TASK ORIENTATION AND VOCABULARY KNOWLEDGE TYPES: HOW DO THEY RELATE TO COLLOCATIONAL KNOWLEDGE?

SİNEM AYDOĞAN

BOĞAZİÇİ UNIVERSITY

2016

TASK ORIENTATION AND VOCABULARY KNOWLEDGE TYPES: HOW DO THEY RELATE TO COLLOCATIONAL KNOWLEDGE?

Thesis submitted to the

Institute for Graduate Studies in Social Sciences

in partial fulfillment of the requirements for the degree of

Master of Arts

in

English Language Education

by

Sinem Aydoğan

Boğaziçi University

2016

Task Orientation and Vocabulary Knowledge Types:

How Do They Relate to Collocational Knowledge?

The thesis of Sinem Aydoğan

has been approved by:

Assist. Prof. Senem Yıldız
(Thesis Advisor)

Assoc. Prof. Çiler Hatipoğlu
(External Member)

Assist. Prof. Aylin Ünaldı

May 2016

DECLARATION OF ORIGINALITY

I, Sinem Aydoğan, certify that

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
- this is a true copy of the thesis approved by my advisor and thesis committee at Boğaziçi University, including final revisions required by them.

Signature .....

Date .....01.06.2016.....

ABSTRACT

Task Orientation and Vocabulary Knowledge Types:

How Do They Relate to Collocational Knowledge?

This study aims to investigate the effects of task orientation (input vs. output orientation) on the acquisition of productive collocational knowledge and explore the differences among the gains in different measures of passive and active recall of collocations. It also aims to identify learner opinions regarding the input-oriented and output-oriented teaching tasks, output-oriented assessment tasks and the learning of collocations. The experimental group (P-group, *N* = 22) studied collocations through output-oriented tasks (non-cued inference-making and translation, sentence-construction and non-cued gap-filling). The control group (R-group, *N* = 22) studied collocations through input-oriented tasks (cued inference-making and translation, sentence-half matching and cued gap-filling). An immediate post-test consisting of output-oriented assessment tasks measuring participants' gains in productive collocational knowledge -as implied by task orientation- or passive and active recall of collocations -as implied by Laufer et al.'s (2004) typology- was administered to both groups. The quantitative data were analyzed via an independent samples *t*-test to investigate the effects of task orientation on productive collocational knowledge and via a one-way repeated measures ANOVA to explore the differences among the gains in passive and active recall of collocations within the R-group and the P-group. The *t*-test results demonstrated that the groups did not statistically significantly differ in their productive collocational knowledge. However, the ANOVA results revealed statistically significant differences among the gains in passive and active recall of collocations after the treatment within both the R-group and the P-group.

ÖZET

Görev Yönelimi ve Kelime Bilgisi Türlerinin Söz Öbeği Bilgisi ile İlgisi

Bu çalışma, görev yöneliminin (girdi ve çıktı yönelimi) üretimsel söz öbeği bilgisi edinimine etkilerini araştırmayı ve söz öbeklerinin pasif ve aktif çağırmalarının farklı ölçümlerdeki kazanımları arasındaki farkları keşfetmeyi hedeflemektedir. Aynı zamanda, öğrencilerin girdi yönelimli ve çıktı yönelimli görevler, çıktı yönelimli ölçme görevleri ve söz öbeği öğrenimi üzerine fikirlerinin saptanması hedeflenmektedir. Deney grubu (P-grup, *S* = 22), söz öbeklerini çıktı yönelimli görevlerle (ipuçsuz çıkarım ve çeviri, cümle kurma ve ipuçsuz boşluk doldurma) çalışmıştır. Kontrol grubu (R-grup, *S* = 22) ise söz öbeklerini girdi yönelimli görevlerle (ipuçlu çıkarım ve çeviri, cümle-yarısı birleştirme ve ipuçlu boşluk doldurma) çalışmıştır. Her iki gruba da, katılımcıların üretimsel söz öbeği bilgilerindeki -görev yönelimine göre- veya söz öbeklerinin pasif ve aktif çağırmalarındaki -Laufer vd.'nin (2004) tipolojisine göre- kazanımlarını ölçen ve çıktı yönelimli ölçme görevlerinden oluşan bir birincil sontest uygulanmıştır. Nicel veriler, görev yöneliminin üretimsel söz öbeği bilgisi üzerindeki etkilerini saptamak üzere bağımsız grup *t*-testi, R-grup ve P-grup içerisinde söz öbeklerinin pasif ve aktif çağırmalarındaki kazanımlar arası farkları keşfetmek üzere ise tekrarlayan ölçümlerde tek yönlü varyans analizi ile incelenmiştir. *t*-test sonuçları, grupların üretimsel söz öbeği bilgileri arasında istatiksel açıdan önemli bir fark olmadığını göstermiştir. Varyans analizi sonuçları ise uygulamanın ardından hem R-grup hem de P-grupta, söz öbeklerinin pasif ve aktif çağırmalarındaki kazanımlar arasında istatiksel açıdan önemli farklar saptamıştır.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Vocabulary is acknowledged to be a crucial component of second language acquisition (SLA) by various vocabulary specialists (Coady & Huckin, 1997; Lewis, 1993; Nation, 2001; Schmitt, 2010). Vocabulary knowledge enables learners to comprehend messages and express themselves in the target language. Schmitt (2010) emphasizes this central role of vocabulary for language learners with the following words: "learners carry around dictionaries and not grammar books" (p. 4). Recognizing the importance of vocabulary, researchers have made attempts to categorize vocabulary and vocabulary knowledge over the years (Laufer, Elder, Hill & Kongdon, 2004; Lewis, 1993; Nation, 1990, 2001; Paribakht & Wesche, 1993; Read, 1988). Depth and breadth of vocabulary knowledge have been put forward as two major vocabulary knowledge dimensions (Read, 1988; Schmitt, 2008; Wesche & Paribakht, 1996).

According to Schmitt (2008), the breadth/size of learners' lexicon allows learners to operate successfully in the target language on condition that the depth/quality of their word knowledge is adequately satisfied. He claims that Nation's (2001) word knowledge aspects (see Table 1), which include form (spoken, written, word parts), meaning (form and meaning, concept and referents, associations) and use (grammatical functions, collocations, constraints on use), illustrate what learners need to acquire to deepen their word knowledge. Nation and Chung (2009) suggest that these word knowledge aspects should be targeted in language classes with four strands of activities, each of which is to receive equal

attention and time: meaning-focused input, meaning-focused output, language-focused learning and fluency development. The current study focuses on the language-focused learning (Nation, 2007) of collocations.

Collocations have received a lot of attention in the literature and various researchers have attempted to describe what *collocation* means (Nation, 2001; Nattinger & DeCarrico, 1992; Schmitt, 2000; Sinclair, 1991). Sinclair defines it (1991) as "the occurrence of two or more words within a short space of each other in a text" (p. 170). The other definitions also point to the companionship or co-occurrence of words. Collocations are claimed to be a powerful asset in language teaching (Brown, 1974; Carter & McCarthy, 1988; Conklin & Schmitt, 2008; Hill, 2000; Lewis, 2000; Nation, 2001; Schmitt, 2000; Webb & Kagimoto, 2009). However, as Brown notes (1974), the process underlying the acquisition of collocations is not clear enough. More research into the acquisition of *collocational knowledge*, a term recently coined and used by many scholars (Fan, 2009; Nation, 2001; Schmitt, 1997) to refer to the knowledge of collocations, is needed to gain insight into this process. In addition, it is worth providing empirical evidence for the suggested benefits of collocational knowledge for language learners and see if and to what extent they exist.

Although the learning of these co-occurrences are claimed to have various benefits for language learners (Brown, 1974; Carter & McCarthy, 1988; Conklin & Schmitt, 2008; Hill, 2000; Lewis, 2000; Nation, 2001; Schmitt, 2000; Webb & Kagimoto, 2009), the learning and teaching of collocations have not received enough attention and the findings of vocabulary studies have not been empirically tested on collocations (Webb & Kagimoto, 2009). A widely studied subject regarding the vocabulary acquisition is the productive and receptive dimensions (Nation, 2001) of

vocabulary knowledge. The acknowledgement of the difference since language learners' receptive and productive vocabulary sizes differ and learners possess a larger receptive vocabulary than productive vocabulary (Fan, 2000; Laufer & Paribakht, 1998; Milton, 2009; Waring, 1997). Accordingly, it is important for language teachers to know how to enhance productive vocabulary knowledge.

With a special focus on productive collocational knowledge, the current study has a variety of tasks as treatment materials and data collection instruments, which were designed with data extracted from a corpus called the Corpus of Contemporary American English (COCA). Defined as "large collections or databases of language, incorporating stretches of discourse ranging from a few words to entire books" by Schmitt (2000, p. 68), corpora are valuable sources of input for language learners. The input extracted from corpora are called concordances. The results of many studies (Balcı & Çakır, 2012; Boulton, 2008; Koç, 2006; Koosha & Jafarpour, 2006) indicate the advantage of teaching through concordance lines over teaching through traditional teaching materials and data-driven learning implies that traditional teaching materials need to be revolutionized so as to make them more authentic in nature and that language learning derives from corpora. In line with the results of these studies, the input for both the teaching and assessment tasks designed for the current study were retrieved from COCA. This generalized corpus (Bennett, 2010) was indirectly used (Leech, 1997) by extracting selective concordances (Sinclair, 1991) in order to develop the tasks utilized in this study, which can be called corpus-influenced materials (Bennett, 2010).

Based on the implications of the Input (Krashen, 1985) and Output (Swain, 1985) Hypotheses as well as Nation's (2001) emphasis on receptive and productive dimensions of word knowledge, tasks can be categorized as input-oriented and

output-oriented. Input-oriented tasks are the ones that require receptive vocabulary knowledge and output-oriented tasks are the ones that require productive vocabulary knowledge. Although many studies (Alcaraz Mármol & Sánchez-Lafuente, 2013; Bao, 2015; de la Fuente, 2002; Ellis & He, 1999; Folse, 2006; Griffin & Harley, 1996; Hashemzadeh, 2012; Hulstijn & Laufer, 2001; Jahangiri & Abilipour, 2014; Keating, 2008; Kim, 2011; Li, 2014; Mondria & Wiersma, 2004; Stoddard, 1929; Waring, 1997) investigating the relationship between task orientation and productive and receptive vocabulary knowledge are available in the literature with differing results, to the author's knowledge, there is only one study (Webb & Kagimoto, 2009) that looked into the effects of task type, in other words input versus output orientation of tasks, on the acquisition of collocational knowledge. Therefore, this study aims to fill in an important gap in the literature by investigating the effects of variance in task orientation on learners' productive collocational knowledge.

Because the current study involves three input-oriented and three output-oriented tasks, the types of knowledge required by the input-oriented tasks and the output-oriented tasks will also be categorized according to Laufer, Elder, Hill and Kongdon's (2004) vocabulary knowledge typology, which is grounded on cognitive processes involved in retrieval. The differences among the gains in different measures of passive and active recall of collocations will be explored. This typology will allow the researcher to account for any statistically significant differences in the gains in three different measures of passive and active recall of collocations obtained from the assessment tasks of non-cued gap-filling, translation and sentence-construction.

CHAPTER 2

REVIEW OF LITERATURE

2.1 Introduction

For studies investigating into vocabulary knowledge, understanding the nature of vocabulary knowledge and vocabulary learning tasks is crucial. This chapter will introduce the basic issues relevant to the present research study, which involves exploration of different types of collocational knowledge, input-oriented and output-oriented tasks as well as exploitation of corpus in teaching collocations. First of all, major issues regarding the teaching and learning of vocabulary will be introduced. Then collocations, types of collocations and the suggested benefits of collocational knowledge will be discussed. Types of vocabulary knowledge and relevant pedagogical studies will be introduced in relation to task orientation and cognitive processes involved in retrieval. Issues relating to assessment methods of vocabulary knowledge and collocational knowledge will be reviewed. Finally, corpora and data-driven learning, which are closely related to vocabulary teaching, will be presented and discussed.

2.2 Second language vocabulary teaching and learning

It is claimed by various researchers that the acquisition of vocabulary has two major dimensions: depth versus breadth (Read, 1988; Wesche & Paribakht, 1996; Schmitt, 2008). The breadth dimension pertains to the size or quantity of learners' vocabulary. The depth dimension refers to the quality of vocabulary knowledge. Based on these two dimensions, Schmitt (2008) argues that a large lexicon needs to be supplemented and deepened with various aspects of word knowledge in order for learners to

successfully operate in the second language. He suggests that these word knowledge aspects are best summarized by Nation (2001) as in Table 1.

Table 1. What is Involved in Knowing a Word

Form	spoken	R	What does the word sound like?
		P	How is the word pronounced?
	written	R	What does the word look like?
		P	How is the word written and spelled?
	word parts	R	What parts are recognizable in this word?
		P	What word parts are needed to express the meaning?
Meaning	form and meaning	R	What meaning does this word form signal?
		P	What word form can be used to express this meaning?
	concept and referents	R	What is included in the concept?
		P	What items can the concept refer to?
	associations	R	What other words does this make us think of?
		P	What other words could we use instead of this one?
Use	grammatical functions	R	In what patterns does the word occur?
		P	In what patterns must we use this word?
	collocations	R	What words or types of words occur with this one?
		P	What words or types of words must we use with this one?
	constraints on use (register, frequency …)	R	Where, when, and how often would we expect to meet this word?
		P	Where, when, and how often can we use this word?

Source: Learning vocabulary in another language, 2001: 27

As displayed in Table 1, knowing a word involves three main aspects: form, meaning and use. According to Nation (2001), the form of a word encompasses its pronunciation (spoken form), its spelling (written form) and the parts that make up the word (root, affixes, and so on). The meaning aspect comprises the form-meaning relationship, the concept and what the word refers to and the mental connections that it forms in mind. The use aspect consists of grammatical functions of the words, its collocations and constraints on the use of the word. For each of these three main aspects, Nation (2001) proposes a receptive and productive dimension and puts forward 18 categories of word knowledge framed as questions. As seen in Table 1, receptive knowledge of words refers to recognition of word form, comprehension of word meaning and judgments on the word usage. Productive knowledge of words refers to production of word form, actual use of the word in a meaningful context and proper use of the word.

Nation (2007) proposes four strands of activities that a language course must involve: meaning-focused input, meaning-focused output, language-focused learning and fluency development. According to this framework, language courses should provide learners with opportunities for learning by integrating balanced amounts of activities from each strand. The meaning-focused input strand refers to activities that involves receptive learning through listening and reading. Extensive reading, shared reading, listening to stories, watching TV or films, and being a listener in a conversation are among typical activities in this strand. The meaning-focused output strand refers to activities that involve productive learning through speaking and writing. Typical activities involve talking in conversations, giving a speech or lecture, writing a letter, writing a note to someone, keeping a diary, telling a story and telling someone how to do something. The language-focused learning strand involves deliberate learning and teaching of language and learning strategies. Typical activities involve pronunciation practice, using substitution tables and drills, learning vocabulary from word cards, intensive reading, translation, memorizing dialogues, getting feedback about writing, guessing from context and dictionary use. Finally, the fluency development strand integrates all four skills of listening, speaking, reading and writing with a focus on the meaning. Speed reading, skimming and scanning, repeated reading, repeated retelling, ten-minute writing and listening to easy stories are among typical activities. Nation and Chung (2009) suggest that these four strands apply to the teaching of vocabulary as well and well-balanced vocabulary courses should consist of activities from each strand.

2.3 Collocations

Collocation has long been considered as a sub-category of lexis, which is described as "the set of all . . . word-forms" in a language (Sinclair, 1991, p. 174), and it has been attributed several definitions by researchers (Nation, 2001; Nattinger & DeCarrico, 1992; Schmitt, 2000; Sinclair, 1991), all of which point to the companionship of words. Collocation is defined by Sinclair (1991) as "the occurrence of two or more words within a short space of each other in a text" (p. 170). Nattinger and DeCarrico (1992) define it as "strings of specific lexical items, such as rancid butter and curry flavor, that co-occur with a mutual expectancy greater than chance." (p. 36). As Schmitt (2000) puts it, collocation refers to "the tendency of two or more words to co-occur in discourse" (p. 76). As defined by Nation (2001), it is "a group of words that belong together, either because they commonly occur together like take a chance, or because the meaning of the group is not obvious from the meaning of the parts, as with by the way or to take someone in" (p. 317).

Lewis (1993), emphasizing the significance of lexicon for language acquisition, classifies word meaning as referential meaning, contextual meaning, discourse meaning and collocational meaning. Among these, collocational meaning is centralized due to its generating power. Lewis (1993) explains the generating power of collocations with the following words:

> It is almost impossible to explain the meaning of the verb *bark* without reference to *dog*. To a large extent the meaning of bark is more or less completely expressed by the sentence *Dogs bark, but pigs grunt and ducks quack*. The combination of the collocation and the set of oppositions **constitute** the meaning of *bark*. (p. 82)

When collocations are in question, it is inevitable to refer to the Lexical Approach as this is an approach to teaching languages that implies language teaching with a lexical orientation. Vocabulary, and especially chunks, has a special place in

it. Hence, to implement this approach in language teaching calls for instruction with a special focus on lexicon. In this approach, lexis is divided into four categories; words, collocations, fixed expressions and semi-fixed expressions. It is claimed that coherent, semantically meaningful language consists of combinations of collocations, fixed expressions and semi-fixed expressions. (Lewis & Gough, 2008). It is clear that collocations are central to the Lexical Approach making up one of the main categories of lexis. Collocations, along with the other lexical categories are considered fundamental in language acquisition. This approach emphasizes the point that more meaning can be conveyed through vocabulary than through grammar and that grammar can function only when learners have a large enough lexicon to which they can apply their grammatical knowledge. Therefore, it is very important to expand learners' lexicon. The Lexical Approach suggests that in learning vocabulary it is not the single units that are acquired, it is the chunks, which are then broken down into pieces (Lewis, 1993; McCarthy, 1998; Nation, 2001; Schmitt, 2000), so it is worth investigating the learning of collocations. To this end, it is important to know how to implement this approach in teaching collocations. The following areas claimed to require attention while implementing the Lexical Approach (Lewis & Gough, 2008) received attention in the present study as well. Below are the aforementioned areas:

1. Lexis – different kinds of multi-word chunks
2. Specific language areas not previously standard in many EFL texts
3. Listening (at lower levels) and reading (at higher levels)
4. Activities based on L1/L2 comparisons and translations
5. The use of the dictionary as a resource for active learning
6. Probable rather than possible English
7. Organizing learners' notebooks to reveal patterns and aid retrieval
8. The language which learners may meet outside the classroom
9. Preparing learners to get maximum benefit from text

(p.15)

The first of these areas implies that the implementation of the Lexical Approach requires a special focus on chunks, not single words. In the second area, specific language areas refer to areas specific to the Lexical Approach such as different kinds of word meaning (i.e. referential meaning, contextual meaning, discourse meaning and collocational meaning). The third area maintains that lexical units be introduced to lower level learners through listening and to higher level learners through reading. It is suggested with the fourth area that it is important to make word-meaning comparisons and also translate lexical units from the first language (L1) to the second language (L2) or vice versa in learning a language with a lexical orientation. The fifth area points to the importance of dictionary referral in learning vocabulary. The sixth and eighth areas are about authenticity of input. The seventh area emphasizes the co-occurrence of words and revelation of patterns in lexical units. The last area refers to the necessity of maximum engagement in input while learning vocabulary. In summary, implementation of the Lexical Approach requires teaching vocabulary in chunks through abundant authentic written and aural input.

2.3.1 Categorization of collocations

To do research on the acquisition of collocational knowledge, it is important to know the characteristics that collocations bear and what types of collocations are available. In this way, target categories of collocations for research can be determined.

To understand how collocations are categorized, it is important to be aware of the criteria that determine what we call collocations in the first place, and have a clear grasp of the concept. A number of criteria listed by Bıçkı (2012) make it clear how collocations form a separate sub-category of lexis. These include frequency & regularity, textual proximity, limited compositionality, non-substitutability, non-

modifiability and category restrictions. The first one of these refers to the frequent and rule-based co-occurrence of words that make up a collocation. What is meant by textual proximity is that the distance between the collocating items is restricted and usually a maximum of four words is accepted. Limited compositionality refers to the fact that the meanings of collocations are not readily understandable by the items that compose them. However, this does not equally apply to all collocations and non-compositionality is highest when it comes to idioms. Another criterion is that a collocating item is difficult to substitute and replace with another item. Collocations are either strictly fixed as in idioms or allow limited substitutability. Modification is also limited in collocations, more so in idioms again. Finally, collocations are restricted to content words. Although concordances of function words are very frequent in English, they do not tend to co-occur regularly. Thus, the heads of collocational phrases are only nouns, verbs, adjectives and adverbs.

All collocations bear certain collocability characteristics to be categorized as collocations, and in addition to this, collocations also have sub-categories based on a variety of other characteristics. The categorization suggested by Hill (2000) puts collocations into four categories based on collocational strength: unique collocations, strong collocations, weak collocations and medium-strength collocations. Unique collocations refer to idiomatic collocations for which the co-occurrence of words is unusual such as *foot the bill.* In the strong collocations category, we have those words that almost always occur with a collocate such as *grudge* in *harbor grudges.* Weak collocations are those that are predictable in nature such as *blue shirt*. Medium-strength collocations fall in the middle of the collocational spectrum and make up the biggest portion of collocational difficulty for learners. Learners may have *hold* and *conversation* in their mental lexicon but they may fail when it comes

to *hold a conversation.* This is a strong indicator of why even learners with a large lexicon continue to have problems as well as of the importance that should be attached to teaching collocations. Another categorization by Lewis (2000) makes a distinction between lexical and grammatical collocations. Lexical collocations are those with a combination of lexical words (e.g. suggest an alternative) whereas grammatical collocations consist of a lexical word along with a grammatical word (e.g. aware of). Particularly in lexical collocations, the co-occurrence of two or more words is not always rule-governed. For instance, the grammaticality of *make a mistake* versus the ungrammaticality of *do a mistake** cannot be accounted for by grammar rules. This makes it impossible to explain the co-occurrences of words through rules. Nevertheless, collocations are important to teach and cannot be ignored.

2.3.2 Suggested benefits of collocational knowledge

The companionship, in other words the co-occurrence of words, has been claimed to positively influence language acquisition. Many researchers in the field of applied linguistics have emphasized the importance of collocations for second language learners (Brown, 1974; Carter & McCarthy, 1988; Conklin & Schmitt, 2008; Hill, 2000; Lewis, 2000; Nation, 2001; Schmitt, 2000; Webb & Kagimoto, 2009). Millions of collocations may exist in any language and research shows that they play a significant role in the language reception and production of native speakers (Brown, 1974; Hill, 1999). Hill (2000) makes a comparison between instruction on collocations and grammar-centered instruction. He points to the fact that grammar is a finite set of rules and fits the syllabus well; whereas, collocations are beyond measure and too many to fit the syllabus. Despite this drawback on the surface, he

claims that it is nevertheless collocational knowledge that is more effective in the creation and comprehension of naturally-occurring text. He suggests that language teaching with a lexical orientation and more importantly a collocational orientation can help learners become more native-like and competent in using the language more appropriately than grammar-centered instruction can.

Collocational knowledge is important for language comprehension and production. Carter and McCarthy (1988) claim that collocations are crucial for comprehension of written and spoken language thanks to two characteristics that they bear. One of them is that word meaning is strongly associated with the collocates of that word. The second characteristic is that the collocates of a word shape people's expectations, which means they know what may come next when they read or hear a word. In terms of production, Carter and McCarthy regard collocation as a technique that raises the likelihood of retrieval thereby improving production. They claim that collocations help learners know about the lexical restrictions, make fewer mistakes in register and refer to their collocational knowledge instead of reinventing the wheel every time they want to produce new language. The benefit of collocational knowledge in terms of language production is also proven in a study by Wu (1996) in which students' collocational knowledge was pre-tested and then post-tested after a take-home collocation exercise. Study of collocations seemed to activate learners' passive vocabulary knowledge. Wu claims that familiarization with the recurrent word combinations allows learners to produce natural and meaningful utterances making passive vocabulary active.

There is more to the construction of language than grammar and the recall of chunks can make life much easier for language learners than grammar could. An effective language user is one who has prefabricated chunks, including collocations,

in their lexicon ready to retrieve in case of need (Lewis, 2000). In other words, collocations in learners' lexicon facilitate retrieval, making processing more efficient. The explanation that Conklin and Schmitt (2008) bring to this processing efficiency is that even though they contain several words in them, formulaic sequences are quicker and easier to process compared to creatively generated sequences of the same words as the former are stored as a single unit. In their study, they obtained results indicating the advantage of formulaic language over non-formulaic language in terms of processing speed in both native speakers and L2 speakers of English. Prefabricated formulaic sequences take up extra space in long-term memory. Nonetheless, short-term memory, which is limited in scope, can deal with the retrieval of these sequences more efficiently allowing the learner to produce and understand language more rapidly.

Native speakers of a language, as Brown (1974) noted many years ago, intuitively know which words co-occur. They know that the word *intense* will most probably be followed by a word that carries the meaning of "*pressure*, *heat*, *light*, *energy* or *feeling*". It is exactly the lack of this kind of intuitive knowledge in learners that results in lexical mistakes as well as mistakes in register. Schmitt (2000) believes that collocational knowledge can tell apart a native speaker and a nonnative speaker. Therefore, learners need to enhance their collocational knowledge if they want to sound more native-like. To this end, a recipe of how to teach collocations can be the cure.

As Nation (2001) argues, collocational knowledge is closely related with fluency and accuracy. He claims that collocational knowledge positively influences fluency and leads to native-like selection. However, acquisition of collocations does not only foster fluency, but also accuracy. Nation (2001) rhetorically asks the

following question: “Is it more usual, for example, to say that we ate some *speedy food*, *quick food*, or *fast food*?” (p. 56). As the examples demonstrate, there are several adjectives that can go with a certain noun, which may confuse language learners, but native speakers do not make mistakes in these co-occurrences. This proves that if learners have a rich reservoir of collocations, their accuracy will be positively influenced. Therefore, instead of dedicating a lot of classroom time to teaching grammar or single words, learners should be provided with opportunities to study collocations. However, methods through which this could be done should be developed and analyzed.

As revealed in Nesselhauf’s study (2003) with advanced learners of English, even advanced learners tend to make mistakes when it comes to collocations. Advanced learners’ tendency to make collocational mistakes makes it an intriguing area of research. Having scrutinized advanced learners’ essay papers in her research with a focus on verb-noun collocations, Nesselhauf concludes that collocation teaching needs to have a special place in language teaching. Similarly, the findings of Bıçkı’s study (2012) examining 177 argumentative essays written by university students reveal that Turkish learners of English make many mistakes in collocations and produce the highest number of deviant collocations when one of the components is a verb. An example to such deviances is the overextension of the verb *become* to the verbs *be, get, go+adjective, turn into* and *grow* (e.g. *becoming late** instead of *getting late*).

2.4 Task orientation and types of vocabulary knowledge

2.4.1 Definition of task

Definition of *task* is essential for this study as the input versus output orientation characterized the tasks. In this section, some definitions of task available in the literature will be presented. As defined by Long (1985), a task is:

> . . . a piece of work undertaken for oneself or for others, freely or for some reward. Thus examples of tasks include painting a fence, dressing a child … In other words, by "task" is meant the hundred and one things people *do* in everyday life, at work, at play, and in between. (p. 89)

Crookes (1986) defines task as "a piece of work or an activity, usually with a specified objective, undertaken as part of an educational course, at work, or used to elicit data for research." (p. 1). Prabhu (1987) notes "an activity which required learners to arrive at an outcome from given information through some process of thought and which allowed teachers to control and regulate that process was regarded as a task." (p. 24). Task is also defined by Nunan (1989) as "a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form." (p. 10). Obviously, the term has been adopted by researchers in a variety of ways so far and has been attributed a number of varying characteristics. The fact that task has been interpreted differently by different groups of people is regarded as a problem by Bygate, Skehan and Swain (2001). This problem led to interchangeable use of the terms *task*, *activity* and *language exercise* in the literature. Coughlan and Duff (1994) describe a *research task* as a blueprint that SLA researchers supply for the subjects in order to elicit linguistic data. For clarity purposes, the term task will be operationalized in the present research study as

a research task, as entitled by Coughlan and Duff, and will enclose tasks, activities and language exercises.

2.4.2 Task orientation

Tasks can be categorized according to their orientation. The categories appear in the literature under different names including input-based versus output-based, receptive versus productive and comprehension-based versus production-based. The Input and Output Hypotheses form the theoretical foundation of Nation's (2001) receptive-productive distinction in word knowledge aspects. Similarly, task orientation in the current study is also grounded on the implications of the Input and Output Hypotheses.

Input Hypothesis is defined as the necessity of understanding messages, along with other conditions such as low affective filter and the presence of input in the form of i+1, to acquire a language (Krashen, 1985, 2002). Low affective filter means that learners are emotionally ready to acquire the language. Input in the form of i+1 refers to input that contains information one step beyond the learner's current level of competence. In Krashen's words (1982), "Production ability emerges. It is not taught directly." (p. 22). According to this hypothesis, output automatically follows input. In an input-oriented vocabulary teaching task, the learner has a receptive role. Learning occurs through exposure to vocabulary and productive use of vocabulary by learners is considered a natural result of this exposure.

The competitor of the Input Hypothesis is the Output Hypothesis. The Output Hypothesis, generated by Merrill Swain, implies that output plays a more important role in learning a language than input does (Swain, 1985). She developed this hypothesis based on the research with French immersion students, in which students'

written and spoken French contained a good many errors despite six or seven years of comprehensible input (Swain, 1985). Swain (2000) argues that output stimulates noticing and contributes to language learning through hypothesis testing. When learners are supposed to produce output, they notice that they lack the knowledge necessary to express themselves in certain situations. Also, when they write or speak, they test their theoretical knowledge and see how effectively it works in real life. In an output-oriented vocabulary teaching task, the learner has an active role. In output-oriented tasks, vocabulary acquisition takes place through practising the use of vocabulary items.

Input and output, as prioritized by these two hypotheses respectively, are what determine the orientation of tasks. The receptive or productive nature of the task is related with the role of the learner in the task. If comprehension of the input is sufficient for successful completion of the task, it is an input-oriented, receptive or comprehension-based task. If the learner is expected to produce language, the task is considered to be output-oriented, productive or production-based. Input-oriented tasks require receptive vocabulary knowledge and output-oriented tasks require productive vocabulary knowledge to achieve task completion. For the acquisition of a language, both receptive and productive vocabulary knowledge are necessary (Schmitt, 2008) and it is important to investigate the relationship between task orientation and the types of vocabulary knowledge.

The previously mentioned variance in the definition of task, interchangeable use of the terms task, activity and language exercise and the difficulty of drawing clear-cut distinctions among the three is observable in studies comparing tasks with different task orientations as well. In these studies, (Alcaraz Mármol & Sánchez-Lafuente, 2013; Bao, 2015; Behzadi & Nezhad, 2014; DeKeyser & Sokalski, 2001;

de la Fuente, 2002; Ellis & He, 1999; Folse, 2006; Griffin & Harley, 1996; Hashemzadeh, 2012; Hulstijn & Laufer, 2001; Izumi & Bigelow, 2000; Izumi, 2002; Jahangiri & Abilipour, 2014; Keating, 2008; Kim, 2011; Li, 2014; Stoddard, 1929; Waring, 1997; Webb, 2005; Webb, 2009; Webb & Kagimoto, 2009), which involve input-oriented and output-oriented tasks, the procedures of treatment vary with a mixture of tasks, activities and language exercises and do not uniformly comply with the definitions available in the literature. Nevertheless, regardless of the terminology they adopted, they all investigated the relationship between the effects of task type (input-oriented versus output-oriented) and vocabulary knowledge type (receptive versus productive).

2.4.3 Pedagogical studies on receptive-productive dichotomy

Receptive versus productive nature of tasks has been a neglected aspect in the literature. Early studies on the reception versus production dichotomy focused mainly on list learning of vocabulary (Griffin & Harley, 1996; Mondria & Wiersma, 2004; Stoddard, 1929; Waring, 1997; Webb, 2009). In other words, these studies aimed to find out whether receptive or productive vocabulary knowledge was easier to acquire. They investigated into the effects of receptive versus productive types of learning and all dealt with the direction of learning words in lists. In these studies, learning type was considered to be receptive if the direction of learning was from L2 to L1 and productive if the direction of learning was from L1 to L2. If learners had a list of words in their L2 and studied their L1 counterparts, it was considered to be receptive learning. If learners had a list of words in their L1 and studied their L2 counterparts, it was considered to be productive learning. The findings of all except one (Mondria & Wiersma, 2004) showed that those who studied words receptively

scored higher on receptive tests and similarly those who studied words productively scored higher on productive tests. Mondria and Wiersma's findings showed that learning words receptively or productively does not have an impact on the acquisition of productive vocabulary knowledge. Although limited in number, certain studies have focused on the receptive-productive dichotomy with differing results and these studies will be outlined in this section.

There are studies which utilized a variety of input-oriented and output-oriented task designs (see Table 2 for task orientations) and investigated the effects of receptive versus productive types of learning on the acquisition of receptive and productive vocabulary knowledge (Alcaraz Mármol & Sánchez-Lafuente, 2013; Bao, 2015; de la Fuente, 2002; Ellis & He, 1999; Folse, 2006; Hashemzadeh, 2012; Hulstijn & Laufer, 2001; Jahangiri & Abilipour, 2014; Keating, 2008; Kim, 2011; Li, 2014; Webb & Kagimoto, 2009). In accordance with the scope of the current study, the results of these studies regarding the effects of variance in task orientation on the acquisition of productive vocabulary knowledge will be discussed. Some of these studies yielded results in favor of output-oriented tasks by comparing the tasks of reading comprehension with marginal glosses, reading comprehension with cued gap-filling, sentence-construction with the help of glosses and sentence-construction with the help of a bilingual dictionary (Alcaraz Mármol & Sánchez-Lafuente, 2013), following directions and giving directions (Ellis & He, 1999; de la Fuente, 2002), cued gap-filling, definition-matching, paraphrasing and glossing (Hashemzadeh, 2012), and reading comprehension, reading comprehension with cued gap-filling and composition-writing (Hulstijn & Laufer, 2001; Kim, 2011). In addition to these studies, Webb (2005) compared reading comprehension task with sentence-construction task. He found that when time-on-task is not controlled, in other words

when time to complete a task is not kept constant but increased or decreased according to the requirements of the task, output-oriented tasks are more effective. However, when time-on-task is controlled, Webb's results show that input-oriented tasks are more effective. Webb explains this by stating that output-oriented tasks require more time than input-oriented tasks. On the other hand, Jahangiri and Abilipour's (2014) results demonstrate that there is no significant difference between the post-test scores of two groups, one of which studied vocabulary through a cued gap-filling task and the other through a sentence-construction task. Similarly, Keating's study (2008) comparing reading comprehension, reading comprehension with cued gap-filling and sentence-construction tasks showed that the tasks are not more effective than one another when time-on-task is controlled. Another study that compared multiple tasks (Folse, 2006) found that carrying out three cued gap-filling tasks is more effective than cued gap-filling and sentence-construction tasks, but there is no difference between cued gap-filling task and sentence-construction task.

Table 2. Summary of Task Orientations in Relevant Research Studies

Research study	Input-oriented tasks	Output-oriented tasks
Alcaraz Mármol & Sánchez-Lafuente (2013)	-reading comprehension with marginal glosses -reading comprehension with cued gap-filling	-sentence-construction with the help of glosses -sentence-construction with the help of a bilingual dictionary
Ellis & He (1999) de la Fuente (2002)	-following directions	-giving directions
Folse (2006)	-cued gap-filling	-sentence-construction
Hashemzadeh (2012)	-cued gap-filling -definition-matching	-paraphrasing -glossing
Hulstijn & Laufer (2001) Kim (2011)	-reading comprehension -reading comprehension with cued gap-filling	-composition-writing
Jahangiri & Abilipour (2014)	-cued gap-filling	-sentence-construction
Keating (2008)	-reading comprehension -reading comprehension with cued gap-filling	-sentence-construction
Webb (2005)	-reading comprehension	-sentence-construction

All the studies in Table 2 investigated task type effects on the acquisition of receptive and productive vocabulary knowledge. As noted by Nation (2001), receptive and productive knowledge distinction applies to collocational knowledge as well (see Table 1). To the author's knowledge, only one research study (Webb & Kagimoto, 2009) looked into the effects of task orientation on receptive and productive collocational knowledge. Webb and Kagimoto (2009) investigated task type effects in enabling learners to gain collocational knowledge. Their study was carried out with 145 Japanese university students learning English as a second language. The researchers included two tasks in their study; namely a cloze task - the productive one, and reading glossed sentences - the receptive one. The cloze task required the participants in the experimental group to fill in the gaps with appropriate collocations. In the receptive treatment, participants in the control group saw the target collocations with their Japanese definitions and read example sentences only trying to understand them. The results of the productive and receptive post-tests given after 90-minute periods of treatment on a total of 24 collocations revealed that the gain differences in both types of tests were not statistically significant; however, both groups' scores on both post-tests were significantly higher than their scores on the pre-tests. Therefore, the researchers reached the conclusion that simple vocabulary tasks can easily be converted into collocation tasks, and whether productive or receptive in nature, these tasks will improve learners' productive and receptive collocational knowledge.

It is apparent from the discussion above that the results obtained from relevant pedagogical studies on the relationship between task orientation and the acquisition of receptive and productive vocabulary knowledge are not conclusive.

Clearly, the receptive-productive dichotomy in relation to task orientation requires further investigation. Also, the dichotomy needs to be experimented with collocations as opposed to single words.

2.5 Cognitive processes and types of vocabulary knowledge

A very popular typology of L2 vocabulary knowledge has been the receptive-productive dichotomy (Bogaards, 2001; Henriksen, 1999; Joe, 1998; Laufer & Paribakht, 1998; McCarten, 2007; Nation, 2001; Read, 2000; Schmitt & Meara, 1997; Waring, 1997; Webb, 2005). Productive vocabulary knowledge has been associated with the active use of vocabulary. Conversely, receptive vocabulary knowledge has been associated with the passive knowledge of vocabulary, which is sufficient for comprehension, but not for production. Laufer, Elder, Hill and Kongdon (2004) expand on this dichotomy and introduce the distinction of recall-recognition based on the cognitive processes involved in the retrieval of vocabulary knowledge. Table 3 illustrates the four degrees of vocabulary knowledge that Laufer et al. (2004) distinguish.

Table 3. Types of Vocabulary Knowledge

	Recall	Recognition
Active (Productive) (retrieval of form)	Active recall	Active recognition
Passive (Receptive) (retrieval of meaning)	Passive recall	Passive recognition

Source: Size and strength: do we need both to measure vocabulary knowledge, 2004: 206

As described by Laufer et al. (2004), active recall refers to the retrieval and supply of the target L2 word form. Passive recall involves the retrieval of word meaning and demonstration of meaning comprehension. So active-passive distinction is related to the direction of retrieval; from word form to word meaning or from word meaning to word form. Active recognition means the retrieval of the target L2 word form, as in

the selection of the correct word form from a set of options. Passive recognition refers to the retrieval of word meaning, as in the selection of the correct word meaning from a set of options. Table 4 presents Laufer et al.'s (2004) examples of tasks for which one of these vocabulary knowledge types is necessary.

Table 4. Examples of Four Types of Vocabulary Knowledge

Active recall	Turn into water : m_____
Passive recall	When something melts, it turns into _____
Active recognition	Turn into water a. elect b. blame c. melt d. threaten
Passive recognition	Melt a. choose b. accuse c. make threats d. turn into water

Source: Size and strength: do we need both to measure vocabulary knowledge, 2004: 206-207

As seen in Table 4, active knowledge is the type of knowledge that learners rely on when they need to retrieve the word form. Conversely, passive knowledge is sufficient in times when task completion is dependent upon the comprehension of meaning. The distinction between recognition and recall is directly associated with the presence and absence of options. If learners are provided with options, the required knowledge type is recognition. In the absence of options, the required knowledge is recall. In real life, learners are not provided with options in most cases, which indicates that acquisition of recall type knowledge is vital for communication in the target language. The current study, therefore, is particularly interested in the level of improvement in the recall of collocations.

From a pedagogical perspective, Laufer et al. (2004) propose a hierarchy of difficulty for the types of knowledge illustrated in Table 4. The sequence, from the most difficult to the easiest, is as follows: active recall, passive recall, active recognition and passive recognition. They also argue that acquisition of an easier

vocabulary type can be predicted by the acquisition of a more difficult vocabulary type. More specifically, if learners show passive recall of a vocabulary item, it can be predicted that they have also acquired active recognition and passive recognition, which are lower in the hierarchy. Based on the findings of their study that tests this difficulty hierarchy of vocabulary knowledge types, Laufer et al. (2004) were able to distinguish active recall, passive recall and recognition; however, no hierarchical order was observed between active recognition and passive recognition in their study.

As noted by Read (2000), the dichotomy of passive/receptive and active/productive has not been defined in the same way by all researchers. In terms of task orientation, tasks which require learners to produce something are considered productive. According to their task orientation, tasks that require recall type of vocabulary knowledge must be productive and those that require recognition type of vocabulary knowledge are supposed to be receptive tasks. However, as displayed in Table 4, according to Laufer et al.'s (2004) categorization, tasks that require learners to rely on recall can be either productive or receptive. Similarly, tasks that require learners to rely on recognition can also be either productive or receptive. To sum up, Laufer et al.'s (2004) definition of productive and receptive vocabulary knowledge differ from the previous definitions discussed in the *Task orientation* section. The discrepancy between the implications of task orientation and Laufer et al.'s vocabulary knowledge typology results from their approaches to define receptive and productive. Those researchers who classify vocabulary knowledge according to task orientation rely on the presence or absence of output in their definition of receptive and productive vocabulary knowledge. On the other hand, Laufer et al. rely on the cognitive processes involved in retrieval in their vocabulary knowledge typology. To

the author's knowledge, this new definition and recall-recognition distinction made by Laufer et al. have not been tested in other research studies and require further investigation.

Researchers propose varying types of vocabulary knowledge depending on what they take as the basis of their typologies. Based on the presence/absence of output or the cognitive processes involved, if types of vocabulary knowledge are more comprehensively and accurately specified, and supported with empirical evidence from research studies, this might enable materials developers and language teaching practitioners to develop and employ vocabulary teaching tasks that target a variety of vocabulary knowledge types in line with their objectives.

2.6 Assessment of vocabulary knowledge and collocational knowledge

Once the importance of vocabulary was recognized by researchers, tests that would measure vocabulary knowledge in different ways were needed to test the vocabulary size and growth of the language learners. As a result of this need, assessment methods of vocabulary knowledge including some standard tests of vocabulary have been developed. An early vocabulary test format is the yes/no format (Meara & Buxton, 1987). In yes/no tests, the testees are asked to state whether they know the word or not. These tests measure the testees' receptive knowledge of vocabulary relying on their responses.

Later on, yes/no format was improved with some modifications and additions (Paribakht & Wesche, 1993; Wesche and Paribakht, 1996). The so-called Vocabulary Knowledge Scale (VKS), which is more sophisticated than yes/no tests in a number of ways, was developed. In the VKS, the testees are asked to self-report whether they know the word or not, but also asked to show their receptive knowledge of the word

by providing the L1 translation or a synonym. They are also asked to show their productive knowledge of the word by using it in a sentence. The five-point rating scale of the VKS is presented in Figure 1.

I. I have never seen this word.
II. I have seen this word before, but I don't know what it means.
III. I have seen this word before, and I think it means _____. (synonym or translation)
IV. I know this word. It means _____. (synonym or translation)
V. I can use this word in a sentence: _____.

Figure 1. Paribakht and Wesche's VKS

Source: The relationship between reading comprehension and second language development in a comprehension based ESL program, 1993: 15

Nation's (1990) Vocabulary Levels Test (VLT) is another test originally developed to test receptive vocabulary knowledge. A productive version of the VLT was also designed later (Laufer & Nation, 1999). Figures 2 and 3 show sample items from the receptive and productive versions of the VLT.

1. business	
2. clock	___ part of a house
3. horse	___ animal with four legs
4. pencil	___ something used for writing
5. shoe	
6. wall	

Figure 2. Sample items from the receptive version of VLT

Source: A vocabulary-size test of controlled productive ability, 1999: 34

1. I'm glad we had this opp_____ to talk.
2. There are a doz_____ eggs in the basket.
3. Every working person must pay income t_____.
4. The pirates buried the trea_____ on a desert island.
5. Her beauty and cha_____ had a powerful effect on men.

Figure 3. Sample items from the productive version of VLT

Source: A vocabulary-size test of controlled productive ability, 1999: 46

As demonstrated in Figure 2, the receptive version of the test presents six words and three word meanings or synonyms. It requires the test takers to match the words with the correct word meanings or synonyms. The productive version of the test involves

sentences with a missing word. The initial letter(s) of the words are provided to elicit the target word forms.

Test formats measuring collocational knowledge have been adapted from vocabulary tests and some new formats have also been developed. Collocational knowledge has been tested through gap-filling tests (Bahns & Eldaw, 1993; Farghal & Obiedat, 1995), translation tests (Bahns & Eldaw, 1993; Farghal & Obiedat, 1995; Webb & Kagimoto, 2009) and matching tests (Revier, 2009; Gyllstad, 2007). With a growing interest in assessment of collocational knowledge, the tests of collocating lexis (COLLEX) and collocation matching (COLLMATCH) were developed by Gyllstad (2007) to test receptive knowledge of collocations. Likewise, Revier (2009) constructed the constituent matrix (CONTRIX) with the aim of testing productive collocational knowledge. Figure 4 displays sample items from the COLLEX format.

In the following test your task is to choose one out of two word combinations.

Choose the word combination that you think is the most common one, and the one you think native speakers of English would use in speech/writing, by putting a circle around it.

If you don't know, and have to guess, then tick the box to the right of the word combinations.

		tick the box if you are guessing
1. set the bed	make the bed	☐
2. drop count	lose count	☐
3. run a business	drive a business	☐

Figure 4. Sample items from COLLEX

Source: Testing English collocations: Developing receptive tests for use with advanced Swedish learners, 2007: 74

In the other test called COLLMATCH, grids with three verbs on the left and six nouns at the top are provided and test takers are asked to tick the combinations that they think are possible in English. A sample grid is illustrated in Figure 5.

	charges	patience	weight	hints	anchor	blood
drop						
lose						
shed						

Figure 5. Sample grid from COLLMATCH

Source: Testing English collocations: Developing receptive tests for use with advanced Swedish learners, 2007: 10

The test CONTRIX, designed to measure productive collocational knowledge, provides contexts as in Figure 6 to test knowledge of collocations. It requires the test takers to form the best combination choosing a verb, a determiner if necessary and a noun in order to complete the sentence.

The quickest way to win a friend's trust is to show that you are able to _____.		
tell take keep	a/an the ---	joke secret truth

Figure 6. A sample item from CONTRIX

Source: Researching collocations in another language, 2009: 129

To sum up, tests measuring vocabulary knowledge and collocational knowledge have been designed in a variety of formats. The developers have constructed test formats in a way that they would test receptive knowledge or productive knowledge.

2.7 Corpora and data-driven learning

For a research study on the acquisition of collocational knowledge involving data-driven learning, corpora provide huge databases from which the researcher can extract concordances that involve the target collocations to be used in the

development of the research tasks. In this section, the definitions of corpus-related terminology, classification of corpora and the rationale behind employment of corpora in the current research will be explained. Data-driven learning will be discussed in relation to corpora and several pedagogical studies involving the use of corpora and the teaching of collocations will be presented.

2.7.1 Definitions of corpus, concordance and concordancer

Having recently gained their places in the field of applied linguistics, the terms *corpus*, *concordance* and *concordancer* (Bennett, 2010; Lewis, 2000; Reppen, 2010; Schmitt, 2000; Woolard, 2000) have been attributed several definitions by applied linguists. Schmitt (2000) defines corpora as "large collections or databases of language, incorporating stretches of discourse ranging from a few words to entire books" (p. 68). Reppen's (2010) definition of corpus is "a large, principled collection of naturally occurring texts (written or spoken) stored electronically" (p. 2).

The corpora available are not of a single type. As specified by Leech (1997), the different types of corpora include Language for Specific Purposes (LSP) corpora, which host bodies of content-related linguistic data, first language (L1) and second language (L2) developmental corpora, which are compilations of L1 and L2 learners' output in different developmental stages, and bilingual/multilingual corpora that involve the very same texts in two or more languages.

It is also possible to classify corpora based on the type of language they cover. Bennett (2010) suggests eight categories of corpora, namely generalized, specialized, learner, pedagogic, historical, parallel, comparable and monitor. Among these, the most useful ones are the first four. Generalized corpora are the most common usually containing more than 10 million words with a holistic perspective to

language. The British National Corpus (BNC), the American National Corpus (ANC) and the Corpus of Contemporary American English (COCA) are examples to such corpora. Specialized corpora are comprised of texts of a specific language type and differ in size. They are mostly used in English for specific purposes (ESP) settings. The Michigan Corpus of Academic Spoken English (MICASE), the CHILDES Corpus and the Michigan Corpus of Upper-level Student Papers (MICUSP) are some examples. Learner corpora contain written texts and/or spoken transcripts of learner output, and through such corpora, learner errors may be examined and activities may be developed for specific groups of learners. Some examples are the International Corpus of Learner English (ICLE) and the Standard Speaking Test Corpus (SST). Pedagogic corpora contain classroom language such as academic textbooks, transcripts of classroom interactions and the like. This type of corpus can be used to examine the content and efficiency of classroom language.

Data extracted from corpora are commonly referred to as concordances. A concordance is defined as "a collection of the occurrences of a word form, each in its textual environment" (Sinclair, 1991, p. 32). A concordance can be selective or exhaustive (Sinclair, 1991). When the number of occurrences in a concordance is too many, it is possible to eliminate some and have a selective concordance. These concordances can be useful resources for language teaching and make a remarkable contribution to the design of classroom materials with authentic and contextual uses of words/phrases that are stored in them. Concordance involves concordance lines, which are useful sources of information for the co-occurrence of words, contexts in which words are used, lexical patterns, grammatical patterns and multiple meanings of words. Through concordances, learners can get exposed to abundant data in a

short period and easily acquire words through repeated exposure whereas it may take longer for an EFL textbook to recycle a certain word.

Corpora are valuable databases for language specialists; however, they require the use of a search engine due to the magnitude of their sizes. Concordancing programs, in other words concordancers, are the search engines for corpora. A concordancing program, which enables users to extract concordance lines from the corpus, is incorporated into most large corpora. Bennett (2010, p.16) defines concordancing programs as "computer software used to access and sort data from the corpus". Woolard (2000) describes a concordancer as "a relatively simple piece of computer software which allows a constructive search of large amounts of text for examples of a particular word or phrase." (p. 39). As defined by Lewis (2000), concordancers are "programs that are designed to search for and display all the instances of a word of interest in a corpus" (p. 198). They enable learners, teachers and researchers to reach and examine the collocates of a word easily.

In a nutshell, with corpora and concordancing programs, it is easy to access huge bodies of language output. Corpora enable researchers, teachers and students to access plenty of authentic, real uses of the language. The data that corpora make available are superior to the data found in traditional teaching and learning resources in terms of both quantity and quality, as suggested by scholars (Aston, 2001; Johns, 1994) and proven by several research studies (Balcı & Çakır, 2012; Boulton, 2008; Koç, 2006; Koosha & Jafarpour, 2006).

2.7.2 Rationale behind corpus exploitation

Considering the amount of authentic language that corpora contain, it is clear that exploitation of corpora offers benefits for SLA research and pedagogy. As Bennett

(2010) notes, corpus linguistics has existed for almost a century since the first corpus involving 1 million words, the Brown corpus, was composed in 1961. She suggests at the core of corpus linguistics lies John Sinclair's idea that words do not carry meanings on their own. Rather, meaning is carried by the combination of words and their companies. Containing enormous bodies of data, corpora are valuable sources that enable the users to find instances of these word combinations. However, it lies on researchers', materials developers' and teachers' shoulders to make the best use of this valuable resource.

While teaching collocations, language teachers benefit from corpora. Tsui (in Sinclair, 2004) mentions a website called TeleNex where English language teachers in Hong Kong share their questions and receive replies from language specialists. After seven years of using this website, Tsui examined the questions sent by teachers with special interest in ways in which corpus data were relied upon to answer teachers' questions. She came up with six question categories, one of which was the teaching of lexical collocations. She suggests that teachers of English try hard to rationalize collocations by looking for rules that govern co-occurrence of words. Corpus-evidence was of great help to these teachers because they could easily search for word co-occurrences and see plenty of examples. Therefore, it is reasonable to make use of such enormous databases like corpora in teaching collocations.

Especially with the exploitation of corpora in studies of applied linguistics, it is becoming more and more evident that language is not a mere interaction of single words and grammar, which come together and make up phrases, sentences and texts. Grammar alone fails to explain the co-occurrence of many words as well as the ungrammaticality of the co-occurrence of many words. In understanding co-occurrences, for example, Sinclair (1991) suggests two principles; the open-choice

principle and the idiom principle. The open-choice principle accounts for the language patterns in a traditional way and brings syntactic explanations to those patterns. However, Sinclair emphasizes that it is the idiom principle that dominates the interpretation of language text. The fact that the co-occurrence of *of* and *course* cannot be explained in grammatical terms is presented as evidence for that. Likewise, no syntactic rule can explain the ungrammaticality of *do a mistake* whereas *make a mistake* is perfectly grammatical. Briefly, Sinclair believes that collocation is strong evidence to the idiom principle. Not being rule-governed, the co-occurrences of words in collocations need to be observed in context and corpora provide plenty of contexts for such co-occurrences.

Corpora have brought about changes in how grammar and vocabulary are approached. Grammar and vocabulary used to be explained and exemplified in reference books and course books relying on native-speaker intuition. However, as pointed out by Aston (2001), native-speaker intuition proved unreliable in certain cases as many occurrences found in corpora do not have a place in traditional books and many language use descriptions in these traditional books occur in various corpora with zero frequency. Therefore, corpus is valuable as a reliable source of actual occurrences in any language. Dictionaries used to consist of fabricated definitions and examples; however, with the advent of corpora, the concept of dictionary gained a new dimension. Now it is possible to incorporate real data into dictionaries. Native speakers acquire the language through exposure to such data that involve real uses of that language and these uses can be found in corpora.

Besides benefits, there are some drawbacks to the data that concordancers extract from corpora. The drawbacks proposed by Gavioli (1997) will be summarized as follows: For one thing, no matter how large a corpus is, it is never the

real language itself. To give an example, if someone is searching for the written occurrences of a specific word, the concordancer will extract all the occurrences of that word from the corpus; however, as only a certain amount of written documents are available in the corpus, they will only reach a certain number of occurrences. In other words, it is representative of the language to some extent. Another drawback would be that concordances do not give the direct answer to a question. They require interpretation. For instance, if you are trying to find an answer to how a linking word is used, the corpus does not provide you with the direct answer. You need to search for that word in the corpus through a concordancer and figure out the answer by looking at the concordance lines. Finally, the results obtained, in other words the data extracted, are dependent on the corpus used, which means there is a possibility that different corpora yield different results. Also, corpora do not present data appropriate for different proficiency levels. The extracts you obtain are random and are not categorized or controlled for proficiency levels. When concordances are used, the difficulty level needs to be considered by the teacher or materials developer and they may need to fine-tune these concordances in accordance with the proficiency level of the target student profile.

2.7.3 Data-driven learning

In light of the advantages and possible drawbacks of using corpora, it can be said that researchers and teachers can benefit from corpora in a number of ways. As corpora provide huge amounts of data, they have a special place for data-driven learning (DDL).

Data-driven learning is an approach to language teaching, which suggests that language learning derives from data, particularly data from corpora. This approach

implies that learners discover the language patterns from the data they engage in. Hence, discovery learning and learner autonomy are promoted. The founder of DDL, Tim Johns, mentions the following implications of the approach (Johns, 1994):

> 1. The evidence thrown up by the data has left no escape from the conclusion that the description of English underlying our teaching, whether homemade or inherited from other teachers and linguists, needs reassessment.
> 2. Experience in using concordance data reactively has indicated that it could also be used proactively in a more traditional teacher-centered setting, and has suggested also a range of concordance-based exercise types which could have high transferability, helping students to develop inductive strategies that will help them to become better language learners outside the classroom.
>
> (p. 297)

From these implications, Johns derives the conclusion that our traditional teaching materials need to be revolutionized so as to make them more authentic in nature. The use of corpora and corpus extracts in materials development is maybe one of the most feasible ways of achieving this as the data are directly taken from real life.

Exploitation of corpus in language classrooms is claimed by Leech (1997) to be the best example for student-centered discovery learning, which is the core of Johns' data-driven learning (DDL). Leech divides corpus applications in teaching into three categories; direct use of corpora, indirect use of corpora and teaching-oriented corpus development. Direct use of corpora implies introducing the concept of corpora to language learners and teacher trainees, exploitation of corpora such as data presented via printouts in classroom context and teaching students how to make use of corpora while learning a language. Indirect use of corpora involves employment of corpus data in reference publishing, materials development and language testing. Finally, teaching-oriented corpus development can be described as the composition of new corpora to be used for pedagogical purposes. Similarly, Bennett (2010) puts the pedagogical applications of corpora into three categories:

corpus-influenced materials, corpus-cited texts, and corpus-designed activities. Corpus-influenced materials refer to materials like textbooks that include activities deriving from corpus findings. Grammar and vocabulary reference books that cite corpus findings constitute the category of corpus-cited texts. Corpus-designed activities are activities that necessitate the manipulation of corpus data by students. To conclude, it is possible to integrate corpus data into teaching languages in a variety of ways that lead to data-driven learning.

2.7.4 Corpus and collocation studies with pedagogical purposes

Research studies carried out on the teaching of collocations have not dealt with types of collocational knowledge as opposed to the studies investigating the vocabulary knowledge types. There are studies available on the teaching of collocations, which have focused on other aspects. Several research studies compared traditional vocabulary teaching with vocabulary teaching through a concordance or concordance lines and yielded results in favor of the latter (Balcı & Çakır, 2012; Boulton, 2008; Koç, 2006; Koosha & Jafarpour, 2006). Although limited, a number of studies have compared tasks with deductive versus inductive approaches to teaching collocations or tasks involving explicit versus implicit teaching of collocations (Akıncı, 2009; Chan & Liou, 2005; Sun & Wang, 2003). The design and results of these studies will be discussed in this section.

Sun and Wang (2003) conducted a study to examine the effectiveness of inductive and deductive approaches in teaching grammatical collocations via a concordancer. 81 high school students in Taiwan took part in their study. After participants were randomly divided into two groups (inductive and deductive), the researchers administered a pre-test in error-correction format to both groups.

Following the pre-test, the inductive group was taught how to search a keyword on a web-based concordancer. They were asked to search the keywords on the concordance (keywords seen in the set of sentences with miscollocations) and write down the underlying patterns they induced by examining five of the concordance lines. Finally, they would make the necessary corrections in the sentences. On the other hand, the deductive group was provided with the same set of sentences with miscollocations. However, the students were presented with the rules that were necessary to correct the sentences. When the post-test results were compared, the inductive group was observed to have performed significantly better than the deductive group. The post-test results were also compared for easy versus difficult collocations. No significant difference was found in test results for difficult collocations. However, the significant difference persisted for easy collocations.

Chan and Liou (2005) made use of a Chinese-English bilingual concordancer to explore its benefit in teaching EFL students verb-noun collocations. The participants were 32 college freshmen majoring in a non-English degree program. There was only one group of students and they went through two types of instructional methods; induction and deduction. The researchers created five web-based units of collocations, in other words exercises of multiple-choice, translation and gap-filling. In three of these units, students could refer to a web-based bilingual concordancer, namely TOTALrecall, read plenty of instances and discover the patterns on their own. In the other two, they were provided with explanations and examples. Students were given an immediate post-test and a delayed post-test after the treatment. The items used in all tests were the same, gap-filling type, but differently ordered. Students also filled out questionnaires, one before, and one after the treatment. The figures of the immediate post-test showed that both concordancing

method and non-concordancing method generated benefits in terms of learning collocations. However, the delayed post-test results revealed that in the long run the improvement observed as a result of the concordancing method is more persistent compared to the non-concordancing method. Notwithstanding this finding, students' interview results pointed to a preference for the non-concordancing method over the concordancing method. The researchers attribute this preference to students' unfamiliarity with the concordancer although they had been instructed on it before the study.

In their study with 200 English majors in an Iranian university, Koosha and Jafarpour (2006) were in pursuit of answers to the following research questions: 1. What is the role of the data-driven learning approach in the development of collocational knowledge of prepositions among Iranian EFL students? 2. To what extent is the collocation of prepositions affected by Iranian EFL learners' L1? 3. Does collocation of prepositions exert the same degree of difficulty for different levels of language proficiency among Iranian EFL students? To address their first question, the researchers randomly assigned the participants into two main groups. A pre-test of 60 items in the format of a completion test was given to determine students' prior collocational knowledge. As a treatment, 15 two-hour sessions of instruction on collocation of prepositions were provided. The control group went through traditional instruction and was taught the collocations explicitly in English or in Farsi. On the other hand, the experimental group underwent a data-driven instruction in which concordance lines were given to participants as printouts. The post-test was identical to the pre-test in terms of its format. The results of the study showed that the participants in the experimental group outperformed the ones in the control group.

Boulton (2008) investigated the effectiveness of using concordance lines in teaching phrasal verbs. Aimed to reveal the impact of concordance lines on the discovery of language patterns, Boulton designed this small scale study with two phrasal verbs; *pick up* and *look up*. For the purposes of this study, 113 participants (105 French speakers, 4 Arabic speakers, 4 Chinese speakers) were involved in the experimentation. They were freshmen enrolled in a general engineering college and were considered to be low-level in terms of English proficiency based on their Test of English for International Communication (TOEIC) exam results. Their knowledge of the two phrasal verbs as well as their single word versions (*pick* and *look*) were first pre-tested using concordance lines. The pre-test involved 10 concordance lines for *pick/pick up* and 10 for *look/look up*. Each concordance line had a gap that the students were expected to fill in. Following the pre-test, concordance line sheets, which consisted of 25 lines each with *picked, picked up, picked (something) up, looked, looked up* and *looked (something) up* were distributed to students. 10 minutes after this presentation stage, students were post-tested in the same way. The results of the study revealed that students were able to derive benefit from consulting concordance lines as significant improvement was observed in their post-test results. However, one main drawback of this study is that the lack of a control group does not help to ensure that improvement in students' collocational knowledge resulted from exposure to concordance lines.

Koç (2006) aimed to determine the extent to which development of collocational awareness in language learners is achievable via explicit instruction of collocations and the likelihood of its effects on the retention of vocabulary. The study was carried out with 160 participants from eight classrooms of upper-intermediate level. Both the control and the experimental groups were administered

the same pre- and post-test. Similarly, both groups were exposed to the same treatment materials with the experimental group's attention drawn to the collocates of the target words using three different techniques; namely translation, dictoglossing and error correction with concordancing extracts. In addition to the pre-test, post-test, the tasks and the techniques, audiotape transcriptions of the sessions as well as interviews held with the participant teachers were drawn upon as means of data collection. As there were three types of treatment, the pre- and post-tests consisted of three sub-tests of 75 collocations (grammatical and lexical), each corresponding to one of the treatments. The first sub-test was a multiple-choice recognition test comprised of 25 collocations. The second one was a fill-in-the-blank test with the collocates of 25 words left empty in two passages selected from an article. Finally, the last sub-test was again a fill-in-the-blank test comprised of 25 collocations, but this time with synonyms of blanked collocates given at the end of each sentence as cues. The treatments corresponding to each sub-test were as follows: In the first treatment session, participants were provided with an article that involved quite a few collocations and were asked to translate 10 Turkish sentences on a handout into English (Each sentence included a collocation). In the second treatment session, following the dictoglossing technique, students were read aloud a text by their teacher and were asked to write a similar passage. In the last treatment session, students were given a handout full of a mixture of sentences with collocations and miscollocations. They were later asked to detect and correct the miscollocations by referring to a set of concordancing extracts retrieved from Web Concordancer and The Collins Wordbanks Online English Corpus. The control group, on the other hand, received traditional vocabulary treatment. The audiotape transcriptions of the sessions and interviews held with participant teachers revealed that explicit

instruction leads to development of collocational awareness in language learners. Pre- and post-test results indicated that both the experimental and control groups showed improvement; however, the improvement in the vocabulary retention of the experimental group was proven to be far better when the between group gains were compared. Finally, the sub-test results showed that the translation technique was more effective than dictoglossing and error correction with concordancing extracts.

Akıncı (2009) investigated the effectiveness of DDL by comparing it with two other instructional methods, namely explicit instruction and combined method (DDL & explicit instruction). He worked with three groups of freshman students enrolled in the department of English Language Teaching one hour per week for five weeks (one week spent on corpus training) to test each method. Data-driven learning group (D-Group) studied verb-noun collocations with the researcher writing nouns of target collocations on the board and asking participants to find their collocates in the corpus. Then, the students would share their findings and the teacher would list them on the board. Explicit-instruction group (EI-Group) was shown the same set of nouns. First, they were asked to brainstorm what their collocates might be and then the instructor listed the collocations that D-Group had come up with. At the end of the lesson, students were given a worksheet of nine fill-in-the-blank questions. After they completed the worksheet, the instructor gave them the correct answers. Finally, combined group (C-Group) followed D-Group's method for the first three weeks and EI-Group's method for the remaining weeks. Akıncı collected the data through a verb-noun collocation test, a collocation judgment test, a self-evaluation questionnaire and semi-structured interviews. The results of the data analysis revealed that both in recognition and in judgment EI-Group was superior to C-Group. There was also a difference between C-Group and D-Group, but not statistically

significant. On the other hand, according to questionnaire and interview results, participants were usually in favor of corpus-consultancy. Akıncı attributed the high performance of EI-Group compared to the other two groups to the fact that the participants of the study had an educational background based on explicit instruction. Also, he suggests C-Group's and D-Group's performances might have been negatively influenced by the novelty effect of using corpus.

In their study with 59 seventh grade Turkish students, Balcı and Çakır (2012) compared teaching vocabulary through collocations and teaching vocabulary with classical vocabulary teaching techniques (definition, synonym, antonym, mother tongue translation). After giving students a proficiency test, they divided the participants into a control group and an experimental group randomly. For six weeks, the experimental group received instruction on vocabulary presented through reading passages followed by collocation mind maps of words from these passages whereas the control group was taught single words through definitions, synonyms, antonyms and translation. All the words were unknown as they had asked students to choose the unknown words in a list prior to treatment. In the meantime, they tested students' vocabulary knowledge on a weekly basis with multiple-choice and fill-in-the-blanks items. Until the test given on the sixth week, there was no statistically significant difference between the two group's vocabulary test performances; however, the test results of the sixth week yielded a statistically significant difference between the experimental and control group's performances with the experimental group outperforming the control group. Likewise, the results of the retention test administered a week later to check the long-term effect of the experiment pointed to such a difference as well. Therefore, based on the findings of this study, it can be concluded that teaching vocabulary through collocations is superior to classical

vocabulary teaching techniques and therefore should be exploited more often by language teachers.

2.8 Conclusion

In a nutshell, knowledge of vocabulary, the importance of which has been acknowledged by various researchers (Coady & Huckin, 1997; Lewis, 1993; Nation, 2001; Schmitt, 2010), has been categorized as receptive and productive (Nation, 2001). The receptive and productive distinction applies to collocational knowledge as well, the acquisition of which is also very important, even more important than the acquisition of single words due to a number of advantages suggested by scholars (Brown, 1974; Carter & McCarthy, 1988; Conklin & Schmitt, 2008; Hill, 2000; Lewis, 2000; Nation, 2001; Schmitt, 2000; Webb & Kagimoto, 2009). Although vocabulary acquisition studies (Alcaraz Mármol & Sánchez-Lafuente, 2013; Bao, 2015; de la Fuente, 2002; Ellis & He, 1999; Folse, 2006; Hashemzadeh, 2012; Hulstijn & Laufer, 2001; Jahangiri & Abilipour, 2014; Keating, 2008; Kim, 2011; Li, 2014) have compared the effects of input- versus output-oriented tasks on the acquisition of receptive and productive vocabulary knowledge, to the author's knowledge, only one research study (Webb & Kagimoto, 2009) studied the effects of variance in task orientation on receptive and productive collocational knowledge.

In the literature, reading comprehension (Alcaraz Mármol & Sánchez-Lafuente, 2013; Hulstijn & Laufer, 2001; Keating, 2008; Kim, 2011; Webb, 2005), reading comprehension with cued gap-filling (Alcaraz Mármol & Sánchez-Lafuente, 2013; Hulstijn & Laufer, 2001; Keating, 2008), cued gap-filling (Folse, 2006; Hashemzadeh, 2012; Jahangiri & Abilipour, 2014) and following directions (Ellis & He, 1999; de la Fuente, 2002) have typically been characterized as input-oriented

vocabulary teaching tasks. Sentence-construction (Alcaraz Mármol & Sánchez-Lafuente, 2013; Folse, 2006; Jahangiri & Abilipour, 2014), composition-writing (Hulstijn & Laufer, 2001; Kim, 2011), paraphrasing and glossing (Hashemzadeh, 2012) and giving directions (Ellis & He, 1999; de la Fuente, 2002) have been utilized as output-oriented vocabulary teaching tasks. Some of these tasks along with some others have also been employed to teach collocations in a number of studies. The results of these studies have shown that inference-making (Boulton, 2008; Koosha & Jafarpour, 2006; Sun & Wang, 2003), multiple-choice (Sun & Wang, 2003), translation (Koç, 2006; Sun & Wang, 2003), gap-filling (Boulton, 2008; Koosha & Jafarpour, 2006; Sun & Wang, 2003), dictoglossing (Koç, 2006) and collocation mind-mapping (Balcı & Çakır, 2012) are successful task designs in teaching collocations. Research on teaching collocations has also shown that inductive learning of collocations results in higher rates of acquisition than deductive learning (Sun & Wang, 2003; Chan & Liou, 2005) and data-driven learning through corpus-influenced materials is more effective than explicit instruction on collocations (Koosha & Jafarpour, 2006; Boulton, 2008).

Because collocational research has greatly been facilitated by the easy accessibility of large corpora, affordable software, and high-tech computers, several studies so far have made use of concordances, which were found to be effective in teaching collocations. In light of all the facts and findings regarding the use of corpora in teaching, it seemed plausible to design the tasks to be utilized in this study by making use of corpora. The current study introduced collocations with corpus extracts presented in the tasks, which can be called corpus-influenced materials (Bennett, 2010). Based on the gap in the literature with only one study (Webb & Kagimoto, 2009) investigating the effects of variance in task orientation on the

acquisition of receptive and productive collocational knowledge as opposed to a number of studies available for vocabulary acquisition, three input-oriented and three output-oriented tasks were developed using concordances to teach collocations. The input-oriented teaching tasks are cued gap-filling and translation, sentence-half matching and cued gap-filling. The output-oriented teaching tasks are non-cued gap-filling and translation, sentence-construction and non-cued gap-filling. The current study aimed to explore the effects of variance in task orientation on the acquisition of productive collocational knowledge. Because there were three input-oriented tasks that required receptive collocational knowledge and three output-oriented teaching tasks that required productive collocational knowledge, the knowledge types required by the tasks were further categorized according to Laufer et al.'s (2004) vocabulary knowledge typology. Based on this second categorization, the present study also aimed to explore the differences among the gains in different measures of passive and active recall of collocations. The present researcher is convinced that the results of the present study will prove practical and useful for practitioners of applied linguistics.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This study was carried out with the aim of investigating the possible effects of variance in task orientation (input vs. output orientation) on the acquisition of productive collocational knowledge, finding out the gain differences among the different measures of passive and active recall of collocations and exploring learners' opinions regarding the effectiveness of input- and output-oriented teaching tasks, the difficulty level of output-oriented assessment tasks and the learning of collocations. This section explains how these aims are addressed. It presents information about the research questions, setting, participants, implementers, experimental design, research variables, pilot study, data collection instruments, and procedures of data collection.

3.2 Research questions

The current study was conducted at the English preparatory program of a university based in Turkey with the aim of investigating the effects of input- versus output-oriented tasks on the productive acquisition of verb-noun collocations and the gain differences among different measures of passive and active recall of collocations. It also investigated learners' opinions related to the effectiveness of input-oriented and output-oriented collocation teaching tasks, the difficulty level of output-oriented assessment tasks and the learning of collocations. The research questions addressed were:

1. Does learning verb-noun collocations through input-oriented tasks versus output-oriented tasks result in different rates of acquisition of productive collocational knowledge?
2. Are there any differences between the acquisition rates of passive recall and active recall of verb-noun collocations?
3. What are learners' opinions regarding the effectiveness of input-oriented and output-oriented collocation teaching tasks, the difficulty level of output-oriented assessment tasks that measure collocational knowledge and the learning of collocations?

The research hypotheses with regards to the first and second research questions stated above are as follows:

1. Learning verb-noun collocations through output-oriented tasks will result in higher rates of acquisition of productive collocational knowledge than learning collocations through input-oriented tasks.
2. The acquisition rate of passive recall of verb-noun collocations will be higher than the acquisition rate of active recall of verb-noun collocations.

3.3 Setting and participants

The experiment was carried out at a partially English-medium university in Turkey. In some Turkish universities, including the university in which this experiment was conducted, some or all of the departmental courses are offered in English. Therefore, students have to attain a certain level of English to be allowed to start their undergraduate education. The university in question administers a B2 level (Common European Framework of Reference for Languages, 2015) English proficiency test to the students at the beginning of their university education, for

which the benchmark is 65 out of 100, to test their English proficiency. Students scoring in the 65-100 range pass the exam. The corresponding B2 level score range in TOEFL IBT is 72-94 (TOEFL IBT Compare TOEFL® Scores, 2015), as noted on the official website of ETS, the institution that administers this exam. If students fail this test, they study in an intensive English preparatory program for a year, in which a modular system is adopted. Students are placed into classrooms in accordance with their exam scores obtained from an institutional placement test. Then, they study English for one year and go through four modules. At the end of each module, midterm exam scores, final exam scores and portfolio grades determine whether a student is ready to move up to a higher level in the following module. At the time when the experiment was conducted, the participants were in the final module of the year and all the participants were studying in preparatory program upper-intermediate level classes. 44 participants, who were all L1 Turkish speakers, took part in the experiment. The control group and the experimental group consisted of 22 participants each and they were intact groups. Convenience sampling was adopted in the sense that the participants, who were all studying in the same English preparatory program, were easy o reach.

3.4 Implementers

Two implementers took part in this experiment. One implementer worked with the R-group and he implemented the input-oriented tasks. The other implementer worked with the P-group and she implemented the output-oriented tasks. These implementers were not informed about each other's tasks. They only received instruction on the tasks to be implemented in their group. Both implementers, one male and one female, were L1 Turkish, L2 English instructors of English employed in the

preparatory program mentioned above. They were aged 27 and 26. One had four and the other had three years of English teaching experience with adult learners. In summary, the implementers were similar to each other in terms of their linguistic background, teaching experience and age, but not gender.

In terms of their educational background, the implementers were graduates of English Language and Literature and American Culture and Literature departments. They were not graduates of English Languge Teaching department, but the treatment could be implemented through following the guidelines without deep pedagogical knowledge on teaching English. Also, the tasks involved no instruction on collocations by the implementers. The implementers were responsible for the distribution of task sheets, timing, and giving feedback.

3.5 Design of the study

As one of the aims of the study was to find out any possible differences in learners' output resulting from task orientation, one group carried out input-oriented tasks and output-oriented tasks were implemented in the other. The tasks were randomly assigned to intact groups. Because the participants were not randomly assigned to the groups and convenience sampling was adopted, this could be called a quasi-experimental study in the format of pre-test post-test control group design.

3.6 Definitions of variables

For the first research question, the independent variable was task orientation. The R-group carried out tasks with an input orientation whereas the P-group carried out tasks with an output orientation. The dependent variable was learners' productive collocational knowledge as implied by task orientation and it was measured by the

post-test. The post-test consisted of three sub-tests administered after each treatment session and each sub-test involved three different types of output-oriented assessment tasks measuring productive collocational knowledge. For the second research question, the only variable was learners' gains in different measures of passive and active recall of collocations as implied by Laufer et al.'s (2004) hierarchy. The gains were measured by the same sub-tests. The assessment tasks that the sub-tests included aimed to measure passive and active recall of collocations.

3.7 Piloting the study

The study was piloted with 30 non-participants enrolled in the same program and studying at upper-intermediate level. Only one input-oriented treatment session, one output-oriented treatment session and the corresponding sub-tests were piloted in order to see the implementation process and make sure the allocated times were sufficient to complete the tasks and tests. After piloting these tasks, the implementers were asked to give oral feedback to the researcher on the level-appropriateness and timing of the tasks. They gave positive feedback noting that the tasks were level-appropriate. They also informed the researcher on how much time would be sufficient for completion of each teaching and assessment task. Written implementation guidelines for both groups were composed in accordance with the implementers' feedback (see Appendices B and F).

3.8 Data collection instruments

3.8.1 Pre-test

The pre-test included 20 verb-noun collocations (see Appendix A.1). It was ensured by the researcher that the collocations chosen for the current study met the collocability criteria. While searching the corpus for relevant concordances to be employed in the present study, the distance between the collocates was restricted to a maximum of four words following Bıçkı's (2012) textual proximity criterion. Also, they were chosen from the Collocations Dictionary and Thesaurus (2013) and they have a high frequency of co-occurrence (around 100-500 co-occurrences) in the corpus that they were extracted from.

Collocations, regarded as a sub-category of lexis (Sinclair, 1991) and commonly described as the companionship of words (Nation, 2001; Nattinger & DeCarrico, 1992; Schmitt, 2000; Sinclair, 1991), differ in terms of the parts of speech their collocates belong to, their frequency-based strength and also their lexical vs. grammatical categorization. These differences were taken into consideration in the selection process.

Verb-noun collocations were chosen as the target set of lexical items for this study based on Bıçkı's (2012) research results showing that Turkish learners have the greatest difficulty when one of the collocates is a verb. As for the category of the target collocations included in the pre-test and the rest of the study, it is a mix of strong collocations and medium-strength collocations according to Hill's (2000) categorization. Unique collocations were not targeted as this category consists of idioms, which have unique characteristics as the name of the category suggests. Weak collocations were not included in the study either due to their predictable

nature. Based on Lewis' (2000) distinction between grammatical and lexical collocations, the current study focused on lexical collocations and they consist of a verb and a noun, which are both lexical words. To sum up, the target set of collocations were strong and medium-strength lexical verb-noun collocations.

In order to design the pre-test, the vocabulary lists of the course books the participants had covered were examined to ensure that the collocations were unknown by the participants. Then the researcher chose 50 verb-noun collocations from a collocations dictionary called Collocations Dictionary and Thesaurus (2013). Later, this list was presented to three instructors teaching upper-intermediate classes to get expert opinion on whether the students knew the collocations and whether they could learn them at that level. Based on their opinions, a smaller sample consisting of 20 verb-noun collocations was created. The pre-test was formed using this list.

The pre-test served the purpose of detecting the collocations that the participants did not know. It was administered to all participants before the tasks were applied. In the pre-test, students were asked to tick *I know* or *I don't know* for each collocation. If they knew the meaning of a collocation, they were also asked to provide the Turkish translation. The results of the pre-test showed that a few participants were familiar with some of the collocations. Therefore, five collocations that were known by different participants were omitted from the list. The quasi-experiment was carried out with the remaining 15 collocations.

3.8.2 Treatment materials

A variety of tasks, described by Coughlan and Duff (1994) as research taks used to elicit linguistic data, were employed in the treatment sessions of the current study. P-group and R-group did not differ in the collocations they studied, but differed in the

type of tasks that they got engaged in. Following Nation (2001), the P-group tasks were designed as output-oriented tasks which required productive knowledge of collocations and the the R-group tasks were designed as input-oriented tasks which required receptive knowledge of collocations (see Table 1). All the tasks utilized in the current study belong to the language-focused learning strand (Nation, 2007), which is claimed by Nation to be a very effective method especially for teaching chunks.

Within the R-group and P-group, the course of each treatment session was identical as the participants went through the same set of tasks in each session. Table 5 displays control and experimental group task categories.

Table 5. Tasks Utilized in Treatment Sessions

	Treatment Session I	Treatment Session II	Treatment Session III
R-group (Input-oriented Tasks)	Task I: Cued inference-making and translation	Task I: Cued inference-making and translation	Task I: Cued inference-making and translation
	Task II: Sentence-half matching	Task II: Sentence-half matching	Task II: Sentence-half matching
	Task III: Cued gap-filling	Task III: Cued gap-filling	Task III: Cued gap-filling
P-group (Output-oriented Tasks)	Task I: Non-cued inference-making and translation	Task I: Non-cued inference-making and translation	Task I: Non-cued inference-making and translation
	Task II: Sentence-construction	Task II: Sentence-construction	Task II: Sentence-construction
	Task III: Non-cued gap-filling	Task III: Non-cued gap-filling	Task III: Non-cued gap-filling

As displayed in Table 5, the treatment was given to both the P-group and R-group in three sessions. The sessions covered only those collocations that the participants reported not to know according to their pre-test results. A total of 15 collocations

were covered during the entire treatment and five collocations were covered in each session. The unknown collocations were randomly broken down into three groups to prevent any grouping effects and were randomly distributed to three treatment sessions since introducing 15 collocations at once would be too overloading for the participants. Each session involved three tasks and enabled the participants to practise the same five collocations three times with three consecutive tasks that recycled the collocations.

In the first treatment session, the participants studied the collocations *acquire property, allocate time, file a petition, damage sb's/sth's credibility* and *seek refuge* with three tasks shown in Table 5 that recycled these five collocations. In the second treatment session, they studied *drop charges, resign sb's post, implement measures, deny involvement* and *obtain sb's consent* with three tasks again. In the third treatment session, they studied *undergo an operation, bear resemblance, face a prospect* and *suit sb's taste*. With each of the three sessions aiming to teach five collocations, at the end of the treatment period, the participants in both groups had studied the same 15 verb-noun collocations with different types of tasks.

Based on the implications of the Input Hypothesis (Krashen, 2002), all the R-group tasks were input-oriented, which means that comprehension of input was sufficient for successful completion of the tasks. For the R-group, the first task of each session was cued inference-making and translation and four concordance lines for each collocation were presented to participants (see Appendices G.1, H.1 and I.1). They were expected to read the concordance lines, infer the meaning of the target collocation and choose its Turkish translation from a box of seven Turkish translations. As each session aimed to teach five collocations, two of the translations in the box were extra to reduce the chance factor. The second task of each session for

the R-group was sentence-half matching and required the participants to match the concordance line halves with each other (see Appendices G.3, H.3 and I.3). The lines had been divided into two in a way that collocates would be in different halves. So in this task, participants were expected to read and understand the lines and then match the halves trying to remember the collocations that they had learned in the previous task. The third task was non-cued gap-filling (see Appendices G.5, H.5 and I.5). It contained five concordance lines with the target collocations omitted and the participants' job was to choose the appropriate collocations again from a box of seven collocations and fill in the gaps. Obviously, the R-group participants were not expected to produce any kind of output while carrying out these tasks.

Based on the implications of the Output Hypothesis (Swain, 2000), all the P-group tasks were output-oriented, which means that successful completion of the tasks was dependent upon production of the target linguistic output. All the tasks for the P-group were output-oriented counterparts of the R-group tasks. The first task of each session was non-cued inference-making and translation, in which four concordance lines were presented for each collocation (see Appendices C.1, D.1 and E.1). Differently from the R-group, participants were not provided with the Turkish translations and they had to come up with the translations for all of the five collocations in that task by reading the concordance lines given and inferring the meanings of the collocations. In the second task, which was sentence-construction, they were asked to produce five original and meaningful sentences using the same five collocations (see Appendices C.3, D.3 and E.3). In the final task, which was a non-cued gap-filling task, participants were presented with five concordance lines with the target collocations omitted as in the cued gap-filling task (see Appendices C.5, D.5 and E.5). However, they did not have a box to choose the answers from.

They were expected to recall the collocations, which they had studied in the first two tasks.

The vocabulary knowledge typology proposed by Laufer et al. (2004) has different implications (see Table 3) than task orientation. According to the implications of this typology, the R-group relied on passive recognition in the tasks of cued inference-making and translation and sentence-half matching since the participants only had to recognize the meanings of the collocations and choose the correct meaning from a set of options. In the cued gap-filling task, task completion was dependent upon active recognition because they had to recognize the forms of the collocations and choose the correct collocation for the contexts given from a set of options. On the other hand, the P-group relied on passive recall in the tasks of non-cued inference-making and translation and sentence-construction since the participants had to supply or show comprehension of the meanings for the collocations. In the non-cued gap-filling task, task completion was dependent upon active recall because they had to supply the forms of the collocations. In summary, according to Laufer et al.'s (2004) typology, the two groups in the present study differed only in terms of the recognition-recall distinction, but practised both passive/receptive and active/productive types of knowledge.

It appears that the implications of task orientation and Laufer et al.'s (2004) typology may contradict. All the tasks implemented in the P-group in the present study can be considered productive/output-oriented and, likewise, all the tasks implemented in the R-group can be considered receptive/input-oriented. However, when the tasks are mapped onto the types of vocabulary knowledge proposed by Laufer et al. (2004), different results are obtained as shown in Table 6.

Table 6. Types of Vocabulary Knowledge in the Tasks of the Current Study

R-group tasks		P-group tasks	
Task type	Vocabulary knowledge type	Task type	Vocabulary knowledge type
Cued inference-making and translation	Passive recognition	Non-cued inference-making and translation	Passive recall
Sentence-half matching	Passive recognition	Sentence-making	Passive recall
Cued gap-filling	Active recognition	Non-cued gap-filling	Active recall

As displayed in Table 6, when Laufer et al.'s categorization is adopted, different types of vocabulary knowledge are obtained. In terms of task orientation, all R-group tasks are input-oriented and require receptive collocational knowledge and all P-group tasks are output-oriented and require productive collocational knowledge; however, according to Laufer et al.'s typology of vocabulary knowledge, the R-group tasks and P-group tasks differ in terms of the recognition-recall distinction, not in terms of the passive-active distinction. The tasks of both groups include two passive (receptive) tasks and one active (productive) task. This contrast will be taken into consideration while discussing the findings of the current study.

To summarize, the input-oriented R-group tasks were respectively cued inference-making and translation, sentence-half matching and cued gap-filling. The output-oriented P-group tasks were respectively non-cued inference-making and translation, sentence-construction and non-cued gap-filling. In line with the objectives of the study, the two groups' teaching tasks were designed parallel to each other by varying the orientation of the tasks only and varying the types of tasks according to Laufer et al.'s (2004) typology within the R-group and P-group.

3.8.3 Development of treatment materials

Whatever the implications of task orientation or Laufer et al.'s (2004) typology might be, special attention was paid to distinguish the teaching materials used in the current research study from the traditional language teaching materials based on Johns' (1994) suggestion on revolutionizing the traditional language teaching materials. It was not traditional dictionary examples provided as input for learners in the tasks, but concordances extracted from COCA - an L1 generalized corpus (Bennett, 2010) with a body of 520 million words by the year 2015. For the present research study, COCA was selected due to this very high number of words it covers and also because it has a built-in concordancing program.

Due to the magnitude of their sizes, corpora require the use of a concordancing program (Bennett, 2010; Lewis, 2000; Woolard, 2000). As COCA has a built-in concordancing program, collocations were searched and concordances were retrieved easily. Concordance data were proactively used in the development of tasks utilized in the current study as they are claimed to be superior to the data in traditional sources in terms of both quantity and quality (Balcı & Çakır, 2012; Boulton, 2008; Johns, 1994; Koç, 2006; Koosha & Jafarpour, 2006). The tasks designed for this study are considered to be corpus-influenced materials as named by Bennett (2010). As stated in McCarthy (2004), this type of materials do not look different than traditional teaching materials format wise; however, they are special in that they rely on actual uses of the language providing authenticity and richness. In this way, they may also give learners a sense of motivation.

Inference-making, sentence-half matching and gap-filling tasks were created by the researcher using COCA as the source of data. The learners had to rely on inductive strategies to carry out the cued and non-cued inference-making and

translation tasks (see Appendices C.1, D.1, E.1, G.1, H.1 and I.1). Concordance data were used for the other tasks as well. In the sentence-half matching tasks (see Appendices G.3, H.3 and I.3), the learners were expected to combine sentence halves and these concordance lines were taken from COCA. Also, for the sentence-construction task, the learners were allowed to refer to concordance extracts in their handouts. Likewise, the sentences used for both cued and non-cued gap-filling tasks (see Appendices C.4, D.4, E.4, G.5, H.5 and I.5) were concordance lines extracted from corpus.

For the purposes of this study, selective concordances as opposed to exhaustive concordances (Sinclair, 1991) were employed since only a maximum of seven concordance lines for each collocation were needed and the remaining concordance lines were unnecessary. In the selection process, the researcher paid attention to selecting concordance lines that had rich contextual clues to ensure that it was possible to infer the meanings of the collocations from the concordance lines. Following Boulton's (2008) and Koosha and Jafarpour's (2006) studies, these concordance lines were employed in the design of all the tasks. They were used to introduce and exemplify authentic uses of collocations and to design a variety of tasks. Within the scope of this study, corpus was indirectly used (Leech, 1997) by extracting concordance lines. On the basis of Aston's (2001) argument that the difficulty of corpus data can be diminished through selection and adjustment of concordances, the concordance lines selected were fined-tuned in terms of grammar and vocabulary where necessary according to the proficiency level of the students after an examination of their course materials and were presented to them as input in various tasks. To sum up, concordances were used to develop the R-group teaching tasks of cued inference-making and translation, sentence-half matching and cued

gap-filling and the P-group teaching tasks of non-cued inference-making and translation, sentence-construction and non-cued gap-filling. The difference between the tasks of the two groups was the ways the participants dealt with the concordance data. The tasks required the R-group to use the data presented in receptive ways whereas the P-group tasks got the participants to utilize the data in productive ways.

Inference-making, which was the first step of the inference-making and translation task implemented in both groups with different task orientations, has been proven by previous studies to be effective in teaching collocations. Earlier studies (Chan & Liou, 2005; Sun & Wang, 2003) have shown that inductive learning of collocations results in higher rates of acquisition than deductive learning. Johns (1994) also argues for the benefit of practising the language through exploitation of inductive strategies. The translation task has previously been utilized to teach collocations (Koç, 2006; Sun & Wang, 2003). This task, employed as a vocabulary teaching task in other research studies as well (Balcı & Çakır, 2012; Chan & Liou, 2005; Koç, 2006; Webb & Kagimoto, 2009), also had two versions in the current study. The cued inference-making and translation task required the participants to match the collocations with their given L1 translations, which means that the L1 translations were provided for the participants and that they were not asked to produce anything. On the other hand, the non-cued cued inference-making and translation task implemented in the P-group was output-oriented since the participants had to come up with the L1 translations for the collocations on their own. Word translation has frequently been relied on as an assessment task in the literature. The studies that have used this format have interpreted the knowledge type that it requires as receptive if the direction of translation is from L2 to L1, and productive if the direction of translation is from L1 to L2 (Alcaraz Mármol &

Sánchez-Lafuente, 2013; de la Fuente, 2002; Griffin & Harley, 1996; Keating, 2008; Stoddard, 1929; Waring, 1997; Webb, 2009). As opposed to these studies, the Input and Output Hypotheses that Nation (2001) takes as the theoretical foundation for the distinction between receptive and productive knowledge imply that translation in either direction is an output-oriented task as long as learners make the translations without any options provided. It should be noted that the differentiation between two types of translation does not have a firm theoretical foundation; however, Laufer et al.'s (2004) word knowledge typology can account for it. According to their typology, L2 to L1 translation requires recall or recognition of the word meaning so the knowledge type is passive (receptive). L1 to L2 translation requires recall or recognition of the word form so the knowledge type is active (productive). This will be discussed in depth in the discussion chapter. Its task orientation implies that the translation task is an output-oriented one; however, because of the way it was utilized in the previous studies, two more tasks, the task orientations of which were compatible with previous studies were utilized in the current study.

The sentence-construction task was also commonly utilized in the literature as a teaching task (Folse, 2006; Jahangiri & Abilipour, 2014; Keating, 2008; Webb, 2005) and as an assessment task (Paribakht & Wesche, 1993). Several studies have pointed to its positive impact on the acquisition of productive vocabulary knowledge (Alcaraz Mármol & Sánchez-Lafuente, 2013; Webb, 2005; Keating, 2008). As the sentence-construction task is an output-oriented task, it was utilized in the P-group treatment sessions. The input-oriented counterpart of this task was sentence-half matching and required the R-group participants to match the sentence-halves with each other. Matching collocates in this way is also a common task design in the literature (Gyllstad, 2007; Revier, 2009). In terms of Laufer et al.'s (2004) typology,

the sentence-construction test required passive (receptive) recall and the sentence-half matching task required passive (receptive) recognition. As opposed to the implications of task orientation, this typology implies that with the sentence-cosntruction task, learners practise receptive knowledge of collocations.

The gap-filling task was used as a task to teach collocations in several studies (Boulton, 2008; Koosha & Jafarpour, 2006; Sun & Wang, 2003). This task has frequently been utilized in the literature as a cued gap-filling task and so it was interpreted as an input-oriented task in vocabulary studies (Alcaraz Mármol & Sánchez-Lafuente, 2013; Hashemzadeh, 2012; Hulstijn & Laufer, 2001; Keating, 2008; Kim, 2011). However, based on Laufer and Nation's (1995) development of an output-oriented version of Nation's (1990) gap-filling vocabulary levels test, two versions of gap-filling task were formed for the current study: cued gap-filling and non-cued gap-filling. In the input-oriented version of the VLT (Nation, 1990), students are provided with options whereas in the output-oriented (Laufer & Nation, 1995) version no options are available and students need to produce the target word forms. In line with these two versions, the gap-filling task was used both as an input-oriented task (cued gap-filling) and as an output-oriented task (non-cued gap-filling) in the current study. This selection and design of the teaching tasks allowed the researcher to have an input-oriented and output-oriented set of tasks and also to ensure that the tasks were parallel to each other except their orientation.

The areas listed in the Lexical Approach section, which are claimed to require more attention in the implementation of the Lexical Approach (Lewis & Gough, 2008), closely relate to the tasks used in the present research study. The first one, multi-word chunks, clearly receives attention in this research study as all the tasks serve the aim of teaching collocations. The participants are upper-intermediate level

learners and the cued and non-cued inference-making and translation tasks expose R-group and P-group participants to abundant written input. In this way, the third area, which emphasizes the importance of reading at higher levels, also receives attention. In the same tasks again, both groups engage in translation, which proves that the fourth area, namely activities based on L1/L2 comparisons and translations, was paid attention to as well. The use of corpus data, which consists of real uses of the language, in the preparation of the tasks indicates that the fifth, sixth and eighth areas also drew considerable attention. These areas are respectively the use of the dictionary as a resource for active learning, probable rather than possible English and the language which learners may meet outside the classroom. Overall, the participants engaged in comprehension and translation in the inference-making tasks. This shows that learners were prepared to get maximum benefit from the text, in other words the corpus extracts presented in the inference-making tasks. To sum up, the treatment that participants received in this study can be considered a decent example of the implementation of the Lexical Approach.

In a nutshell, convinced that the Lexical Approach has a point by implying that lexicon is more important than grammar for language learners and that collocations along with fixed and semi-fixed expressions are what make up coherent, semantically meaningful language (Lewis & Gough, 2008), the researcher aimed to teach words as chunks. Corpus was indirectly used to develop different types of input-oriented and output-oriented tasks to teach collocations. Corpus was exploited because as suggested by DDL the role of authentic data in learning a language cannot be ignored.

3.8.4 Post-test

Like the treatment sessions, the post-test also consisted of research tasks as entitled by Coughlan and Duff (1994), which were utilized to elicit data for assessment purposes. The design of the assessment tasks were modified versions of the P-group teaching tasks used in treatment sessions. The assessment tasks were also output-oriented since it was the acquisition of productive collocational knowledge that was investigated. The post-test was broken down into three sub-tests each covering five collocations practised in one treatment session. There was an immediate sub-test implemented after each session to keep the time period between the treatment and assessment constant. Table 7 shows which assessment task corresponds to which teaching task.

Table 7. Types of Tasks Utilized in Teaching and Assessment

Type of Input-oriented Teaching Task	Type of Output-oriented Teaching Task	Type of Corresponding Assessment Task
Task I: Cued inference-making and translation	Task I: Non-cued inference-making and translation	Task II: Translation
Task II: Sentence-half matching	Task II: Sentence-construction	Task III: Sentence-construction
Task III: Cued gap-filling	Task III: Non-cued gap-filling	Task I: Non-cued gap-filling

Every sub-test consisted of three assessment tasks. In the first assessment task, participants were presented with five concordance lines with the collocations omitted (see Appendices K1, L1 and M1). They were supposed to recall the collocations and fill in the gaps. In the second assessment task, participants were asked to write the Turkish translations for five collocations (see Appendices K.3, L.3 and M.3). As

noted by Milton (2009), translation and elicitation (gap-filling) tests are two common forms of measurement and have the advantage of giving the test designer the control over the language that test takers will produce. Therefore, the use of these two forms of measurement enabled the researcher to elicit the targeted language in a controlled way. Also, translation tests are considered to be reliable assessment tools in measuring vocabulary knowledge (Alcaraz Mármol & Sánchez-Lafuente, 2013; Read, 2000). In the third assessment task, the participants were asked to produce original and meaningful sentences with the target collocations (see Appendices K.3, L.3 and M.3).

It is important to note two points related to Table 7. Firstly, it is seen in the table that the order of the administration of assessment tasks is different from the order of implementation of the teaching tasks. The reason is that in the treatment sessions, it was desired that participants first had exposure to the collocations in concordance lines and infer their meanings from context. If this order had been adopted in the assessment tasks too, seeing collocations and writing translations before gap-filling would have helped learners remember the collocations and would have hindered a reliable assessment of learners' recall in the non-cued gap-filling assessment task. The other point is that no concordance lines were supplied in the translation assessment task. In the P-group treatment sessions, concordance lines had been supplied for the participants to infer the meanings of the collocations from. The lines were supplied because it was the treatment period and the participants were studying the target collocations. In the post-test, however, the aim was to test, not to teach, productive knowledge and recall of collocations, and presenting concordance lines in the post-test would interfere with this aim. Therefore, the target collocations were presented in isolation and the participants were asked to write down the Turkish

translations for the collocations given in the translation assessment task, and produce sentences using them in the sentence-construction assessment task.

In terms of task orientation, all the assessment tasks tested productive collocational knowledge as the learners had an active role producing something. However, according to Laufer et al.'s (2004) typology, each assessment task served the purpose of testing passive or active recall of collocations. Assessment task I measured active recall as the participants were supposed to retrieve the form and no options were provided. Assessment tasks II and III measured passive recall because the items required the test takers to retrieve the word meaning and no options were provided.

A comparison of test formats with other formats of tests developed to measure knowledge of vocabulary or collocations reveals that the first assessment task, translation, is a common format used to test receptive and productive vocabulary knowledge. The distinction of productive and receptive vocabulary knowledge required by translation depending on the direction of translation (Alcaraz Mármol & Sánchez-Lafuente, 2013; de la Fuente, 2002; Griffin & Harley, 1996; Keating, 2008; Stoddard, 1929; Waring, 1997; Webb, 2009) was taken into consideration while designing the assessment tasks as well. Because translation from L2 to L1 is considered as an input-oriented task in earlier studies, two more assessment tasks testing productive collocational knowledge as implied by task orientation, namely sentence-construction and non-cued gap-filling, were designed. In terms of Laufer et al.'s (2004) typology, this task tested passive (receptive) recall of collocations.

The sentence-construction task has previously been used as a test format in standard vocabulary tests such as the VKS (Paribakht & Wesche, 1993). In the VKS,

test takers are asked to translate the word from L2 to L1 to test their receptive knowledge of the word. Then, they are asked to construct a sentence with the target word to test their productive knowledge of the word. Therefore, in the current study, sentence-construction was utilized as an ouput-oriented assessment task measuring test takers' productive knowledge of collocations. In terms of Laufer et al.'s (2004) typology, it tested passive (receptive) recall of collocations because the participants were asked to recall the word meaning from the word form presented to them.

The last assessment task, namely non-cued gap-filling, is another standard test format used to measure vocabulary knowledge. In the productive version of the VLT (Laufer & Nation, 1999), test takers' productive knowledge of words is tested by asking them to recall the target words and fill in the gaps in sentences. Similarly, the participants in the present study were asked to fill in the gaps in concordance lines with the target collocations. This assessment task tests participants' productive knowledge (active recall) according to Laufer et al.'s (2004) typology as well because it requires the participants to recall the word forms.

To summarize, the participants practised the collocations with three teaching tasks and then were tested through the sub-tests consisting of three assessment tasks. Each assessment task corresponded to a teaching task. For the P-group, the nature of each teaching task was identical to the corresponding assessment task except for the lack of of concordance lines in the translation and sentence-construction assessment tasks. The same assessment tasks measuring learners' productive knowledge and recall of collocations were administered to the R-group as well, who had carried out similar teaching tasks, but with an input orientation. Briefly, the way participants' collocational knowledge was assessed in the post-test was as similar to the way they were taught the collocations in the treatment sessions as possible, the difference

being task orientation for the R-group. In the post-test, the R-group participants were not provided with options as opposed to the teaching tasks. All the assessment tasks tested participants' productive collocational knowledge as implied by task orientation. The same assessment tasks measured active recall, passive recall and passive recall of collocations respectively as implied by Laufer et al.'s (2004) typology.

3.8.5 Interviews

Interviews were held with participants and their responses were analyzed to explore their opinions regarding the effectiveness of the teaching tasks and the difficulty level of the assessment tasks, which they went through after the completion of all three sessions. Such data collection instruments as student interviews and questionnaires had been used in previous collocation studies to explore learner opinions (Akıncı, 2009; Chan & Liou, 2005). To this end, interviews that focused around the following questions were conducted with four respondents randomly selected from the R-group and four respondents randomly selected from the P-group:

1. What are your positive and negative opinions regarding the tasks utilized in these lessons?
2. Did you have difficulty answering the post-test questions?
3. What do you think about learning collocations?

The combination of post-test and interviews enabled the researcher to collect both quantitative and qualitative data. In this way, conclusions could be drawn based on both test results and respondents' answers to the interview questions.

3.9 Procedures of data collection

3.9.1 Administration of pre-test

The pre-test was administered to all participants one week before the tasks were implemented. Of the 20 collocations in the pre-test, five were eliminated as several participants knew the meanings of these five collocations. The remaining 15 were used in the tasks as the pre-test results had shown that none of the students knew their meanings. In this way, it was ensured that when the quasi-experiment started, neither the R-group nor the P-group members knew the meanings of the any of the collocations to be taught.

In the pre-test, the yes/no format (Balcı & Çakır, 2012; Meara & Buxton, 1987) was followed. In this format, the test takers are asked to tick the words that they know. This pre-test design is quite straightforward and to the point. What is missing, however, is that a researcher cannot know for certain that participants really know the words which they tick. Differently from this format, in this study, the participants were also asked to provide the Turkish translations for the collocations that they claimed to know to make sure that they really knew the meaning. This pre-test format is an improved version of the yes/no format and adapted from the VKS (Paribakht & Wesche, 1993).

3.9.2 Implementation of treatment

All three treatment sessions were implemented over a period of two weeks in both groups with three-day intervals. Implementation was carried out by two instructors of English. The implementer of the R-group was provided with written guidelines on how to implement all three tasks in each session and received oral explanations from

the researcher as well. Similarly, the implementer of the P-group received written guidelines on how to implement the tasks as well as oral explanations prior to treatment. Both implementers were informed that the treatment was supposed to take place as stated in oral and written guidelines.

In each session of both the R-group and the P-group, first of all the implementer told the participants that they were expected to fill out the personal information part, that they were not allowed to use their mobile phones or dictionaries, that they could ask the implementer any unknown words apart from the target collocations and that they were not allowed to take notes or photos (see Appendices B and F). The use of mobile phones and dictionaries was not permitted as the participants were expected to study the collocations only through the tasks. They were allowed to ask the implementer any unknown words so that lack of knowledge of any words other than the target collocations would not interfere with the findings. Likewise, they were not allowed to take notes or photos since they would be given a post-test the following day on those collocations. The effects of revision were not desired. The implementers were instructed through oral and written guidelines to share all this information with the participants before they started the treatment sessions.

In each R-group session, participants had 10 minutes to complete the first task in which they read four concordance lines for each collocation and matched the collocations with their Turkish translations. Prior to treatment, the implementer was told that the aim of the first task was getting participants to engage in data-driven learning and to infer the meanings of collocations from the contexts. He was informed that at the end of the task he was supposed to hear the participants' answers first by encouraging them to justify how they arrived at that answer from the contexts

given. So, at the end of this task, the implementer checked the answers with participants by asking what the answers were and asking them to justify their answers. If none of the participants got the answer right, the implementer would give the answer and explain why referring to the contexts. After this feedback period, he collected the first task sheets and distributed the second task sheets. Participants were given five minutes to complete the second task, in other words to match the concordance line halves with each other. This task was followed by a similar feedback period. Then, the implementer collected the second task sheets and handed out the third task sheets. In the third task, participants filled in the gaps with one of the collocations provided in a box in five minutes. A similar feedback period took place following this task as well.

The first task of a P-group session required participants to read four concordance lines for each collocation and come up with its Turkish translation in 10 minutes. Like the R-group implementer, the P-group implementer was also informed about the importance of data-driven learning, contexts and inference-making in the first task. At the end of the task, the implementer checked the answers by encouraging participants to share and justify their answers referring to the contexts. If they did not get the answer right, the implementer would tell them the answer referring to the contexts. It is evident that the feedback format was identical to the feedback format of the R-group. At the end of this task, participants were given the second task sheets but they were allowed to keep the first task sheets as well as opposed to the R-group. The reason was that P-group participants were expected to write original and meaningful sentences using the target collocations and referring to authentic corpus data presented in the first task sheet. They had 10 minutes to produce five sentences. When this task was over, the implementer collected the first

and second task sheets and distributed the third task sheets. In the last task, participants were asked to fill in the gaps with appropriate collocations in five minutes; however, they were not provided with any options. They had to recall the collocations that they had practised in the first two tasks.

3.9.3 Administration of post-test

Each sub-test of that the post-test involved was administered the day after the implementation of the relevant treatment session. The implementers were given oral instructions and written guidelines on the administration of the tests (see Appendix J). The participants were allowed to ask the implementer any unknown words other than the target collocations in the tests as well. The sequence of the implementation of the output-oriented tasks, which was respectively translation, sentence-construction and non-cued gap-filling, was modified in the post-test. This modification was practised because in the teaching tasks, translation and sentence-construction preceded non-cued gap-filling so that the participants would be exposed to the collocations within the concordance lines first and would practise using the collocations in sentences later. Consequently, this would enable them to fill in the gaps in the non-cued gap-filling task. On the other hand, in the post-test, gap-filling preceded translation and sentence-construction because the participants were expected to recall, not recognize, the collocations. If they had carried out the assessment tasks of translation and sentence-construction initially, this would have given them a hint for the following gap-filling task and facilitated the recall of collocations.

The assessment tasks of non-cued gap-filling and translation were scored by the researcher according to the answer keys (see Appendices K.2, K.4, L.2, L.4, M.2

and M.4). For the sentence-construction assessment task, if a participant could correctly use the collocation in an original sentence, it was accepted as a correct answer. Minor spelling and grammar errors that did not interfere with meaning were ignored. As each sub-test was administered the day after each of the three treatment sessions, participants had taken three sub-tests and carried out nine assessment tasks at the end of the quasi-experiment. Each assessment task aimed to test knowledge of five collocations and every correct answer received one point. As such, the maximum total score was five for each assessment task, 15 for each sub-test as the sub-tests involved three assessment tasks and 45 for the whole post-test as the post-test was administered in three sub-tests.

3.9.4 Conduct of interviews

Four students from both groups were randomly selected and called for an interview about one week after all the tasks and tests were over. The interviews were held in participants' native language, which is Turkish, audiotaped with their approval and then transcribed for analysis. An interview lasted for approximately five minutes.

3.10 Data analysis

The aim of this study was to investigate the effects of variance in task orientation on learners' productive collocational knowledge and the gain differences among different measures of passive and active recall of collocations. Learners' opinions regarding the effectiveness of input-oriented and output-oriented collocation teaching tasks, the difficulty level of output-oriented assessment tasks that measure collocational knowledge and the learning of collocations were explored, too. To this end, one experimental and one control group received input-oriented and output-

oriented treatment respectively. The two groups of students that participated in this study were all students studying at upper-intermediate level. Each group consisted of 22 students. Both groups were intact groups. The R-group and P-group carried out tasks with an input versus output orientation. The effects of variance in task orientation and the gain differences among different measures of passive and active recall of collocations were investigated via statistical analyses of quantitative data, which were participants' post-test scores, and inductive content analysis of qualitative data, which were collected through interviews with four respondents from each group. This section outlines the procedures of data analysis.

The input-oriented and output-oriented tasks were designed using concordance lines to make them as authentic as possible and with the conviction deriving from earlier studies that corpus-influenced materials are more effective in vocabulary acquisition than traditional materials. The treatment came in three sessions. Each covered five collocations, lasted for 35 minutes, and was followed by an immediate post-test the following day. Regardless of which group they belonged to, all the students took the same post-test which tested their productive knowledge (as implied by task orientation) of the collocations that they had studied either through inpur-oriented or output-oriented tasks in the relevant treatment sessions. The post-test consisted of three sub-tests administered after the treatment sessions. Each sub-test involved three assessment tasks, which measured passive and active recall of collocations as implied by Laufer et al.'s (2004) typology. The quantitative data came from students' post-test results.

At the end of the treatment and post-test, four participants from the P-group and four participants from the R-group were interviewed. They were asked to share their opinions regarding the effectiveness of the input-oriented and output-oriented

collocation teaching tasks, the difficulty level of the output-oriented assessment tasks and also the learning of collocations. The qualitative data came from the transcriptions of these student interviews.

The research questions are illustrated with the corresponding procedures of data collection and data analysis in Table 8.

Table 8. Research Questions and Corresponding Procedures

Research Questions	Instruments	Data Analysis
1. Does learning verb-noun collocations through input-oriented tasks versus output-oriented tasks result in different rates of acquisition of productive collocational knowledge?	1. Assessment task I: Non-cued gap-filling 2. Assessment task II: Translation 3. Assessment task III: Sentence-construction	Independent samples *t*-test
2. Are there any differences between the acquisition rates of passive recall and active recall of verb-noun collocations?	1. Assessment task I: Non-cued gap-filling 2. Assessment task II: Translation 3. Assessment task III: Sentence-construction	One-way repeated measures ANOVA
3. What are learners' opinions regarding the effectiveness of input-oriented and output-oriented collocation teaching tasks, the difficulty level of output-oriented assessment tasks that measure collocational knowledge and the learning of collocations?	Interviews	Inductive content analysis

3.11 Conclusion

To sum up, quantitative data were collected from 44 upper-intermediate level English preparatory program university students in order to investigate the effects of

variance in task orientation on learners' productive collocational knowledge and the gain differences among different measures of passive and active recall of collocations. Also, qualitative data were collected from eight of the participants to investigate learners' opinions regarding the effectiveness of input-oriented and output-oriented collocation teaching tasks, the difficulty level of the output-oriented assessment tasks and the learning of collocations. The types of tasks were input-oriented and output-oriented. The control and experimental groups were assigned input-oriented tasks and output-oriented tasks respectively to be able to compare the effects of variance in task orientation via a statistical analysis of their post-test scores. An analysis of the data collected in this study is expected to yield results that will inform teachers and materials developers on what type of tasks to develop using corpus data when their aim is to improve learners' productive collocational knowledge or passive and active recall of collocations. It is also expected to shed some light upon the effects of variance in task orientation (input vs. output orientation) on the acquisition of productive collocational knowledge and the passive and active recall of collocations. With this study, it is also aimed to investigate the difficulty hierarchy proposed by Laufer et al. (2004). Concisely, quantitative data that came from the sub-tests were analyzed running an independent samples *t*-test and one-way repeated measures ANOVA, and the qualitative data that came from the interviews underwent an inductive content analysis.

To address the first and second research questions, three assessment tasks designed to measure productive collocational knowledge (as implied by task orientation) and passive and active recall of collocations (as implied by Laufer et al.'s (2004) typology) were administered. For each assessment task that sub-tests involved, independent samples *t*-test was performed to compare the mean scores of

the two groups. Within the R-group and P-group, gains in passive and active recall of collocations were compared by operating one-way repeated measures ANOVA. To address the third research question, interviews were held with four participants from each group. Their replies to the interview questions were analyzed by the researcher. For all the non-cued gap-filling assessment tasks, the answer keys were ready as the concordance lines had been taken from the corpus and the target collocations had been omitted. For the assessment task of translation, the researcher prepared the answer key and had it proofread by two L1 Turkish, L2 English teachers of English. These two assessment tasks had word-level answers. Therefore, a second rater was not vital for these sub-tests. For the sentence-construction assessment task, having a second rater could have increased the reliability.

CHAPTER 4

RESULTS

4.1 Introduction

The quantitative and qualitative data collected with the aim of finding answers to the research questions were analyzed through the procedures of independent samples *t*-test, one-way repeated measures ANOVA and inductive content analysis respectively. This section will present the results of these analyses.

4.2 Results of quantitative data

The quantitative data were collected through a post-test measuring students' productive collocational knowledge as implied by task orientation or passive and active recall of collocations as implied by Laufer et al.'s (2004) typology after the treatment. The post-test consisted of three sub-tests and each sub-test consisted of three assessment tasks measuring productive collocational knowledge as implied by task orientation or passive and active recall of collocations as implied by Laufer et al.'s (2004) typology. Table 9 presents descriptive statistics of the groups' post-test mean scores. At this point, it is important to remember that three assessment tasks of the same type were repeated in three sub-tests. Therefore, each type of assessment task involved 15 items in total and the whole post-test, which involved three sub-tests, was scored out of 45.

Table 9. Means and Standard Deviations for Post-test Scores

Assessment task type	Group type	*N*	*M*	*SD*
Assessment task I: Non-cued gap-filling	P-group	22	6.27	3.23
	R-group	22	5.05	2.57
Assessment task II: Translation	P-group	22	10.91	2.02
	R-group	22	10.36	1.76
Assessment task III: Sentence-construction	P-group	22	10.23	2.27
	R-group	22	9.32	2.10
Post-test	P-group	22	27.41	1.42
	R-group	22	24.73	1.14

According to the statistics in Table 9, the R-group (N = 22) was associated with collocational knowledge M = 5.05 (SD = 2.57) in the non-cued gap-filling assessment task, M = 10.36 (SD = 1.76) in the translation assessment task, M = 9.32 (SD = 2.10) in the sentence-construction assessment task and M = 24.73 (SD = 1.14) in the whole post-test. By comparison, the P-group was associated with collocational knowledge M = 6.27 (SD = 3.23) in the non-cued gap-filling assessment task, M = 10.91 (SD = 2.02) in the translation assessment task, M = 10.23 (SD = 2.27) in the sentence-construction assessment task and M = 27.41 (SD = 1.42) in the whole post-test. As can be seen in Table 9, the P-group numerically outscored the R-group persistently in every assessment task and the whole post-test.

To test the research hypothesis that learning verb-noun collocations through output-oriented tasks will result in higher rates of acquisition of productive collocational knowledge than learning verb-noun collocations through input-oriented tasks, the participants' post-test scores were analyzed running an independent samples *t*-test to see if there was a statistically significant difference between their assessment task scores. Table 10 displays the *t*-test comparisons of the two groups' mean scores in the assessment tasks at the 95% confidence interval.

Table 10. Independent Samples *t*-test Summary Table

Dependent variable	*t*	*df*	*p*	Mean Difference	Std. Error Difference
Assessment task I: Non-cued gap-filling scores	1.40	42	.170	1.3	.88
Assessment task II: Translation scores	.95	42	.345	.55	.57
Assessment task III: Sentence-construction scores	1.38	42	.175	.91	.66
Post-test score	1.48	42	.147	2.68	1.82

The homogeneity of variances was tested and satisfied via Levene's *F* test, $F(42) = .40$, $p = .530$ for assessment task I, $F(42) = .06$, $p = .807$ for assessment task II, $F(42) = .02$, $p = .9$ for assessment task III and $F(42) = .35$, $p = .558$ for the whole post-test. As illustrated in Table 10, despite the fact that the mean scores of the P-group were greater than the mean scores of the R-group in all the assessment tasks and the whole post-test, the independent samples *t*-test did not reveal a statistically significant effect for assessment task I, $t(42) = 1.3$, $p = .170$, for assessment task II, $t(42) = .55$, $p = .345$, for assessment task III, $t(42) = .91$, $p = .175$ or for the whole post-test, $t(42) = 2.68$, $p = .147$. Hence, the null hypothesis that the assessment task means of the R-group and P-group did not statistically significantly differ from each other was retained. The research hypothesis that learning verb-noun collocations through output-oriented tasks would result in higher rates of acquisition of productive collocational knowledge than learning verb-noun collocations through input-oriented tasks was rejected. Although statistically insignificant, the difference between the

mean scores of the R-group and P-group is greatest in the non-cued gap-filling assessment task followed by the sentence-construction assessment task and is smallest in the translation assessment task.

To address the second research question and to test the hypothesis that the acquisition rate of passive recall of verb-noun collocations will be higher than the acquisition rate of active recall of verb-noun collocations, a one-way repeated measures ANOVA was performed. The gain differences across the types of collocational knowledge, namely active recall in the non-cued gap-filling assessment task, passive recall both in the translation and sentence-construction assessment tasks, were investigated. In these analyses, the within-subjects factor was collocational knowledge type and the variable was the assessment task scores.

A one-way repeated measures ANOVA revealed statistically significant differences among the R-group's scores obtained from three assessment tasks at the 99% confidence interval, with a large effect size, $F(2, 473.68) = .000$, $\eta^2 = .958$. An adjusted Bonferroni post hoc comparison showed that the mean score of the translation assessment task ($M = 10.36$, $SD = 1.76$) was statistically significantly ($p = .001$) higher than the mean score of the sentence-construction assessment task ($M = 9.32$, $SD = 2.10$). In turn, the mean score of the sentence-construction assessment task was statistically significantly ($p = .000$) higher than the mean score of the non-cued gap-filling assessment task ($M = 5.05$, $SD = 2.57$). Thus, the null hypothesis that the assessment task mean scores would not statistically significantly differ from one another within the R-group was rejected and the second research hypothesis was retained for the R-group.

A one-way repeated measures ANOVA detected a similar pattern of differences at the 99% confidence interval among the P-group's scores as well. The

effect size was large, $F(2, 373.48) = .000$, $\eta^2 = .947$. As in the R-group, an adjusted Bonferroni post hoc comparison showed that the mean score of the translation assessment task ($M = 10.91$, $SD = 2.02$) was statistically significantly higher ($p = .012$) than the mean score of the sentence-construction assessment task ($M = 10.23$, $SD = 2.27$). In a similar vein, the mean score of the sentence-construction assessment task was statistically significantly ($p = .000$) higher than the mean score of the non-cued gap-filling assessment task ($M = 6.27$, $SD = 3.23$). Hence, the null hypothesis that the assessment task mean scores would not statistically significantly differ from one another within the P-group was rejected and the second research hypothesis was retained for the P-group as well.

Table 11 shows the groups' gains in collocational knowledge in percentages. When the groups' gains in collocational knowledge are examined, it is seen that according to assessment task I results, the R-group acquired approximately 34% of the collocations with a mean score of 5.05/15 and the P-group acquired 42% with a mean score of 6.27/15. As for assessment task II, the R-group acquired 69% of the collocations with a mean score of 10.36/15 and the P-group acquired 73% with a mean score of 10.91/15. Assessment task III results point to a gain of 62% in the R-group with a mean score of 9.32/15 and 68% in the P-group with a mean score of 10.23/15. The whole post-test results reveal a gain of 55% for the R-group with a mean score of 24.73/45 and 61% for the P-group with a mean score of 27.41/45.

Table 11. Collocational Knowledge Gains in Percentages

Test Type	Percentage of Gain in R-group	Percentage of Gain in P-group
Assessment task I: Non-cued gap-filling	34%	42%
Assessment task II: Translation	69%	73%
Assessment task III: Sentence-construction	62%	68%
Post-test	55%	61%

Note: Percentages have been approximated.

4.3 Results of qualitative data

The qualitative data came from the interviews conducted with four participants from the R-group (subject 1 = RS1, subject 2 = RS2, subject 3 = RS3, subject 4 = RS4) and four participants from the P-group (subject 1 = PS1, subject 2 = PS2, subject 3 = PS3, subject 4 = PS4). The interviews were held a week after the end of the treatments and post-test administrations. They were audio-recorded and transcribed for analysis. The interview questions were as follows:

1. What are your positive and negative opinions regarding the tasks utilized in these lessons?
2. Did you have difficulty answering the post-test questions?
3. What do you think about learning collocations?

With respect to the first interview question, all four respondents in the R-group were in favor of the tasks that they carried out. RS3 and RS4 mentioned the benefit of seeing the collocations in multiple contexts in the cued inference-making and translation task. They both added that one sentence would not be sufficient to infer the meanings of the collocations. RS4 said that cued inference-making and translation-matching was a difficult task, but added that if the meaning could not be inferred from one context, there were three more contexts to refer to. RS3 commented that inference-making results in better retention of vocabulary than seeing the vocabulary in glosses. Despite having positive opinions of the tasks, RS3 said that she would prefer tasks such as sentence-construction through which she can practise using the vocabulary items. Related to the sentence-half matching task, RS1 reported having difficulty but she still found it useful whereas RS2 made the comment that it was too easy to remember which words collocate after studying the collocations through sets of concordance lines and so not very educational.

As for the P-group interviewees' responses to the first interview question, three out of four respondents were in favor of the output-oriented tasks that they carried out in the treatment sessions. PS1 found the tasks generally easy; however, she added that it was a bit hard to infer the meaning of the collocations in the non-cued inference-making and translation task. PS2 stated that it was nice to try to infer the meanings of the collocations in this task. For PS3, the non-cued inference-making and translation task was sometimes difficult. She also reported that seeing collocations in several contexts facilitated task completion because even if they could not infer the meaning from one context, there were three more contexts to look at. With respect to the sentence-construction task, PS2 stated that this task helped them internalize the target collocations. PS3 said that after studying the collocations in the non-cued inference-making and translation task, it was easy to make sentences. Regarding the non-cued gap-filling task, it was a bit hard to remember and correctly spell the collocations for PS1. She also reported that the non-cued gap-filling task got them to push their memory and to struggle to remember the way the collocations are spelled. PS2 said she would have preferred to see the collocations in a box in the non-cued gap-filling task. She also added, however, that it might not have been as memorable if they had not pushed the limits of their memory. Like PS2, PS3 also mentioned the benefit of trying to remember the collocations in the non-cued gap-filling task and said that it made learning more memorable. However, she reported having difficulty in this task saying that she knew which collocation to fill in the gap with; however, she had difficulty spelling it. Differently from the other three respondents, PS4 found all the tasks difficult and commented that although she found the tasks useful, she would not want to carry out such tasks in the future.

Regarding the second interview question, all the R-group respondents except for RS4 reported having difficulty answering the relevant post-test items. RS1 said that it was very difficult to retrieve the collocations and write them down. She said that the answers were on the tip of her tongue but she just could not get them out. RS2 responded that it could have been easier to answer the items if they had studied the collocations in such ways as in the post-test. Although RS4 found the assessment tasks more challenging compared to the teaching tasks, he said that it was not a big problem as they had studied all the collocations that appeared in the post-test. Similar to the R-group respondents, all the P-group respondents mentioned the difficulty of answering the post-test items, particularly the gap-filling items. They all added that it would have been much more difficult if they had not practised it in the non-cued gap-filling teaching task.

As for the third interview question, RS4 does not think that learning vocabulary in collocations can replace learning single words. He claims that they are two different things, both are necessary and neither is superior to the other. The other three respondents were in favor of learning collocations. RS1 reported that it is profitable to study collocations as you learn two words at a time. RS3 explained her preference for learning collocations by saying that two words may carry a different meaning when they come together and that if you learn the collocates independently, you may not necessarily be able to come up with the collocation's meaning. Similarly, RS2 stated that you may not be able to bring words together or know which words collocate if you study the words individually. Three out of four P-group respondents had positive opinions of learning collocations as well. PS1 said that it was better to study collocations than to study single words because collocations may have different meanings than the words that make up them and students might not

necessarily be able to predict those meanings even if they are familiar with the words individually. PS2 reported that remembering one of the collocates enables them to retrieve the other collocate and that this is very useful. PS3 pointed out that it is more useful to learn collocations than single words because when you think of a phrase in Turkish, you may not know how to say it in English, in other words you may not know which two words to bring together to express that meaning. PS4 was skeptical about learning collocations. She responded that it would have been easier to learn individual words and then to bring them together. However, she also added that some words, but not all, may carry a totally different meaning when they are combined and in that case it is not quite possible to guess the meaning.

The interviewees' responses to the interview questions can be summarized as in Table 12. All R-group respondents and three out of four P-group respondents had positive opinions about the teaching tasks. Three out of four R-group respondents and all the P-group respondents found the post-test difficult. Three out of four R-group respondents and all the P-group respondents were in favor of learning collocations.

Table 12. Summary of Interviewees' Responses

Interview Question	R-group	P-group
1. What are your positive and negative opinions regarding the tasks utilized in these lessons?	4 out of 4 positive	3 out of 4 in positive
2. Did you have difficulty answering the post-test questions?	3 out of 4 found difficult	4 out of 4 found difficult
3. What do you think about learning collocations?	3 out of 4 in favor	4 out of 4 in favor

As displayed in Table 12, R-group and P-group respondents gave more or less parallel answers despite the fact that they carried out tasks with different orientations. These findings will be discussed in the discussion chapter.

4.4 Conclusion

To summarize, the independent samples *t*-test did not detect a statistically significant difference between the mean scores of the R-group and P-group in any of the assessment tasks (non-cued gap-filling, translation, sentence-construction) that measured productive collocational knowledge as implied by task orientation or active recall, passive recall and passive recall of collocations respectively as implied by Laufer et al.'s (2004) typology. However, the one-way repeated measures ANOVA revealed statistically significant differences among all the mean scores of assessment tasks within the R-group and P-group. As for the interview results, the respondents were in favor of the teaching tasks in general irrespective of task orientation; however, they had differing opinions about different tasks. Both groups seem to have found the assessment tasks difficult in general. Also, most of them stated positive opinions on learning collocations.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Introduction

The purpose of the current study was to investigate the effects of variance in task orientation on the acquisition of productive collocational knowledge as implied by task orientation and to explore and compare the amounts of gain in different measures of passive and active recall of collocations as implied by Laufer et al.'s (2004) typology. The study had a quasi-experimental research design with a control group (R-group) and an experimental group (P-group). The research design was enriched with the interviews held with four respondents randomly selected from each group to collect qualitative data as well. Convenience sampling was adopted and the data were collected from intact groups. The R-group studied collocations through input-oriented tasks and the P-group studied them through output-oriented tasks. The input-oriented tasks included cued inference-making and translation, sentence-half matching and cued gap-filling. The corresponding output-oriented tasks were non-cued inference-making and translation, sentence-construction and non-cued gap-filling. According to Laufer et al.'s (2004) typology, the input-oriented group practised passive recognition, passive recognition and active recognition respectively in their tasks. The output-oriented group practised passive recall, passive recall and active recall respectively in their tasks. Each treatment session contained all three types of input-oriented tasks for the R-group and all three types of output-oriented tasks for the P-group. Each session aimed to teach five verb-noun collocations with three tasks and the participants had studied fifteen verb-noun collocations by the end of the treatment. Participants' collocational knowledge was measured with sub-tests,

which involved the assessment tasks of non-cued gap-filling, translation and sentence-construction administered the day after each treatment session. In addition, the interviews explored the participants' opinions regarding the teaching tasks, difficulty of the assessment tasks and the learning of collocations. The effects of variance in task orientation were analyzed through an independent samples *t*-test, the gains in different measures of passive and active recall of collocations were compared via a one-way repeated measures ANOVA and finally respondents' answers to the interview questions underwent inductive content analysis. In this chapter, the findings of the present study reported in the previous chapter will be discussed, the pedagogical implications will be presented, the limitations of the study will be mentioned and suggestions for further research will be made.

5.2 Discussion of the findings

As one of the purposes of this study was to investigate the effects of variance in task orientation on the acquisition of productive collocational knowledge, the R-group's and P-group's scores on the output-oriented assessment tasks were compared running an independent samples *t*-test after they received treatment with input-oriented tasks and output-oriented tasks respectively. No statistically significant difference was detected in any of the mean scores of the assessment tasks, which included non-cued gap-filling, translation and sentence-construction.

The results of this study are not in line with the majority of studies that utilized input- and output-oriented tasks to teach vocabulary (Alcaraz Mármol & Sánchez-Lafuente, 2013; Ellis & He, 1999; de la Fuente, 2002; Hashemzadeh, 2012; Hulstijn & Laufer, 2001; Kim, 2011) because these studies demonstrate the superiority of output-oriented tasks over the input-oriented ones. The findings also

differ from the findings of studies on list learning of vocabulary (Griffin & Harley, 1996; Stoddard, 1929; Waring, 1997; Webb, 2009), which show that receptive learning results in higher scores on the receptive test whereas productive learning results in higher scores on the productive test. One difference between these studies and the current study is that these studies all aimed to teach single words, not collocations. Therefore, the fact that there was no statistically significant difference between the productive collocational knowledge (as implied by task orientation) of the input-oriented group (R-group) and the output-oriented group (P-group) may be due to a collocation effect. Learning vocabulary in the form of collocations may have facilitated recall in the assessment tasks, which measured productive collocational knowledge. This conclusion is also supported by several researchers and their positive thoughts on teaching collocations. As suggested by Carter and McCarthy (1988), collocations might have raised the likelihood of retrieval. Lewis (2000) also claims that collocations increase the likelihood of acquisition. Besides, as Wu (1996) argues, collocations may contribute to the activation of passive vocabulary knowledge. Similarly, Conklin and Schmitt (2008) suggest that formulaic sequences are easier and quicker to process. The results are also in line with Webb and Kagimoto's (2009). Their findings also show that both the output-oriented group, who studied collocations with a cloze task, and the input-oriented group, who studied collocations by reading glossed sentences, performed similarly on the output-oriented test that required productive collocational knowledge. This supports the conclusion that the absence of a statistically significant difference may result from the presentation of vocabulary in the form of collocations.

Study of collocations might be one of the reasons that resulted in the similarity in the levels of gain observed in both groups' mean scores; however, the

factors underlying this result should be analyzed with caution. Another factor that might have eliminated the effect of task orientation on the growth of productive collocational knowledge can be the corpus-influenced design (Bennett, 2010) of the tasks. Both input-oriented and output-oriented tasks were designed making indirect use (Leech, 1997) of the Corpus of Contemporary American English- a generalized corpus (Bennett, 2010) of English. Also, concordances are said to be useful tools for teaching word combinations (Bennett, 2010) and to provide authentic data superior to the data in traditional resources (Balcı & Çakır, 2012; Boulton, 2008; Koç, 2006; Koosha & Jafarpour, 2006). Data-driven learning through corpus-influenced materials is shown to be more effective than explicit instruction on collocations (Boulton, 2008; Koosha & Jafarpour, 2006).

In addition to the corpus-influenced design of the tasks, engagement in inference-making can be another factor that might have eliminated the effect of task orientation on the growth of productive collocational knowledge. As argued by Johns (1994), learners benefit from practising the language through exploitation of inductive strategies as the participants of both groups did in the inference-making tasks utilized in the current study. This argument is also supported by studies which found that inductive learning of collocations results in higher rates of acquisition than deductive learning (Chan & Liou, 2005; Sun & Wang, 2003). Therefore, the corpus-influenced design of the teaching tasks along with the data-driven learning involved in the inference-making tasks might also have enabled the R-group participants to score as well as the P-group participants on the output-oriented assessment tasks although the R-group had studied collocations through input-oriented tasks.

When the independent samples *t*-test results are examined according to the vocabulary knowledge typology and the difficulty hierarchy proposed by Laufer et al. (2004), the results are surprising. Their hierarchy predicts that recall is more difficult, so recognition precedes recall in the vocabulary acquisition process. The presence of recall can predict the existence of recognition in learners' repertoires whereas the opposite does not hold true. However, the findings of this study demonstrate that although the R-group studied collocations through tasks that required recognition of collocations only, their scores in the assessment tasks, which tested passive and active recall of collocations, were not statistically significantly lower than the scores of the P-group, who studied collocations through tasks that required recall of collocations. The hierarchy between recognition and recall did not emerge in the present study. The previously mentioned argument of Carter and McCarthy (1988), which is collocations raise the likelihood of retrieval, may have applied both to the retrieval of form and the retrieval of meaning, thus facilitating the retrieval of form for the R-group and bridging the gap between the test scores of the two groups.

The current study contained three types of input-oriented as well as three types of output-oriented tasks in its design. The post-test involved three sub-tests, each of which was administered after each treatment session. Each sub-test involved three assessment tasks aimed to measure two different types of collocational knowledge; passive recall in the assessment tasks of translation and sentence-construction and active recall in the assessment task of non-cued gap-filling. Hence, the study also investigated different types of collocational knowledge in terms of the cognitive processes involved and compared the amounts of gain in passive and active recall of collocations within the control group and the experimental group via a one-

way repeated measures ANOVA. The results revealed a similar pattern both within the R-group and the P-group. In both groups, the participants scored highest on the assessment task of translation, which measured passive recall, followed respectively by sentence-construction, which measured passive recall, and non-cued gap-filling, which measured active recall. The finding that learners' active recall of collocations is weaker than their passive recall complies with Laufer et al.'s (2004) difficulty hierarchy. However, the same hierarchy would not predict any statistically significant differences between participants' scores in the assessment tasks of translation and sentence-construction as they both aimed to measure passive recall. Yet, in both groups, the participants did statistically significantly better on the assessment task of translation compared to sentence-construction. Although the participants had to retrieve and supply the meanings of collocations in both tasks relying on passive recall, the translation task had a word-level outcome whereas the sentence-construction task had a sentence-level outcome. This may account for the relative difficulty of sentence-construction. Hence, it can be argued that Laufer et al.'s (2004) typology needs to be improved by considering some other factors.

Based on the results of the results of independent samples *t*-test and one-way repeated measures ANOVA, it was argued that the hierarchy proposed by Laufer et al.'s (2004) typology did not apply to recognition and recall and the possible reasons behind this were discussed; however, the hierarchy between passive recall and active recall persisted. The variance in task orientation as implied by the Input (Krashen, 1985) and Output (Swain, 1985) Hypotheses, which Nation (2001) took as the theoretical foundation for the receptive and productive distinction he made, would not predict any statistically significant differences among on the scores of the assessment tasks of non-cued gap-filling, translation and sentence-construction

because they were all output-oriented tasks. In contradiction to the implications of the Input and Output Hypotheses, the one-way repeated measures ANOVA results revealed statistically significant differences between the mean scores of passive and active recall in both the R-group and P-group. In light of these results, it can be argued that Laufer et al.'s (2004) vocabulary knowledge typology, which takes cognitive processes into consideration and suggests four types of vocabulary knowledge, provides a more advanced and accurate typology than task orientation, which is based on the Input and Output Hypotheses.

The teaching tasks of cued inference-making and translation, sentence-half matching and cued gap-filling utilized in the R-group were designed in a way to enable the learners in this group to learn the collocations through exposure to input as implied by task orientation or to practise passive recognition and active recognition as implied by Laufer et al.'s (2004) typology. The teaching tasks of non-cued inference-making and translation, sentence-construction and non-cued gap-filling utilized in the P-group were designed in a way to enable the learners in this group to learn the collocations through producing output as implied by task orientation or to practise passive recall and active recall as implied by Laufer et al.'s (2004) typology. The assessment tasks of non-cued gap-filling, translation and sentence-construction and were aimed to test learners' productive collocational knowledge as implied by task orientation or active recall, passive recall and passive recall of collocations as implied by Laufer et al.'s (2004) typology. Similarly, the teaching task of translation teaching was interpreted as input-oriented if comprehension and recognition of the L1 translation were enough for the successful completion of the task and as output-oriented if learners were expected to come up with the L1 translations of the collocations on their own. The assessment task of

translation was also an output-oriented task; therefore, test takers were expected to come up with the L1 translations. This is a rational distinction in terms of task orientation; however, the studies that have used this format have interpreted the knowledge type that it requires as receptive if the direction of translation is from L2 to L1, and productive if the direction of translation is from L1 to L2 (Alcaraz Mármol & Sánchez-Lafuente, 2013; de la Fuente, 2002; Griffin & Harley, 1996; Keating, 2008; Paribakht & Wesche, 1993; Stoddard, 1929; Waring, 1997; Webb, 2009). Although non-cued translation from L2 to L1 is an output-oriented task, it has been interpreted as an input-oriented task in the literature due to the direction of translation. However, the studies that maintain translation from L2 to L1 requires receptive, not productive knowledge, do not base this interpretation on a firm theoretical foundation. The word knowledge typology proposed by Laufer et al. (2004) implies that non-cued translation from L2 to L1 requires passive (receptive) recall because the direction of retrieval is from the word form to the word meaning. Non-cued translation from L1 to L2 requires active (productive) recall because the direction of retrieval is from the word meaning to the word form.

In the literature, the sentence-construction task has been utilized as an output-oriented teaching task to get learners to practise productive vocabulary knowledge (Folse, 2006; Jahangiri & Abilipour, 2014; Keating, 2008; Webb, 2005) and as an output-oriented assessment task to test productive vocabulary knowledge (Paribakht & Wesche, 1993) with some studies showing its positive impact on the acquisition of productive vocabulary knowledge (Alcaraz Mármol & Sánchez-Lafuente, 2013; Keating, 2008; Webb, 2005). In line with these studies, sentence-construction tasks were designed and used as output-oriented teaching and assessment tasks in the current study as well. However, according to Laufer et al.'s (2004) vocabulary

knowledge typology, sentence-construction tasks, in which learners are provided with the word forms and asked to construct meaningful sentences using them, do not require productive knowledge. They require passive (receptive) knowledge of collocations. Because the learners are provided with the target collocation forms and asked to construct sentences using them, the direction of retrieval is from the word form to the word meaning. Although they require sentence-level outcome, the type of knowledge is still receptive knowledge because it is not free writing that requires the learners to actively recall the collocations, but controlled writing with the target collocations already provided. Therefore, sentence-construction as a teaching task (Alcaraz Mármol & Sánchez-Lafuente, 2013; Folse, 2006; Jahangiri & Abilipour, 2014; Keating, 2008; Webb, 2005) or an assessment task as in the VKS (Paribakht & Wesche, 1993) aimed to teach or test productive vocabulary knowledge needs to be reevaluated taking cognitive processes into consideration.

In the present study, the input-oriented version of the sentence-construction teaching task was sentence-half matching. Each half contained one of the collocates of the whole collocation and learners were basically expected to match these collocates presented to them in sentence-level contexts. Assessment tasks such as COLLMATCH (Gyllstad, 2007) and CONTRIX (Revier, 2009) designed to test collocational knowledge made use of the matching format as well. Although it is a successful format for learners to practise receptive collocational knowledge or for teachers and researchers to test learners' receptive collocational knowledge, Revier (2009) claimed to use it as a task to test productive collocational knowledge. In CONTRIX (see Figure 6), all test takers need to do is match the collocates to form a collocation that fits the gap in the sentence given. In terms of its task orientation, CONTRIX is not a test that measures productive collocational knowledge because

test takers are only asked to match the collocates, but not to produce the collocates or collocations. It is not a test that measures productive collocational knowledge in terms of Laufer et al.'s (2004) typology either because the direction of the test is from the word form to the word meaning so the required knowledge type is passive (receptive) recall.

The gap-filling task, which has frequently been utilized in the literature as a cued gap-filling task and interpreted as an input-oriented task (Alcaraz Mármol & Sánchez-Lafuente, 2013; Hashemzadeh, 2012; Hulstijn & Laufer, 2001; Keating, 2008; Kim, 2011), was utilized both as a cued gap-filling task and a non-cued gap-filling task following the productive version of the VLT developed by Laufer and Nation (1995). As a non-cued gap-filling task, it has a powerful design to teach and test active recall of vocabulary or collocations, which is the highest-ranking type in the difficulty hierarchy proposed by Laufer et al. (2004). It provides teachers and researchers with the advantage of providing a controlled context, which allows elicitation of the target item but requires active recall at the same time.

An examination of the groups' productive collocational knowledge or recall gains in percentages informs us on the general effectiveness of the tasks in teaching collocations. It appears that the percentages are above 60% for the assessment tasks of translation and sentence-construction in both groups, but not for the non-cued gap-filling task. So, according to these percentages, regardless of the orientation of the tasks, all the teaching tasks applied in the R-group and P-group except for the gap-filling task, were effective in teaching collocations. On the surface, the cued and non-cued gap-filling tasks may seem to have been less effective than the teaching tasks of cued inference-making and translation and sentence-half matching applied in the R-group and the teaching tasks of non-cued inference-making and translation and

sentence-construction applied in the P-group. The fact that both groups were associated with the lowest gain percentage in the corresponding non-cued gap-filling assessment task may be accounted for by the type of knowledge required for the non-cued gap-filling assessment task rather than the ineffectiveness of the corresponding teaching tasks applied in the R-group and P-group. In Laufer et al.'s hierarchy (2004), the knowledge type required for this type of task is active recall, which is claimed to be more difficult than passive recall. In the assessment task of non-cued gap-filling, the participants had to rely on active recall whereas in the assessment tasks of translation and sentence-construction, they relied on passive recall. The hierarchical order between the two types of collocational knowledge can be argued to account for the low percentages of gain in active recall in both groups.

The percentages of gains in productive collocational knowledge or recall of collocations as well as the mean scores obtained from the assessment tasks should be interpreted by taking the fact that none of the participants knew the collocations prior to treatment into consideration. Only the collocations that were shown by the pre-test to be unknown by all the participants were chosen as the target collocations for the current study. According to Hirsh and Nation (1992), the more learners meet new words, the higher the retention rate will be. When the novelty of collocations is coupled with the difficulty of verb-noun collocations for Turkish learners of English (Bıçkı, 2012), it can be argued that the gains were actually high and the teaching tasks were effective.

The present study also investigated learners' opinions regarding the teaching tasks, the difficulty of the assessment tasks and the learning of collocations. To this end, qualitative data were collected via interviews conducted with four participants randomly selected from each group. The content analysis of the interviewees'

responses to the first interview question indicate that the participants of both groups benefited especially from the inference-making teaching task. Although the R-group carried out a cued inference-making and translation task and the P-group carried out a non-cued one, respondents from both groups found this task helpful. Regardless of the group type that they belonged to, most of the respondents particularly mentioned the benefit of seeing collocations in multiple contexts and trying to infer their meanings. This may be explained by the data-driven nature of the inference-making teaching task. This explanation is also supported by the results of several studies (Boulton, 2008; Koosha & Jafarpour, 2006), in which data-driven learning of collocations was found to be superior to traditional instruction on collocations, and also studies (Chan & Liou, 2005; Sun & Wang, 2003), in which inductive learning of collocations as in the inference-making tasks was found to result in higher rates of acquisition than deductive learning. The interviewees' opinions regarding the inference-making task supports the argument made in the current study that data-driven learning in the inference-making tasks might have eliminated the effect of task orientation on the acquisition of productive collocational knowledge (as implied by task orientation) or the disadvantage of practising recognition in the teaching tasks but doing a recall assessment task as implied by Laufer et al.'s (2004) typology.

Regarding the teaching tasks of sentence-half matching and sentence-construction, the R-group had differing opinions regarding the sentence-half matching teaching task and the P-group group generally thought the sentence-construction task was beneficial. However, it is an interesting finding that the R-group performed as well as the P-group in the sentence-construction assessment task although they had not practised making sentences with the target collocations. As discussed earlier, this might be an effect of learning vocabulary in the form of

collocations. However, based on the participants' comments on the benefit of seeing collocations in multiple contexts, the abundance of input in the inference-making task may also have facilitated sentence-construction in the assessment task for the R-group. As for the gap-filling teaching task, the R-group did not have much to say about it, but the P-group respondents reported its difficulty as well as its benefit in terms of pushing their memory to recall the collocations. Despite the lack of practice in productive use (as implied by task orientation) or recall (as implied by Laufer et al.'s (2004) typology) of collocations, the R-group's scores in the gap-filling assessment task were not statistically significantly lower than the P-group's as in the translation and sentence-construction assessment tasks. Clearly, the use of the receptive-productive dichotomy alone, in other words the variance in the orientation of the teaching tasks or recognition-recall dichotomy cannot account for the amount of growth in productive collocational knowledge or recall of collocations. The responses of the interviewees reveal that seeing the collocations in multiple contexts and making inferences might be some of the factors which ruled out the influence of task orientation on the acquisition of productive collocational knowledge (as implied by task orientation) or the disadvantage of practising recognition in the teaching tasks but doing a recall assessment task in the post-test (as implied by Laufer et al.'s (2004) typology).

The second interview question aimed to explore participants' perceptions of the difficulty of the assessment tasks. Both groups mentioned the difficulty of the assessment tasks, particularly the non-cued gap-filling task. Their responses support the ANOVA results, which showed that the mean score for the non-cued gap-filling assessment task was statistically significantly lower than the mean score for the other assessment tasks. Additionally, the R-group respondents reported that it would have

been easier for them to provide the answers if they had practised the collocations in the teaching tasks as they appeared in the assessment tasks. Conversely, the P-group respondents said that answering the items in the non-cued gap-filling assessment task could have been much more difficult had they not practised it through the corresponding teaching task. Learners' opinions on the relationship between the type of learning, in other words, the orientation of the task, and the difficulty of the assessment tasks are reflected in their mean scores to some extent. Having practised the productive use of collocations in the output-oriented teaching tasks as implied by task orientation or recall of collocations as implied by Laufer et al.'s (2004) typology, the P-group consistently outscored the R-group in all the assessment tasks, which required productive use as implied by task orientation or recall of collocations as implied by Laufer et al.'s (2004) typology. However, the mean differences were not statistically significant. At this point, factors other than task orientation must have influenced the results. The difference between the mean scores may have been diminished due to the use of inductive strategies (Chan & Liou, 2005; Sun & Wang, 2003) in the inference-making tasks, data-driven learning (Boulton, 2008; Koosha & Jafarpour, 2006), exposure to abundant authentic data extracted from corpora (Boulton, 2008; Koosha & Jafarpour, 2006) and also studying the vocabulary in the form of collocations (Webb & Kagimoto, 2009) as all of these were shown by previous studies to positively influence the growth in collocational knowledge.

The third question inquired into the participants' opinions on the learning of collocations. Previously, Webb and Kagimoto's study with collocations (2009) had yielded findings, which were not in line with the majority of studies investigating the relationship between input-oriented versus output-oriented teaching tasks and the acquisition of receptive versus productive vocabulary. Webb and Kagimoto did not

find significant differences between the two types of tasks whereas the other studies did. Based on the results obtained from their study on the acquisition of productive and receptive knowledge of collocations, it was aimed to explore learners' opinions regarding the learning of collocations with the third interview question. The responses of the interviewees revealed that both groups were in favor of learning collocations. The interviewees reported the benefits of learning two words at once and learning the meanings of co-occurrences. These benefits are useful, which have previously been claimed by scholars to make the learners effective users of the language (Lewis, 2000) and to enable them to make native-like selections (Brown, 1974; Schmitt, 2000). The interviewees also reported the benefits of learning which words can co-occur and avoiding mistakes while bringing two words together. These are also very practical benefits of learning collocations because considering the facts that even advanced learners make collocational mistakes (Nesselhauf, 2003) and that Turkish learners of English make a lot of mistakes in collocations (Bıçkı, 2012). One of the respondents pointed out that collocations facilitate retrieval. She said that when you remember one of the collocates, it is easy to retrieve the other. This provides support for the facilitating function of collocations in terms of retrieval (Carter & McCarthy, 1988; Lewis, 2000) and the accelerating function of collocations in terms of processing (Conklin & Schmitt, 2008).

5.3 Pedagogical implications

The findings of the present study provide important practical and theoretical implications in terms of how to teach vocabulary. First of all, the findings related to the first research question demonstrate that the variance in task orientation alone does not influence the level of improvement in productive collocational knowledge

although it might have a substantial influence on the level of growth in productive vocabulary knowledge size as shown by several studies (Alcaraz Mármol & Sánchez-Lafuente, 2013; de la Fuente, 2002; Ellis & He, 1999; Hashemzadeh, 2012; Hulstijn & Laufer, 2001; Kim, 2011). If the aim is to enhance learners' productive collocational knowledge as implied by task orientation, teachers can utilize either input-oriented or output-oriented tasks as both of them result in similar levels of gain in productive collocational knowledge. Similarly, from a cognitive perspective, if the aim is to enhance learners' recall of collocations, teachers can utilize either recognition or recall tasks. However, since data-driven learning in the inference-making task, presentation of multiple concordance lines for each collocation and the authentic nature of corpus data characterize all the input- and output-oriented tasks in the current study or all the recognition and recall tasks as implied by Laufer et al.'s (2004) typology, the in-class use of corpus-influenced materials (Bennett, 2010) designed in a range of ways enabling learners to develop inductive strategies can be helpful as suggested by Johns (1994).

Another finding of the present study was that the gains in passive recall and active recall of collocations statistically significantly differed from each other. This implies that they should individually be targeted in the language classroom and assessment procedures. It seems that learners may have trouble in active recall of a collocation even if they have no problem with passive recall of the same collocation. To give an example, even if they can translate a collocation into their L1 or construct a meaningful sentence with the given collocation, both of which require passive recall, they may still not retrieve the target collocation to fill in the gap in a sentence, which requires active recall. This indicates that active recall of collocations requires

more practice and that tasks which give learners the opportunity to practise active recall are needed.

Participants' responses to the interview questions revealed that collocations enable them to learn two words at once, learn which words can co-occur, avoid mistakes while bringing two words together and easily retrieve the words from their memory. These benefits have also been expressed in several scholars' arguments earlier. Effective language users have prefabricated chunks ready for retrieval (Lewis, 2000), collocational knowledge reduces the number of mistakes in register (Carter & McCarthy, 1988), collocational knowledge is one of the important factors that tells apart a native and non-native speaker (Schmitt, 2000) and storage of words as collocations raises the likelihood of retrieval (Carter & McCarthy, 1988). In light of the benefits articulated by the participants as well as scholars, it can be argued that collocations should have a place in the language teaching syllabus as Nesselhauf (2003) maintains. To summarize, as suggested by Hill (2000), it is easier for grammar to fit the syllabus than collocations because grammar is a finite set of rules. However, as he further argues, collocations are more effective tools than grammar in production and comprehension in the second language, which is supported by the participants' opinions regarding the learning of collocations. Therefore, as the Lexical Approach implies, because meaning is conveyed through vocabulary rather than grammar, there is a need for such a syllabus which allows learners' lexicon to be expanded so that they can apply their grammatical knowledge to the items in their lexicon (Lewis & Gough, 2008).

5.4 Limitations and suggestions for further research

Limitations regarding the task design, experimental design, treatment period, target collocations and post-test implementation withhold us from reaching definite conclusions about the effects of variance in task orientation on productive vocabulary knowledge and the differences in different measures of passive and active recall of collocations. Accordingly, suggestions can be made for further studies.

First of all, the instruction in this study was based on tasks in which corpus extracts were used as input. The researcher searched for the collocations in the corpus called COCA. Prior to this, a list of target collocations had to be created. Collocations Dictionary and Thesaurus was used as a source of reference while creating this list but it was one of the most challenging and time-consuming parts of this study. In addition, not all concordances available in the corpus for the target collocations were utilized because only a maximum of seven concordance lines were needed for each collocation. Since the concordances were selective, not exhaustive concordances (Sinclair, 1991), the selection period which enabled the researcher to choose the most appropriate lines was also time-consuming. Furthermore, as Gavioli (1997) also noted, concordances are authentic instances of the language and not level-appropriate especially for lower levels. Although the participants who took part in this study were studying at upper-intermediate level, the concordances had to be fine-tuned by the researcher in terms of grammar and vocabulary. These sides of the study should be considered as a serious challenge. Additionally, it would be recommended for further research to vary the task types and examine their effects on the attainment of collocational knowledge.

Secondly, corpus search itself has its own limitations, which have impacts on task development. As pointed out by several researchers (Bennett, 2010; Lewis,

2000; Woolard, 2000), concordancing programs enable search in such large databases as corpora; however, the search features are not limitless. For instance, when a verb is typed in, the concordancer can extract it from the corpus only in the tense it was typed in. Therefore, the verb needs to be typed in several times in multiple tenses. Likewise, when a verb-noun collocation is searched in the corpus, the noun has to be searched in its singular and plural forms separately. The two challenges mentioned above imply that the preparation of the tasks used in this study was time-consuming and not so practical no matter how effective they might have been. We can claim that such tasks had better be developed by professional materials developers and integrated into course books. Alternatively, if to be used by teachers, modifications may be needed in task development to make the process more practical.

A third limitation is that the experimental design adopted was pre-test post-test control group design. The control group and experimental group differed in terms of the orientation of teaching tasks that they carried out. Apart from that, they both studied collocations and got involved in data-driven learning. The independent samples *t*-test results revealed no statistically significant difference between the two groups' productive collocational knowledge as implied by task orientation or recall of collocations as implied by Laufer et al.'s (2004) typology. It was claimed in the discussion that these results might be attributed to data-driven learning and/or learning vocabulary in the form of collocations. However, these conclusions cannot be definite because the experimental design involved no groups that studied collocations without data-driven learning or groups that studied single words instead of collocations. We can only be sure that the variance in task orientation does not influence productive collocational knowledge when the tasks are corpus-influenced

materials that require the learners to use inductive strategies through data-driven learning. Further studies can have more comprehensive and fully experimental designs with random assignment.

Although the tasks were learner-centered in the sense that they did not require any instruction on collocations by the implementers, the difference in the educational background and gender of the implementers may have influenced the way the treatment sessions were delivered. It can be suggested for further studies that treatment be implemented by implementers who are both graduates of the same department and if possible by a single implementer who is a graduate of English Language Teaching department.

The treatment was implemented over a period of two weeks and in three sessions due to time restrictions. Further studies with a longitudinal research design could yield more robust results exploring the long-term impact of task orientation and the retention of different types of collocational knowledge in the long run. Another limitation is that the results may not be generalized to all types of collocations because all the target collocations in this study were strong and medium-strength (Hill, 2000) lexical (Lewis, 2000) collocations. Also, they were all verb-noun collocations based on Bıçkı's (2012) results showing that Turkish learners struggle especially with verb-noun collocations. Further studies may concentrate on other categories of collocations and also look at oral productive collocational knowledge as implied by task orientation or oral recall of collocations as implied by Laufer et al.'s (2004) typology because the present study only investigated written productive collocational knowledge. In addition to this limitation, a delayed post-test was missing in this research. Therefore, any changes that could have appeared in the long term might have been missed out. To examine the long-term effects of the

variance in task orientation and long-term recall of collocations, studies involving a delayed post-test can be carried out.

Another limitation is related to the shortfall in the reliability of two of the assessment tasks. The Cronbach's alpha obtained for the overall post-test was .80 and .70 for assessment task I. However, the Cronbach's alpha was calculated as .48 for assessment task III and .31 for assessment task II. Given this flaw in the reliability of these two assessment tasks, the results should be interpreted with precaution. A further limitation was that the assessment tasks were scored by the researcher only and inter-rater reliability was not examined. Especially for the sentence-construction task for which there was no answer key, a second rater could have increased the reliability. For all the other assessment tasks, there were answer keys and not having a second rater cannot have greatly jeopardized reliability.

As shown by previous studies on vocabulary size (Fan, 2000; Laufer & Paribakht, 1998; Milton, 2009; Waring, 1997), receptive and productive vocabulary sizes differ with learners' receptive vocabulary size being larger than their productive vocabulary size. This was the main reason that the current study targeted productive collocational knowledge and recall of collocations. The assessment tasks of translation, sentence-construction and non-cued gap-filling were output-oriented according to the orientation of the tasks. Although all the assessment tasks had an output orientation and required productive collocational knowledge, statistically significant differences were revealed among the mean scores of both groups in these tasks. An attempt was made to account for these differences by categorizing these tasks according to Laufer et al.'s (2004) typology and the difficulty hierarchy they proposed. Based on their typology and hierarchy, the collocational knowledge types necessitated for the completion of the assessment tasks were: passive (receptive)

recall for translation and sentence-construction and active (productive) recall for non-cued gap-filling. Since the gain percentages of the R-group and P-group were found to be above 60% for passive recall but below 60% for active recall, it was argued that language learners need more practice with active (productive) recall. Further studies can investigate various types of tasks through which learners can practise and improve in active recall of collocations.

Laufer et al.'s (2004) typology requires more empirical evidence from further studies on the acquisition of vocabulary and collocations. It also needs to be approached from different perspectives. Whether the difficulty hierarchy predicts a developmental path in vocabulary acquisition is an intriguing area of research. On one hand, if that was proven to be the case, it would suggest that teaching that skips lower-ranking vocabulary knowledge types and targets the knowledge types higher in the hierarchy is a waste of time. Learners will not acquire vocabulary knowledge types that stand higher in the hierarchy without having acquired the lower ones anyway. On the other hand, if the typology does not predict such a developmental path, then the question to be addressed is whether practitioners and materials developers should design teaching tasks that target higher-ranking vocabulary knowledge types and not waste time on lower-ranking types because the presence of vocabulary knowledge types higher in the hierarchy is claimed to predict the presence of the lower-ranking ones.

APPENDIX A.1

PRE-TEST

Bu test, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda sırasıyla bir fiil ve bir isimden oluşan ikili fiil öbekleri listelenmiştir. Bu söz öbeklerinin Türkçe anlamlarını biliyorsanız "Biliyorum", bilmiyorsanız "Bilmiyorum" kutucuğunu işaretleyiniz. "Biliyorum" şeklinde işaretlediklerinizin Türkçe karşılıklarını altı çizili yere yazınız.

Örnek:

İkili söz öbeği	**Biliyorum**	**Bilmiyorum**	**Türkçe karşılığı**
invent an excuse	☑	☐	_____bahane uydurmak_____
adjourn a trial	☐	☑	_____

İkili söz öbeği	**Biliyorum**	**Bilmiyorum**	**Türkçe karşılığı**
1. acquire property	☐	☐	_____
2. allocate time	☐	☐	_____
3. bear resemblance	☐	☐	_____
4. build rapport	☐	☐	_____
5. damage sb's/sth's credibility	☐	☐	_____
6. deny involvement	☐	☐	_____
7. draw a distinction	☐	☐	_____
8. drop charges	☐	☐	_____
9. face a prospect	☐	☐	_____
10. file a petition	☐	☐	_____
11. gain insight	☐	☐	_____
12. implement measures	☐	☐	_____
13. locate source	☐	☐	_____
14. obtain sb's consent	☐	☐	_____
15. resign sb's post	☐	☐	_____

16. seek refuge	☐	☐	_____
17. state sb's intention	☐	☐	_____
18. suit sb's taste	☐	☐	_____
19. trace sb's/sth's roots	☐	☐	_____
20. undergo an operation	☐	☐	_____

APPENDIX A.2

PRE-TEST ANSWER KEY

1. acquire property	_____ mal / mülk edinmek_____
2. allocate time	_____zaman ayırmak_____
3. bear resemblance	_____benzerlik göstermek_____
4. build rapport	___yakınlık / samimiyet kurmak____
5. damage sb's/sth's credibility	__güvenirliğini / itibarını sarsmak___
6. deny involvement	__(olayla) bağlantıyı inkar etmek___
7. draw a distinction	__farkı belirtmek / ortaya koymak__
8. drop charges	_suçlamaları / iddiaları geri çekmek_
9. face a prospect	__bir ihtimalle karşı karşıya kalmak_
10. file a petition	_____dilekçe vermek_____
11. gain insight	_____içgörü kazanmak _____
12. implement measures	____önlem / tedbir uygulamak_____
13. locate source	_____kaynağını belirlemek_____
14. obtain sb's consent	_____onayını almak_____
15. resign sb's post	_görevinden ayrılmak / istifa etmek_
16. seek refuge	_____sığınmak_____
17. state sb's intention	_____niyetini dile getirmek_____
18. suit sb's taste	_____zevkine uymak_____
19. trace sb's/sth's roots	_____kökenlerini dayandırmak_____
20. undergo an operation	_operasyon geçirmek / ameliyat olmak_

APPENDIX B

GUIDELINES FOR EXPERIMENTAL GROUP'S TASKS

General Guidelines for All Tasks

- Participants should fill out the personal information part on each sheet (name, age, gender) before they begin.
- Participants are not allowed to use their mobile phones or dictionaries in any of the tasks.
- If participants ask the implementer the meaning of a word (not the target collocation), the implementer can tell them what it means.
- Participants are not allowed to take notes or photos of the sheets.
- After all tasks are over, implementer takes attendance on the attendance sheet.

Guidelines for Task-1

- Implementer hands out Task-1 sheets.
- Participants are expected to complete Task-1 in 10 minutes.
- Then, implementer spends 5 minutes giving feedback.
- Participants will keep Task-1 sheets until they finish Task-2.

Guidelines for Task-2

- Implementer hands out Task-2 sheets.
- During Task-1, students can look at their Task-1 sheets.
- Participants are expected to complete Task-2 in 10 minutes.
- At the end of Task-2, implementer collects both Task-1 and Task-2 sheets.

Guidelines for Task-3

- Implementer hands out Task-3 sheets.
- Participants are expected to complete Task-3 in 5 minutes.
- Then, implementer spends 5 minutes giving feedback.
- After giving feedback, implementer collects Task-3 sheets.

APPENDIX C.1

EXPERIMENTAL SESSION ONE TASK ONE:

NON-CUED INFERENCE-MAKING AND TRANSLATION

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki koyu ve altı çizili yazılmış iki kelimeden oluşan fiil öbeklerinin Türkçe karşılıklarını verilen boşluklara yazınız.

Örnek:

keep sb's promise : ____sözünü tutmak_____

We both agreed that it can never happen again, and I believe
we'll **keep** that **promise** and each become the kind of friend the other can trust.

START!

acquire property : _____

1. I have **acquired** a delightful **property** on a bend of the Whisfer River, with five bedrooms, a big garden and a swimming pool.

2. When you're a nomadic society, you're walking ten to fifteen kilometers most days. You don't want to carry a lot of stuff around, so you
don't **acquire** much **property**.

3. There were a number of sources for these tenants. For the majority of them, Rhodesdale had been their home for generations, but when the
BSAC **acquired** the **property**, people living there found themselves homeless.

4. Several migrants from Suez to Cairo reported squatting in vacant apartments built by the government or by private companies such as the Ideal Company for their staff. Later the migrants **acquired property** or rental rights in these apartments.

allocate time : _____

1. Almost half of the teachers have stated that they find each skill important
and **allocate** equal **time** in order to improve the language skills.

2. Teachers, especially, pointed out that the low number of lesson hours, the fact that it takes a very long time for the students to practice what they learn eliminate the preference of **allocating** equal **time** to skills, cause an obligation to **allocate** less **time** for the practice and lead to a difficulty in efficiently using the time.

3. From AIDS to cancer to heart disease, from Alar to asbestos to benzene, from eating to drinking to smoking -- we worry about all the risks of living. We **allocate** a lot of **time**, effort, and money to reducing risks, yet most of us believe that our world is riskier now than it was a generation ago.

4. Gottlieb focuses on a number of questions that are moral rather than political: how should parents of a disabled child **allocate** their **time** and attention between that child and their non-disabled children?

file a petition : _____

1. Dawami's application was rejected, because they'd filed it in her name, and the government considered only her husband eligible to apply. "Denied," the letter said, "There is no appeal to this decision" But there was hope, Ly said, if the family acted quickly. They had three months to **file** a new **petition** in Hassan's name, with statements from witnesses.

2. Parents who believe that vaccines have harmed their children may take action: They can **file** a **petition** through the government's Health Resources and Vaccine Injury Compensation Program (VICP) to receive compensation for medical expenses, special education costs, therapies, and even future lost earnings.

3. In 1969 and 1970 the radical Black Panther party announced that it planned to **file** a **petition** with the European Court of Human Rights charging the United States government with committing genocide against blacks and American Indians.

4. Existing law already says that she can **file** a hardship **petition** with the Rent Board. If she truly cannot afford the CI increases, the Rent Board will grant her petition. She will not be forced to leave her home.

damage sb's/sth's credibility : _____

1. Portrayals of social workers in the wider media, such as TV shows, also often results in an inaccurate stereotype. Although many clients say they have a positive experience of social workers, this type of media coverage leads to a negative public opinion of them. Such attitudes **damage** the profession's **credibility** in the eyes of service users and other professions.

2. A state that emphasizes the injustice of harming civilians and then repeatedly harms them itself will **damage** its **credibility**. Televised images of wedding parties struck by cruise missiles and bombs make it harder for Washington to take the moral high ground.

3. Reporter: "Was it personally upsetting to you that you had said things that you later found out weren't true?" Professor Begala: "Oh, absolutely. Of course, I had no idea that they were false. Yet, it **damaged** my **credibility**."

4. "Instead of making promises you can't keep, be honest," Elmore says, "tell the truth rather than **damage** your **credibility**."

seek refuge : _____

1. There are reports coming in minute by minute on blogs and Twitter. We are getting reports that sympathetic residents have been leaving their doors and gates unlocked or open a crack so that protesters being chased by police can quickly **seek refuge** inside their homes.

2. According to Zara Babitzke, there are hundreds of homeless young people on the streets of Marin County and they blend in with everyone else. Some end up living with friends, couch surfing, while some **seek refuge** in cars and public parks.

3. When Samia challenged her father, she was locked in her bedroom for weeks, she said, and beaten with a hose by her father and brothers. Fearing for her life, she **sought refuge** in the government-run shelter where she still lives.

4. The only factor that motivated or encouraged me was my personal conviction to fight the forces that chose a very old man to be my future husband. I hated him and the only way to get away was to **seek refuge** in school.

APPENDIX C.2

EXPERIMENTAL SESSION ONE TASK ONE:

NON-CUED INFERENCE-MAKING AND TRANSLATION ANSWER KEY

acquire property : mal/mülk edinmek

allocate time : zaman ayırmak

file a petition : dilekçe vermek

damage sb's/sth's credibility : güvenirliğini/itibarını sarsmak

seek refuge : sığınmak

APPENDIX C.3

EXPERIMENTAL SESSION ONE TASK TWO:

SENTENCE-CONSTRUCTION

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen fiil öbekleriyle anlamlı cümleler kurunuz.

Örnek:

commit a crime	keep a promise

He committed a serious crime and served 10 years in prison. ✓**Geçerli**

He committed a serious crime. **X Geçersiz**

My husband said that he would take me to Paris for our wedding anniversary but he didn't keep his promise. ✓**Geçerli**

My husband didn't keep his promise. **X Geçersiz**

START!

file a petition	seek refuge	acquire property
damage sb's/sth's credibility	allocate time	

1. _____.

2. _____.

3. _____.

4. _____.

5. _____.

APPENDIX C.4

EXPERIMENTAL SESSION ONE TASK THREE:

NON-CUED GAP-FILLING

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki boşlukları, önceki alıştırmalarda öğrendiğiniz iki kelimeden oluşan fiil öbekleriyle anlamlarına uygun bir şekilde doldurunuz.

Örnek:

We both agreed that it can never happen again, and I believe
we'll ____keep____ that __promise__ and each become the kind of friend the other can rely on.

If you're in a car accident and a woman's pregnant and her baby dies, this is homicide. You've __committed__ a very serious ____crime____.

START!

1. Bullying and intimidation are not acceptable ways to conduct foreign policy in the 21st century. With its actions in recent days, Russia
has _____ its _____ and its relations with the nations of the free world.

2. The covered area is a shady spot to sit and avoid the hot sun, or it can be a relaxing place to _____ _____ during a summer rain.

3. Students with part-time jobs often find it a "very efficient time-management tool," since it forces them to _____ _____ for work and study.

4. If you want to come to the United States to join family members already here, your relative must _____ a _____ on your behalf.

5. Mr. Moreira said some villagers were exaggerating the problems, manipulating neighbors and even paying protesters. "There are people who have an agenda of their own," he said. "One version is people want to _____ _____ in the area to build a port."

APPENDIX C.5

EXPERIMENTAL SESSION ONE TASK THREE:

NON-CUED GAP-FILLING ANSWER KEY

1. damaged / credibility

2. seek / refuge

3. allocate / time

4. file / petition

5. acquire / property

APPENDIX D.1

EXPERIMENTAL SESSION TWO TASK ONE:

NON-CUED INFERENCE-MAKING AND TRANSLATION

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki koyu ve altı çizili yazılmış iki kelimeden oluşan fiil öbeklerinin Türkçe karşılıklarını verilen boşluklara yazınız.

Örnek:

keep sb's promise : ____sözünü tutmak_____

We both agreed that it can never happen again, and I believe
we'll **keep** that **promise** and each become the kind of friend the other can trust.

START!

drop charges : _____

1. Mr. Ryland: Can I help you? Eric: I'm Eric Camden. Matt's father. You think that Matt was the one who stole the necklace. But it was Mary. Mr. Ryland: I won't **drop** the **charges**. Eric: Matt has learned his lesson. Mr. Ryland: But those other kids haven't. They've been stealing from me for years. This will teach them what happens if they break the law. I'll see you in court.

2. In October 2004, Marijuana was found in his backpack at Denver International Airport before boarding a flight, but a friend later said it was his, and so the police **dropped charges** against Anthony.

3. Earlier this month, the Police Commission held a special hearing to determine the fate of five officers in the wrongful death case of Aaron Williams. Originally the case was against 12 officers, one of whom was our daughter, Catherine E. Bianchi. All **charges** against her were **dropped**, but we are still concerned about this incident.

4. Her attorneys had her take a lie detector test, which she passed, and police finally tested for her fingerprints on the forged documents. They found none. On October 27, Steinhauser wrote the district attorney's office urging it to **drop** the **charges**. She wrote "The case was based solely on handwriting analysis, which in this age of sophisticated identity theft means absolutely nothing."

resign sb's post : _____

1. After law school, Dell became a special assistant to Sargent Shriver in government's Office of Economic Opportunity. He **resigned** the government **post** in 1968 and started to work on the presidential campaign of Robert F. Kennedy.

2. Presidential counselor Karen P. Hughes, one of President Bush's closest advisers throughout his political career and considered to be the most powerful woman ever to work in the White House, announced yesterday that she will **resign** her **post** this summer, saying, "I want to take my family back home to Texas."

3. She **resigned** her new **post** Wednesday, saying she could not do her job because of Catholic League criticism.

4. Suchinda announced he would **resign** his military **post** and become prime minister.

implement measures : _____

1. If we do not require physical education in our schools, if playgrounds and parks are not safe to play in, if adults don't organize children's sports activities; children will be physically inactive. We must learn how to develop and **implement measures** to prevent obesity and promote healthy lifestyles.

2. Air pollution and physical inactivity are both risk factors of chronic diseases. Therefore, it is important for environmental officials to **implement measures** to reduce air pollution.

3. The country spent $300 million for the construction of a palace for the president. However, because the economy was not going well in 1978 and the government had to **implement** austerity **measures**.

4. Some school districts do not want to **implement** new security **measures** such as metal detectors because they fear it may open them up to lawsuits.

deny involvement : _____

1. Investigators decided to question Phil. He **denied** any **involvement** in the killing and told them he couldn't have shot Jarrod because he is physically incapable of holding or firing a gun. Phil claims he'd been disabled in a nearly fatal car accident back in the early 1980s when he worked as a carpenter.

2. Nancy: OK. Michael, I mean, first we should look at who was around the girl when she got lost. What about the father? I assume police have checked him out. Michael: And I actually checked him out, too. I interviewed him at length, Nancy. He **denies** any **involvement** in it. He blames the boyfriend.

3. Beth Holloway: It always goes back to the three primary suspects that Natalee was last seen with. Hilary Brown: And Sloot, the son of a judge, was rearrested on

Wednesday in Holland. He'll be sent back to Aruba within a few days. The Kalpoe brothers were caught on the island itself. All three suspects admit they were with Natalee on the night she disappeared, but they **deny** any **involvement** in her death.

4. The vice president was questioned about a possible White House leak which disclosed the identity of Joseph Wilson's wife as a CIA operative. The White House, though, has **denied** any **involvement** in the leak of information.

obtain sb's consent : _____

1. If the student is not old enough to receive school psychological assistance, the school psychologist **obtains** parent **consent** to provide continuing assistance to the student.

2. The legal requirement is that the doctor **obtains** the patient's **consent** after explaining benefits, risks, and alternatives to the recommended treatment.

3. Because she was close to death, the nurses did not have to **obtain** her **consent** before giving her an experimental blood substitute.

4. All Canadian doctors are required by law to **obtain** informed **consent** from their patients before performing tests and procedures.

APPENDIX D.2

EXPERIMENTAL SESSION TWO TASK ONE:

NON-CUED INFERENCE-MAKING AND TRANSLATION ANSWER KEY

drop charges : suçlamaları/iddiaları geri çekmek

resign sb's post : görevinden ayrılmak

implement measures : önlem/tedbir uygulamak

deny involvement : (olayla) bağlantıyı inkar etmek

obtain sb's consent : onayını almak

APPENDIX D.3

EXPERIMENTAL SESSION TWO TASK TWO:

SENTENCE-CONSTRUCTION

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen fiil öbekleriyle anlamlı cümleler kurunuz.

Örnek:

commit a crime	keep a promise

He committed a serious crime and served 10 years in prison. ✓**Geçerli**

He committed a serious crime. **X Geçersiz**

My husband said that he would take me to Paris for our wedding anniversary but he didn't keep his promise. ✓**Geçerli**

My husband didn't keep his promise. **X Geçersiz**

START!

obtain sb's consent		deny involvement
resign sb's post	drop charges	implement measures

1. _____.

2. _____.

3. _____.

4. _____.

5. _____.

APPENDIX D.4

EXPERIMENTAL SESSION TWO TASK THREE:

NON-CUED GAP-FILLING

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki boşlukları, önceki alıştırmalarda öğrendiğiniz iki kelimeden oluşan fiil öbekleriyle anlamlarına uygun bir şekilde doldurunuz.

Örnek:

We both agreed that it can never happen again, and I believe
we'll ____keep____ that __promise__ and each become the kind of friend the other can rely on.

If you're in a car accident and a woman's pregnant and her baby dies, this is homicide. You've __committed__ a very serious ____crime____.

START!

1. The rebel group known as the Tamil Tigers is believed to be behind the shooting. Police investigators report they found evidence that the rebels have been watching the politician from a nearby home. But the Tigers _____
_____.

2. On January 1, 1990, Mr. Robbins announced that he wished to
_____ his _____ and work on other projects.

3. Some of the competitors were under 18 and the
committee _____ _____ from their parents before they were allowed to participate.

4. To protect migratory species such as songbirds, for instance, it is necessary to
_____ conservation _____ along their flyways.

5. Organizers are asking people to flood Attorney General Holder's office demanding he should _____ the _____ against this clearly innocent man.

APPENDIX D.5

EXPERIMENTAL SESSION TWO TASK THREE:

NON-CUED GAP-FILLING ANSWER KEY

1. deny / involvement

2. resign / post

3. obtained / consent

4. implement / measures

5. drop / charges

APPENDIX E.1

EXPERIMENTAL SESSION THREE TASK ONE:

NON-CUED INFERENCE-MAKING AND TRANSLATION

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki koyu ve altı çizili yazılmış iki kelimeden oluşan fiil öbeklerinin Türkçe karşılıklarını verilen boşluklara yazınız.

Örnek:

keep sb's promise : ____sözünü tutmak_____

We both agreed that it can never happen again, and I believe
we'll **keep** that **promise** and each become the kind of friend the other can trust.

START!

undergo an operation : _____

1. Mr. Ray was persuaded by the doctors to **undergo** a risky **operation** at Ohio State University Medical Center, which would include bypass surgery to improve blood flow to his heart muscle as well as a more complex procedure.

2. A child with a heart problem might burn extra calories because she's working a little bit harder to breathe, or she might get tired a lot faster when feeding. Fortunately, Molly's story has a happy ending. She **underwent** a successful **operation** to repair her heart, and Levin was delighted to watch her first kid rapidly grow into a healthy, happy baby.

3. Most of the clients at the clinic **undergo** a laser-aided **operation** that attempts to cure nearsightedness. During the procedure, in which small incisions are made in the cornea, several doctors work on each patient.

4. She needs open-heart surgery, but her doctors aren't sure she's strong enough to **undergo** the **operation**.

bear resemblance : _____

1. The boys' father is outside the house, leaning against the family's 1973 Chevy Monte Carlo, smoking an unfiltered Camel cigarette. That father is me, but I am so much improved as a man and a father now that I really **bear** no **resemblance** to that man leaning against that car, smoking a cigarette.

2. Future aircraft include personal air vehicles, uninhabited air vehicles, and a visionary autonomic vehicle concept. The air vehicles of today **bear** little **resemblance** to those of the 1960s. Similarly, future air vehicles will **bear** little **resemblance** to those of today.

3. These are truly special lenses; they can produce spectacular photographs of very distant subjects. Think of it - 40 times magnification! Catadioptric lens designs **bear** no **resemblance** to any other photographic lens. Actually, the lenses take their design from reflecting telescopes and are often made by telescope manufacturers.

4. The participants in our studies have ranged widely, from business executives to salespeople to university teachers. Our measurements of practical intelligence **bear** little **resemblance** to traditional intelligence tests.

face a prospect : _____

1. 10,000 Egyptians in America rely on something called temporary protected status. This allows them to live and work in the US. But every September, they **face** the **prospect** of deportation if the government does not extend their status for another year.

2. If SARS becomes an endemic in China, which means permanently established in the population, then everybody else in the world will **face** the **prospect** that SARS could be repeatedly reintroduced, maybe on a seasonable basis like flu.

3. This year, with my husband's degree in diplomacy and international commerce in hand and his two Foreign Service exams passed, we are **facing** the **prospect** of traveling great distances by airplane to foreign countries where we will represent the United States government.

4. Consider the case of an 80-year-old widow from Johnstown, Pennsylvania, with an income of less than $6,000. She needs prescription drugs that cost $2,500 a year. With bills like this, she was **facing** the **prospect** of selling her home to buy medicine.

gain insight : _____

1. By listening to the voices of elementary teachers, high school teachers, and college professors, we can **gain insight** into the profession and help increase job satisfaction and effectiveness, with positive outcomes for students.

2. This edition of the 1980 version offers information about nearly every topic of interest to gay and lesbian teenagers. Readers of all ages can **gain insight** into such concerns as self-image, the negative effects of labeling, bisexuality, coming out, drug use, and STDs.

3. His teacher encourages students to see problems as opportunities for **gaining insight** into approaches and strategies which are helpful in solving problems.

4. To **gain** further **insight** into the relationship between music and academic achievement, we need to compare the scholastic progress of students over time.

suit sb's taste : _____

1. The rooms look more like hotel rooms than hospital rooms, and that's no accident. The idea was to make the whole hospital look like a five-star hotel. Take a look at the lobby: boutiques and restaurants to **suit** every **taste** and nationality.

2. I was disappointed by the music selected for Houston's Fourth of July fireworks celebration this year. The music included a bit of country, R&B, Latino, pop and rock to **suit** nearly every **taste**. Unfortunately, only two songs were connected to the patriotic theme of the holiday.

3. Play around with this recipe, and change the seasonings to **suit** your **taste**.

4. Hyde has made changes on his mother's jam recipe to **suit** his own **taste**. He uses less sugar than she did, and he has gradually worked out a proper proportion of corn syrup.

APPENDIX E.2

EXPERIMENTAL SESSION THREE TASK ONE:

NON-CUED INFERENCE-MAKING AND TRANSLATION ANSWER KEY

undergo an operation : ameliyat olmak

bear resemblance : benzerlik göstermek

face a prospect : bir ihtimalle karşı karşıya kalmak

gain insight : içgörü kazanmak

suit sb's taste : zevkine uymak

APPENDIX E.3

EXPERIMENTAL SESSION THREE TASK TWO:

SENTENCE-CONSTRUCTION

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen fiil öbekleriyle anlamlı cümleler kurunuz.

Örnek:

commit a crime	keep a promise

He committed a serious crime and served 10 years in prison. ✓**Geçerli**

He committed a serious crime. **X Geçersiz**

My husband said that he would take me to Paris for our wedding anniversary but he didn't keep his promise. ✓**Geçerli**

My husband didn't keep his promise. **X Geçersiz**

START!

suit sb's taste	face a prospect	gain insight
bear resemblance	undergo an operation	

1. _____.

2. _____.

3. _____.

4. _____.

5. _____.

APPENDIX E.4

EXPERIMENTAL SESSION THREE TASK THREE:

NON-CUED GAP-FILLING

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki boşlukları, önceki alıştırmalarda öğrendiğiniz iki kelimeden oluşan fiil öbekleriyle anlamlarına uygun bir şekilde doldurunuz.

Örnek:

We both agreed that it can never happen again, and I believe
we'll ____keep____ that __promise__ and each become the kind of friend the other can rely on.

If you're in a car accident and a woman's pregnant and her baby dies, this is homicide. You've __committed__ a very serious ____crime____.

START!

1. When you look at these sculptures, animals are often painted with bright colors and designs and carved with unusual features that _____ little _____ to what occurs in the natural world.

2. A transsexual must live in the gender of choice for one year before they can _____ a sex change _____.

3. If possible, discuss the practicalities of using a CPAP machine with three patients so that you can _____ an _____ into the advantages and disadvantages of using this equipment from a patient's perspective.

4. President Bush is giving Iraq's president, Saddam Hussein, a final chance to leave the country or _____ the _____ of war.

5. Educated individuals in an urban environment experience the ability to fashion their daily lives as they wish. They buy clothes that _____ their _____ and decorate their apartments as they like.

APPENDIX E.5

EXPERIMENTAL SESSION THREE TASK THREE:

NON-CUED GAP-FILLING ANSWER KEY

1. bear / resemblance

2. undergo / operation

3. gain / insight

4. face / prospect

5. suit / taste

APPENDIX F

GUIDELINES FOR CONTROL GROUP'S TASKS

General Guidelines for All Tasks

- Participants should fill out the personal information part on each sheet (name, age, gender) before they begin.
- Participants are not allowed to use their mobile phones or dictionaries in any of the tasks.
- If participants ask the implementer the meaning of a word (not the target collocation), the implementer can tell them what it means.
- Participants are not allowed to take notes or photos of the sheets.
- After all tasks are over, implementer takes attendance on the attendance sheet.

Guidelines for Task-1

- Implementer hands out Task-1 sheets.
- Participants are expected to complete Task-1 in 10 minutes.
- Then, implementer spends 5 minutes giving feedback.
- After giving feedback, implementer collects Task-1 sheets.

Guidelines for Task-2

- Implementer hands out Task-2 sheets.
- Participants are expected to complete Task-2 in 5 minutes.
- Then, implementer spends 5 minutes giving feedback.
- After giving feedback, implementer collects Task-2 sheets.

Guidelines for Task-3

- Implementer hands out Task-3 sheets.
- Participants are expected to complete Task-3 in 5 minutes.
- Then, implementer spends 5 minutes giving feedback.
- After giving feedback, implementer collects Task-3 sheets.

APPENDIX G.1

CONTROL SESSION ONE TASK ONE:

CUED INFERENCE-MAKING AND TRANSLATION

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki koyu ve altı çizili yazılmış iki kelimeden oluşan fiil öbeklerini kutucukta verilen Türkçe karşılıkları ile eşleştiriniz. Kutucukta iki fiil öbeği fazladan verilmiştir!

Örnek:

suç işlemek	hayat kurtarmak	sözünü tutmak

keep sb's promise : ____sözünü tutmak_____

We both agreed that it can never happen again, and I believe
we'll **keep** that **promise** and each become the kind of friend the other can trust.

START!

sığınmak	zaman ayırmak	altyapısı eksik olmak
güvenirliğini/itibarını sarsmak	baskı uygulamak	dilekçe vermek
mal/mülk edinmek		

acquire property : _____

1. I have **acquired** a delightful **property** on a bend of the Whisfer River, with five bedrooms, a big garden and a swimming pool.

2. When you're a nomadic society, you're walking ten to fifteen kilometers most days. You don't want to carry a lot of stuff around, so you
don't **acquire** much **property**.

3. There were a number of sources for these tenants. For the majority of them, Rhodesdale had been their home for generations, but when the
BSAC **acquired** the **property**, people living there found themselves homeless.

4. Several migrants from Suez to Cairo reported squatting in vacant apartments built by the government or by private companies such as the Ideal Company for their staff. Later the migrants **acquired property** or rental rights in these apartments.

allocate time : _____

1. Almost half of the teachers have stated that they find each skill important and **allocate** equal **time** in order to improve the language skills.

2. Teachers, especially, pointed out that the low number of lesson hours, the fact that it takes a very long time for the students to practice what they learn eliminate the preference of **allocating** equal **time** to skills, cause an obligation to **allocate** less **time** for the practice and lead to a difficulty in efficiently using the time.

3. From AIDS to cancer to heart disease, from Alar to asbestos to benzene, from eating to drinking to smoking -- we worry about all the risks of living. We **allocate** a lot of **time**, effort, and money to reducing risks, yet most of us believe that our world is riskier now than it was a generation ago.

4. Gottlieb focuses on a number of questions that are moral rather than political: how should parents of a disabled child **allocate** their **time** and attention between that child and their non-disabled children?

file a petition : _____

1. Dawami's application was rejected, because they'd filed it in her name, and the government considered only her husband eligible to apply. "Denied," the letter said, "There is no appeal to this decision" But there was hope, Ly said, if the family acted quickly. They had three months to **file** a new **petition** in Hassan's name, with statements from witnesses.

2. Parents who believe that vaccines have harmed their children may take action: They can **file** a **petition** through the government's Health Resources and Vaccine Injury Compensation Program (VICP) to receive compensation for medical expenses, special education costs, therapies, and even future lost earnings.

3. In 1969 and 1970 the radical Black Panther party announced that it planned to **file** a **petition** with the European Court of Human Rights charging the United States government with committing genocide against blacks and American Indians.

4. Existing law already says that she can **file** a hardship **petition** with the Rent Board. If she truly cannot afford the CI increases, the Rent Board will grant her petition. She will not be forced to leave her home.

damage sb's/sth's credibility : _____

1. Portrayals of social workers in the wider media, such as TV shows, also often results in an inaccurate stereotype. Although many clients say they have a positive experience of social workers, this type of media coverage leads to a negative public opinion of them. Such attitudes **damage** the profession's **credibility** in the eyes of service users and other professions.

2. A state that emphasizes the injustice of harming civilians and then repeatedly harms them itself will **damage** its **credibility**. Televised images of wedding parties struck by cruise missiles and bombs make it harder for Washington to take the moral high ground.

3. Reporter: "Was it personally upsetting to you that you had said things that you later found out weren't true?" Professor Begala: "Oh, absolutely. Of course, I had no idea that they were false. Yet, it **damaged** my **credibility**."

4. "Instead of making promises you can't keep, be honest," Elmore says, "tell the truth rather than **damage** your **credibility**."

seek refuge : _____

1. There are reports coming in minute by minute on blogs and Twitter. We are getting reports that sympathetic residents have been leaving their doors and gates unlocked or open a crack so that protesters being chased by police can quickly **seek refuge** inside their homes.

2. According to Zara Babitzke, there are hundreds of homeless young people on the streets of Marin County and they blend in with everyone else. Some end up living with friends, couch surfing, while some **seek refuge** in cars and public parks.

3. When Samia challenged her father, she was locked in her bedroom for weeks, she said, and beaten with a hose by her father and brothers. Fearing for her life, she **sought refuge** in the government-run shelter where she still lives.

4. The only factor that motivated or encouraged me was my personal conviction to fight the forces that chose a very old man to be my future husband. I hated him and the only way to get away was to **seek refuge** in school.

APPENDIX G.2

CONTROL SESSION ONE TASK ONE:

CUED INFERENCE-MAKING AND TRANSLATION ANSWER KEY

acquire property : mal/mülk edinmek

allocate time : zaman ayırmak

file a petition : dilekçe vermek

damage sb's/sth's credibility : güvenirliğini/itibarını sarsmak

seek refuge : sığınmak

APPENDIX G.3

CONTROL SESSION ONE TASK TWO:

SENTENCE-HALF MATCHING

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıdaki cümle yarıları, her cümlenin ilk yarısı solda ve ikinci yarısı sağda olacak şekilde karışık olarak verilmiştir. Cümle yarılarını eşleştirerek anlamlı cümleler oluşturunuz. Sağdaki yarılardan biri fazladan verilmiştir!

Örnek:

We both agreed that it can never happen again, and I believe we'll **keep _C_**	**A.** a very serious **crime**.
If you're in a car accident and a woman's pregnant and her baby dies, this is homicide. You've **committed _A_**	**B. lives** during an earthquake.
	C. that **promise** and each become the kind of friend the other can trust.

START!

We are trying to **acquire ____**	**A.** considerable **time** and effort in making a decision regarding attendance at a particular institution.
Individuals who view higher educational programs as specialty goods are typically willing to **allocate ____**	**B.** a **petition** with 25 resident signatures by 4th of December.

The South African funding scandal has severely **damaged ____**	**C. pressure** on the society.
It always seems to rain at night here in the mountains of Papua New Guinea. This is why Lidia and her family **seek ____**	**D.** the **credibility** of the De Klerk government and undermined its prospects of retaining political control during the transition to a new constitution.
Anyone who wishes to run for the election must **file ____**	**E. property** to build a visitor center.
	F. refuge in rock shelters - they're dry.

APPENDIX G.4

CONTROL SESSION ONE TASK TWO:

SENTENCE-HALF MATCHING ANSWER KEY

We are trying to **acquire __E__**	**A.** considerable **time** and effort in making a decision regarding attendance at a particular institution.
Individuals who view higher educational programs as specialty goods are typically willing to **allocate __A__**	**B.** a **petition** with 25 resident signatures by 4th of December.
The South African funding scandal has severely **damaged __D__**	**C. pressure** on the society.
It always seems to rain at night here in the mountains of Papua New Guinea. This is why Lidia and her family **seek __F__**	**D.** the **credibility** of the De Klerk government and undermined its prospects of retaining political control during the transition to a new constitution.
Anyone who wishes to run for the election must **file__B__**	**E. property** to build a visitor center.
	F. refuge in rock shelters - they're dry.

APPENDIX G.5

CONTROL SESSION ONE TASK THREE: CUED GAP-FILLING

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki boşlukları, kutucukta verilen iki kelimeden oluşan fiil öbeklerinin uygun formlarıyla doldurunuz.

Örnek:

commit/crime	give/statement	keep/promise	save/lives

We both agreed that it can never happen again, and I believe we'll ____keep____ that __promise__ and each become the kind of friend the other can rely on.

If you're in a car accident and a woman's pregnant and her baby dies, this is homicide. You've __committed__ a very serious ____crime____.

START!

file/petitition	allocate/time	exert/pressure	seek/refuge
damage/credibility	acquire/property	lack/infrastructure	

1. Bullying and intimidation are not acceptable ways to conduct foreign policy in the 21st century. With its actions in recent days, Russia has _____ its _____ and its relations with the nations of the free world.

2. The covered area is a shady spot to sit and avoid the hot sun, or it can be a relaxing place to _____ _____ during a summer rain.

3. Students with part-time jobs often find it a "very efficient time-management tool," since it forces them to _____ _____ for work and study.

4. If you want to come to the United States to join family members already here, your relative must _____ a _____ on your behalf.

5. Mr. Moreira said some villagers were exaggerating the problems, manipulating neighbors and even paying protesters. "There are people who have an agenda of their own," he said. "One version is people want to _____ _____ in the area to build a port."

APPENDIX G.6

CONTROL SESSION ONE TASK THREE:

CUED GAP-FILLING ANSWER KEY

1. damaged / credibility

2. seek / refuge

3. allocate / time

4. file / petition

5. acquire / property

APPENDIX H.1

CONTROL SESSION TWO TASK ONE:

CUED INFERENCE-MAKING AND TRANSLATION

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki koyu ve altı çizili yazılmış iki kelimeden oluşan fiil öbeklerini kutucukta verilen Türkçe karşılıkları ile eşleştiriniz. Kutucukta iki fiil öbeği fazladan verilmiştir!

Örnek:

suç işlemek	hayat kurtarmak	sözünü tutmak

keep sb's promise : ____sözünü tutmak_____

We both agreed that it can never happen again, and I believe
we'll **keep** that **promise** and each become the kind of friend the other can trust.

START!

(olayla) bağlantıyı inkar etmek	yayılmasını engellemek
suçlamaları/iddiaları geri çekmek	önlem/tedbir uygulamak
görevinden ayrılmak	onayını almak
tehdit oluşturmak	

drop charges : _____

1. Mr. Ryland: Can I help you? Eric: I'm Eric Camden. Matt's father. You think that Matt was the one who stole the necklace. But it was Mary. Mr. Ryland: I won't **drop** the **charges**. Eric: Matt has learned his lesson. Mr. Ryland: But those other kids haven't. They've been stealing from me for years. This will teach them what happens if they break the law. I'll see you in court.

2. In October 2004, Marijuana was found in his backpack at Denver International Airport before boarding a flight, but a friend later said it was his, and so the police **dropped** **charges** against Anthony.

3. Earlier this month, the Police Commission held a special hearing to determine the fate of five officers in the wrongful death case of Aaron Williams. Originally the case was against 12 officers, one of whom was our daughter, Catherine E. Bianchi. All **charges** against her were **dropped**, but we are still concerned about this incident.

4. Her attorneys had her take a lie detector test, which she passed, and police finally tested for her fingerprints on the forged documents. They found none. On October 27, Steinhauser wrote the district attorney's office urging it to **drop** the **charges**. She wrote "The case was based solely on handwriting analysis, which in this age of sophisticated identity theft means absolutely nothing."

resign sb's post : _____

1. After law school, Dell became a special assistant to Sargent Shriver in government's Office of Economic Opportunity. He **resigned** the government **post** in 1968 and started to work on the presidential campaign of Robert F. Kennedy.

2. Presidential counselor Karen P. Hughes, one of President Bush's closest advisers throughout his political career and considered to be the most powerful woman ever to work in the White House, announced yesterday that she will **resign** her **post** this summer, saying, "I want to take my family back home to Texas."

3. She **resigned** her new **post** Wednesday, saying she could not do her job because of Catholic League criticism.

4. Suchinda announced he would **resign** his military **post** and become prime minister.

implement measures : _____

1. If we do not require physical education in our schools, if playgrounds and parks are not safe to play in, if adults don't organize children's sports activities; children will be physically inactive. We must learn how to develop and **implement measures** to prevent obesity and promote healthy lifestyles.

2. Air pollution and physical inactivity are both risk factors of chronic diseases. Therefore, it is important for environmental officials to **implement measures** to reduce air pollution.

3. The country spent $300 million for the construction of a palace for the president. However, because the economy was not going well in 1978 and the government had to **implement** austerity **measures**.

4. Some school districts do not want to **implement** new security **measures** such as metal detectors because they fear it may open them up to lawsuits.

deny involvement : _____

1. Investigators decided to question Phil. He **denied** any **involvement** in the killing and told them he couldn't have shot Jarrod because he is physically incapable of holding or firing a gun. Phil claims he'd been disabled in a nearly fatal car accident back in the early 1980s when he worked as a carpenter.

2. Nancy: OK. Michael, I mean, first we should look at who was around the girl when she got lost. What about the father? I assume police have checked him out. Michael: And I actually checked him out, too. I interviewed him at length, Nancy. He **denies** any **involvement** in it. He blames the boyfriend.

3. Beth Holloway: It always goes back to the three primary suspects that Natalee was last seen with. Hilary Brown: And Sloot, the son of a judge, was rearrested on Wednesday in Holland. He'll be sent back to Aruba within a few days. The Kalpoe brothers were caught on the island itself. All three suspects admit they were with Natalee on the night she disappeared, but they **deny** any **involvement** in her death.

4. The vice president was questioned about a possible White House leak which disclosed the identity of Joseph Wilson's wife as a CIA operative. The White House, though, has **denied** any **involvement** in the leak of information.

obtain sb's consent : _____

1. If the student is not old enough to receive school psychological assistance, the school psychologist **obtains** parent **consent** to provide continuing assistance to the student.

2. The legal requirement is that the doctor **obtains** the patient's **consent** after explaining benefits, risks, and alternatives to the recommended treatment.

3. Because she was close to death, the nurses did not have to **obtain** her **consent** before giving her an experimental blood substitute.

4. All Canadian doctors are required by law to **obtain** informed **consent** from their patients before performing tests and procedures.

APPENDIX H.2

CONTROL SESSION TWO TASK ONE:

CUED INFERENCE-MAKING AND TRANSLATION ANSWER KEY

drop charges : suçlamaları/iddiaları geri çekmek

resign sb's post : görevinden ayrılmak

implement measures : önlem/tedbir uygulamak

deny involvement : (olayla) bağlantıyı inkar etmek

obtain sb's consent : onayını almak

APPENDIX H.3

CONTROL SESSION TWO TASK TWO:

SENTENCE-HALF MATCHING

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıdaki cümle yarıları, her cümlenin ilk yarısı solda ve ikinci yarısı sağda olacak şekilde karışık olarak verilmiştir. Cümle yarılarını eşleştirerek anlamlı cümleler oluşturunuz. Sağdaki yarılardan biri fazladan verilmiştir!

Örnek:

We both agreed that it can never happen again, and I believe we'll **keep _C_**	**A.** a very serious **crime**.
If you're in a car accident and a woman's pregnant and her baby dies, this is homicide. You've **committed _A_**	**B. lives** during an earthquake.
	C. that **promise** and each become the kind of friend the other can trust.

START!

Prosecutors have had to **drop ____**	**A.** his **post** in June because of health problems.
Some states allow sex education in the schools if the students **obtain ____**	**B. measures** such as banning soda and coke from school cafeterias to fight with obesity, especially among children.

In a prison visitors room interview before Sunday's vote, he called his supporters to send a message to the government to end injustice and restore democracy. He **denied ____**	**C. charges** against 3,000 criminal suspects largely because the hurricane destroyed evidence from their cases.
Bennett had been working as the chief of police for 26 years when he **resigned ____**	**D.** parental **consent** to participate in the program.
City governments and public school boards have successfully **implemented ____**	**E.** any **involvement** in the violence and said he had been unfairly treated. "I'm a businessman, an engineer. I'm not a terrorist," he says.
	F. a **threat** to the country's financial progress.

APPENDIX H.4

CONTROL SESSION TWO TASK TWO:

SENTENCE-HALF MATCHING ANSWER KEY

Prosecutors have had to **drop __C__**	**A.** his **post** in June because of health problems.
Some states allow sex education in the schools if the students **obtain __D__**	**B. measures** such as banning soda and coke from school cafeterias to fight with obesity, especially among children.
In a prison visitors room interview before Sunday's vote, he called his supporters to send a message to the government to end injustice and restore democracy. He **denied __E__**	**C. charges** against 3,000 criminal suspects largely because the hurricane destroyed evidence from their cases.
Bennett had been working as the chief of police for 26 years when he **resigned __A__**	**D.** parental **consent** to participate in the program.
City governments and public school boards have successfully **implemented __B__**	**E.** any **involvement** in the violence and said he had been unfairly treated. "I'm a businessman, an engineer. I'm not a terrorist," he says.
	F. a **threat** to the country's financial progress.

APPENDIX H.5

CONTROL SESSION TWO TASK THREE: CUED GAP-FILLING

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki boşlukları, kutucukta verilen iki kelimeden oluşan fiil öbeklerinin uygun formlarıyla doldurunuz.

Örnek:

commit/crime	give/statement	keep/promise	save/lives

We both agreed that it can never happen again, and I believe we'll ____keep____ that __promise__ and each become the kind of friend the other can rely on.

If you're in a car accident and a woman's pregnant and her baby dies, this is homicide. You've __committed__ a very serious ____crime____.

START!

obtain/consent	pose/threat	deny/involvement
drop/charges	prevent/spread	resign/post	implement/measures

1. The rebel group known as the Tamil Tigers is believed to be behind the shooting. Police investigators report they found evidence that the rebels have been watching the politician from a nearby home. But the Tigers **_____ _____.**

2. On January 1, 1990, Mr. Robbins announced that he wished to **_____** his **_____** and work on other projects.

3. Some of the competitors were under 18 and the committee **_____ _____** from their parents before they were allowed to participate.

4. To protect migratory species such as songbirds, for instance, it is necessary to **_____** conservation **_____** along their flyways.

5. Organizers are asking people to flood Attorney General Holder's office demanding he should **_____** the **_____** against this clearly innocent man.

APPENDIX H.6

CONTROL SESSION TWO TASK THREE:

CUED GAP-FILLING ANSWER KEY

1. deny / involvement

2. resign / post

3. obtained / consent

4. implement / measures

5. drop / charges

APPENDIX I.1

CONTROL SESSION THREE TASK ONE:

CUED INFERENCE-MAKING AND TRANSLATION

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki koyu ve altı çizili yazılmış iki kelimeden oluşan fiil öbeklerini kutucukta verilen Türkçe karşılıkları ile eşleştiriniz. Kutucukta iki fiil öbeği fazladan verilmiştir!

Örnek:

suç işlemek	hayat kurtarmak	sözünü tutmak

keep sb's promise : ____sözünü tutmak_____

We both agreed that it can never happen again, and I believe
we'll **keep** that **promise** and each become the kind of friend the other can trust.

START!

zevkine uymak	benzerlik göstermek	övgüyü hak etmek
ameliyat olmak	içgörü kazanmak/özümsemek	
merak/ilgi uyandırmak	bir ihtimalle karşı karşıya kalmak	

undergo an operation : _____

1. Mr. Ray was persuaded by the doctors to **undergo** a risky **operation** at Ohio State University Medical Center, which would include bypass surgery to improve blood flow to his heart muscle as well as a more complex procedure.

2. A child with a heart problem might burn extra calories because she's working a little bit harder to breathe, or she might get tired a lot faster when feeding. Fortunately, Molly's story has a happy ending. She **underwent** a successful **operation** to repair her heart, and Levin was delighted to watch her first kid rapidly grow into a healthy, happy baby.

3. Most of the clients at the clinic **undergo** a laser-aided **operation** that attempts to cure nearsightedness. During the procedure, in which small incisions are made in the cornea, several doctors work on each patient.

4. She needs open-heart surgery, but her doctors aren't sure she's strong enough to **undergo** the **operation**.

bear resemblance : _____

1. The boys' father is outside the house, leaning against the family's 1973 Chevy Monte Carlo, smoking an unfiltered Camel cigarette. That father is me, but I am so much improved as a man and a father now that I really **bear** no **resemblance** to that man leaning against that car, smoking a cigarette.

2. Future aircraft include personal air vehicles, uninhabited air vehicles, and a visionary autonomic vehicle concept. The air vehicles of today **bear** little **resemblance** to those of the 1960s. Similarly, future air vehicles will **bear** little **resemblance** to those of today.

3. These are truly special lenses; they can produce spectacular photographs of very distant subjects. Think of it - 40 times magnification! Catadioptric lens designs **bear** no **resemblance** to any other photographic lens. Actually, the lenses take their design from reflecting telescopes and are often made by telescope manufacturers.

4. The participants in our studies have ranged widely, from business executives to salespeople to university teachers. Our measurements of practical intelligence **bear** little **resemblance** to traditional intelligence tests.

face a prospect : _____

1. 10,000 Egyptians in America rely on something called temporary protected status. This allows them to live and work in the US. But every September, they **face** the **prospect** of deportation if the government does not extend their status for another year.

2. If SARS becomes an endemic in China, which means permanently established in the population, then everybody else in the world will **face** the **prospect** that SARS could be repeatedly reintroduced, maybe on a seasonable basis like flu.

3. This year, with my husband's degree in diplomacy and international commerce in hand and his two Foreign Service exams passed, we are **facing** the **prospect** of traveling great distances by airplane to foreign countries where we will represent the United States government.

4. Consider the case of an 80-year-old widow from Johnstown, Pennsylvania, with an income of less than $6,000. She needs prescription drugs that cost $2,500 a year. With bills like this, she was **facing** the **prospect** of selling her home to buy medicine.

gain insight : _____

1. By listening to the voices of elementary teachers, high school teachers, and college professors, we can **gain insight** into the profession and help increase job satisfaction and effectiveness, with positive outcomes for students.

2. This edition of the 1980 version offers information about nearly every topic of interest to gay and lesbian teenagers. Readers of all ages can **gain insight** into such concerns as self-image, the negative effects of labeling, bisexuality, coming out, drug use, and STDs.

3. His teacher encourages students to see problems as opportunities for **gaining insight** into approaches and strategies which are helpful in solving problems.

4. To **gain** further **insight** into the relationship between music and academic achievement, we need to compare the scholastic progress of students over time.

suit sb's taste : _____

1. The rooms look more like hotel rooms than hospital rooms, and that's no accident. The idea was to make the whole hospital look like a five-star hotel. Take a look at the lobby: boutiques and restaurants to **suit** every **taste** and nationality.

2. I was disappointed by the music selected for Houston's Fourth of July fireworks celebration this year. The music included a bit of country, R&B, Latino, pop and rock to **suit** nearly every **taste**. Unfortunately, only two songs were connected to the patriotic theme of the holiday.

3. Play around with this recipe, and change the seasonings to **suit** your **taste**.

4. Hyde has made changes on his mother's jam recipe to **suit** his own **taste**. He uses less sugar than she did, and he has gradually worked out a proper proportion of corn syrup.

APPENDIX I.2

CONTROL SESSION THREE TASK ONE:

CUED INFERENCE-MAKING AND TRANSLATION ANSWER KEY

undergo an operation : ameliyat olmak

bear resemblance : benzerlik göstermek

face a prospect : bir ihtimalle karşı karşıya kalmak

gain insight : içgörü kazanmak

suit sb's taste : zevkine uymak

APPENDIX I.3

CONTROL SESSION THREE TASK TWO:

SENTENCE-HALF MATCHING

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıdaki cümle yarıları, her cümlenin ilk yarısı solda ve ikinci yarısı sağda olacak şekilde karışık olarak verilmiştir. Cümle yarılarını eşleştirerek anlamlı cümleler oluşturunuz. Sağdaki yarılardan biri fazladan verilmiştir!

Örnek:

We both agreed that it can never happen again, and I believe we'll **keep _C_**	**A.** a very serious **crime**.
If you're in a car accident and a woman's pregnant and her baby dies, this is homicide. You've **committed _A_**	**B. lives** during an earthquake.
	C. that **promise** and each become the kind of friend the other can trust.

START!

Clinton **underwent ____**	**A. interest** in the audience.
Building materials should **suit** your budget **____**	**B.** a striking **resemblance** to passages in the Bible, and portray a similar view of creation.

In the absence of massive government support, the automakers **face ____**	**C.** the **prospect** of bankruptcies.
One of the most important reasons we learn a language is to **gain ____**	**D.** and **taste**, both in appearance and level of maintenance.
Many of the Qur'anic verses **bear ____**	**E.** an eight-hour **operation** to remove a brain tumor last year.
	F. insight into a way of life that is different from our own.

APPENDIX I.4

CONTROL SESSION THREE TASK TWO:

SENTENCE-HALF MATCHING ANSWER KEY

Clinton **underwent __E__**	**A. interest** in the audience.
Building materials should **suit** your budget **__D__**	**B.** a striking **resemblance** to passages in the Bible, and portray a similar view of creation.
In the absence of massive government support, the automakers **face __C__**	**C.** the **prospect** of bankruptcies.
One of the most important reasons we learn a language is to **gain __F__**	**D.** and **taste**, both in appearance and level of maintenance.
Many of the Qur'anic verses **bear __B__**	**E.** an eight-hour **operation** to remove a brain tumor last year.
	F. insight into a way of life that is different from our own.

APPENDIX I.5

CONTROL SESSION THREE TASK THREE: CUED GAP-FILLING

Bu çalışma, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki boşlukları, kutucukta verilen iki kelimeden oluşan fiil öbeklerinin uygun formlarıyla doldurunuz.

Örnek:

commit/crime	give/statement	keep/promise	save/lives

We both agreed that it can never happen again, and I believe we'll ____keep____ that __promise__ and each become the kind of friend the other can rely on.

If you're in a car accident and a woman's pregnant and her baby dies, this is homicide. You've __committed__ a very serious ____crime____.

START!

excite/interest	suit/taste	deserve/credit	gain/insight
undergo/operation		bear/resemblance	

1. When you look at these sculptures, animals are often painted with bright colors and designs and carved with unusual features that _____ little _____ to what occurs in the natural world.

2. A transsexual must live in the gender of choice for one year before they can _____ a sex change _____.

3. If possible, discuss the practicalities of using a CPAP machine with three patients so that you can _____ an _____ into the advantages and disadvantages of using this equipment from a patient's perspective.

4. President Bush is giving Iraq's president, Saddam Hussein, a final chance to leave the country or _____ the _____ of war.

5. Educated individuals in an urban environment experience the ability to fashion their daily lives as they wish. They buy clothes that _____ their _____ and decorate their apartments as they like.

APPENDIX I.6

CONTROL SESSION THREE TASK THREE:

CUED GAP-FILLING ANSWER KEY

1. bear / resemblance

2. undergo / operation

3. gain / insight

4. face / prospect

5. suit / taste

APPENDIX J

GUIDELINES FOR POST-TEST

General Guidelines for Both Parts

- Seating should be arranged in the exam format.
- Participants should fill out the personal information part on each sheet (name, age, gender) before they begin.
- Implementer must not give any type of feedback during or after the test.
- Participants are not allowed to use their mobile phones or dictionaries in any of the tasks.
- If participants ask the implementer the meaning of a word (not the target collocation), the implementer can tell them what it means.
- Participants are not allowed to take notes or photos of the sheets.
- After all tasks are over, implementer takes attendance on the attendance sheet.

Guidelines for Part-1

- Implementer hands out Part-1 sheets.
- Participants are expected to complete Part-1 in 5 minutes.
- Implementer collects Part-1 sheets.

Guidelines for Part-2

- Implementer hands out Part-2 sheets.
- Participants are expected to complete Part-2 in 10 minutes.
- Implementer collects Part-2 sheets.

APPENDIX K.1

SUB-TEST ONE ASSESSMENT TASK ONE

Bu test, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki boşlukları, alıştırmalarda öğrendiğiniz iki kelimeden oluşan fül öbekleriyle anlamlarına uygun bir şekilde doldurunuz.

Örnek:

We both agreed that it can never happen again, and I believe we'll ____keep____ that __promise__ and each become the kind of friend the other can rely on.

START!

1. Ethics problems arise when a judge consistently appears with one special-interest group. Even if it does not affect the judge's decision-making, it can _____ the court's _____.

2. The situation is much more complicated than just simply whether we work more hours or fewer hours than the international companies. The question is how we're going to _____ our _____ for work and leisure activities.

3. Groups of mainly young Muslims attacked cars and houses owned by Christians. Many local Christians in this predominantly Muslim town _____ _____ at police stations and the navy base after a rally on Monday turned violent.

4. Mr. Durham and his wife _____ the _____ in 1933 and spent three years restoring it. They lived in that house for 42 years afterwards.

5. After 25 years of marriage, she filed for divorce and was awarded the family home, custody of the two minor children, $650 per month in alimony until death or remarriage, and $175 per month in child support until the children reached adulthood. In 1972, James Hayes _____ a _____ to end his financial obligations to his wife as he had married again.

APPENDIX K.2

SUB-TEST ONE ASSESSMENT TASK ONE ANSWER KEY

1. damage / credibility

2. allocate / time

3. sought / refuge

4. acquired / property

5. file / petition

APPENDIX K.3

SUB-TEST ONE ASSESSMENT TASKS TWO & THREE

Bu test, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen fiil öbeklerinin Türkçe karşılıklarını yazınız ve bu fiil öbeklerini kullanarak anlamlı cümleler kurunuz.

Örnek:

commit a crime : __suç işlemek__
He committed a serious crime and served 10 years in prison. ✓**Geçerli**

commit a crime : __suç işlemek__
He committed a serious crime. **X Geçersiz**

START!

1. acquire property : _____

_____.

2. allocate time : _____

_____.

3. file a petition : _____

_____.

4. damage sb's/sth's credibility : _____

_____.

5. seek refuge : _____

_____.

APPENDIX K.4

SUB-TEST ONE ASSESSMENT TASK TWO ANSWER KEY

1. acquire property : mal/mülk edinmek

2. allocate time : zaman ayırmak

3. file a petition : dilekçe vermek

4. damage sb's/sth's credibility : güvenirliğini/itibarını sarsmak

5. seek refuge : sığınmak

APPENDIX L.1

SUB-TEST TWO ASSESSMENT TASK ONE

Bu test, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki boşlukları, alıştırmalarda öğrendiğiniz iki kelimeden oluşan fiil öbekleriyle anlamlarına uygun bir şekilde doldurunuz.

Örnek:

We both agreed that it can never happen again, and I believe
we'll ____keep____ that __promise__ and each become the kind of friend the other can rely on.

START!

1. Ariel Sharon, the defense minister of the time, has been indicted as a war criminal by a Belgian court for his role in the massacre at the Sabra and Shatila refugee camps in 1982, where hundreds of Palestinian civilians were killed. An Israeli court had determined Sharon was indirectly responsible and he was forced
to _____ his _____ as defense minister.

2. The police didn't believe Thomson at first but he had appeared on a live television show when the crime occurred. Officials quickly _____
the _____ when they realized the witness had mistaken Thomson's face for the attacker.

3. Drew Peterson did not participate in any of those searches over the weekend, even though some volunteers had asked him to help look for his wife. He has continued
to _____ any _____ in her disappearance.

4. Fears of a global bird flu pandemic are putting governments on notice. Disaster experts in Asia have plans to _____ several _____ to prevent a possible crisis.

5. In many Muslim countries, women must _____ their
husbands' _____ before applying to the court for divorce.

APPENDIX L.2

SUB-TEST TWO ASSESSMENT TASK ONE ANSWER KEY

1. resign / post

2. dropped / charges

3. deny / involvement

4. implement / measures

5. obtain / consent

APPENDIX L.3

SUB-TEST TWO ASSESSMENT TASKS TWO & THREE

Bu test, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen fiil öbeklerinin Türkçe karşılıklarını yazınız ve bu fiil öbeklerini kullanarak anlamlı cümleler kurunuz.

Örnek:

commit a crime : __suç işlemek__
He committed a serious crime and served 10 years in prison. ✓**Geçerli**

commit a crime : __suç işlemek__
He committed a serious crime. **X Geçersiz**

START!

1. drop charges : _____

_____.

2. resign sb's post : _____

_____.

3. implement measures _____

_____.

4. deny involvement _____

_____.

5. obtain sb's consent : _____

_____.

APPENDIX L.4

SUB-TEST TWO ASSESSMENT TASK TWO ANSWER KEY

1. drop charges : suçlamaları/iddiaları geri çekmek

2. resign sb's post : görevinden ayrılmak

3. implement measures : önlem/tedbir uygulamak

4. deny involvement : (olayla) bağlantıyı inkar etmek

5. obtain sb's consent : onayını almak

APPENDIX M.1

SUB-TEST THREE ASSESSMENT TASK ONE

Bu test, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen cümleleri okuyunuz. Cümlelerdeki boşlukları, alıştırmalarda öğrendiğiniz iki kelimeden oluşan fiil öbekleriyle anlamlarına uygun bir şekilde doldurunuz.

Örnek:

We both agreed that it can never happen again, and I believe
we'll ____keep____ that __promise__ and each become the kind of friend the other can rely on.

START!

1. Exploring the oceans, learning about endangered species, meeting new friends - children can benefit from the cruise experience in a variety of ways
and _____ _____ into the world around them.

2. As David Lodge summarizes, "if a novel did not _____some _____to other novels, we wouldn't know how to read it, and if it wasn't different from all other novels, we wouldn't want to read it."

3. The prince has been in and out of the hospital since he was found to have throat cancer some 16 years ago, and last year he _____ his
eighth _____ for cancer.

4. In 2001, ninetynine U.S. towns had populations in which four percent or more of residents were eighty-five or older; most of these towns were in rural areas in the Great Plains. Many communities _____ the _____ of becoming ghost towns, as older inhabitants die and younger residents move away.

5. It's working out great. We take turns cooking, and the girls like dropping in to visit their grandparents. My husband taught my father to play golf, and there are activities here to _____ everyone's _____.

APPENDIX M.2

SUB-TEST THREE ASSESSMENT TASK ONE ANSWER KEY

1. gain / insight

2. bear / resemblance

3. underwent / operation

4. face / prospect

5. suit / taste

APPENDIX M.3

SUB-TEST THREE ASSESSMENT TASKS TWO & THREE

Bu test, Boğaziçi Üniversitesi Yabancı Diller Bölümü bünyesinde yürütülen bir yüksek lisans tez çalışmasının kapsamında uygulanmakta olup kişisel bilgileriniz ve cevaplarınız hiçbir suretle üçüncü şahıs/kurumlarla paylaşılmayacaktır. Vereceğiniz cevaplar araştırmanın sonuçlarını etkileyeceğinden dikkatlice okuyunuz ve tüm soruları eksiksiz yanıtlayınız.

İsim/Soyisim: _____ Yaş: _____ Cinsiyet: Kadın / Erkek

Aşağıda verilen fiil öbeklerinin Türkçe karşılıklarını yazınız ve bu fiil öbeklerini kullanarak anlamlı cümleler kurunuz.

Örnek:

commit a crime : __suç işlemek__
He committed a serious crime and served 10 years in prison. ✓**Geçerli**

commit a crime : __suç işlemek__
He committed a serious crime. **X Geçersiz**

START!

1. undergo an operation : _____

_____.

2. bear resemblance : _____

_____.

3. face a prospect : _____

_____.

4. gain insight : _____

_____.

5. suit sb's taste : _____

_____.

APPENDIX M.4

SUB-TEST THREE ASSESSMENT TASK TWO ANSWER KEY

1. undergo an operation : ameliyat olmak

2. bear resemblance : benzerlik göstermek

3. face a prospect : bir ihtimalle karşı karşıya kalmak

4. gain insight : içgörü kazanmak

5. suit sb's taste : zevkine uymak

REFERENCES

Akıncı, M. (2009). *Effectiveness of corpus consultancy in teaching verb+noun collocations to first year ELT students*. Unpublished MA thesis, Bogazici University. İstanbul.

Alcaraz Mármol, G., & Sánchez-Lafuente, A. A. (2013). The involvement load hypothesis: Its effect on vocabulary learning in primary education. *Revista Española De Lingüística Aplicada/Spanish Journal of Applied Linguistics*, *26*(26), 11.

Aston, G. (2001). Learning with corpora: An overview. In G, Aston (Ed.), *Learning with corpora* (pp. 7-45). Harlow: Addison Wesley Longman.

Bahns, J., & Eldaw, M. (1993). Should we teach EFL students collocations?. *System*, *21*(1), 101-114.

Balcı, Ö., & Çakır, A. (2012). Teaching vocabulary through collocations in EFL classes: The case of Turkey. *International Journal of Research Studies in Language Learning*, *1*(1), 21-32.

Bao, G. (2015). Task type effects on English as a foreign language: Learners' acquisition of receptive and productive vocabulary knowledge. *System*, *53*, 84-95.

Behzadi, A., & Golam Reza Haji Pour Nezhad, G. (2014). The effect of two task types on learning English words and idioms. *International Journal of English Language and Literature Studies*, *3*(1), 12-20.

Bennett, G. R. (2010). *Using corpora in the language learning classroom: Corpus linguistics for teachers*. Ann Arbor: University of Michigan Press.

Bıçkı, A. (2012). *Acquisition of English collocations by adult L2 Turkish learners*. Unpublished doctoral dissertation, Çukurova University, Adana.

Bogaards, P. (2001). Lexical units and the learning of foreign language vocabulary. *Studies in second language acquisition*, *23*(3), 321-343.

Boulton, A. (2008). Looking for empirical evidence of data-driven learning at lower levels. In B. Lewandowska-Tomaszczyk (ed.), *Corpus linguistics, computer tools, and applications: State of the art* (pp. 581-598). Frankfurt: Peter Lang.

Brown, D. F. (1974). Advanced vocabulary teaching: The problem of collocation. *RELC Journal*, *5*(2), 1-11.

Bygate, M., Skehan, P, & Swain, M. (2001). *Researching pedagogic tasks: Second language learning, teaching, and testing.* Harlow: Longman.

Carter, R., & McCarthy, M. (1988). *Vocabulary and language teaching*. London: Longman.

Chan, T. P., & Liou, H. C. (2005). Effects of web-based concordancing instruction on EFL students' learning of verb–noun collocations. *Computer Assisted Language Learning*, *18*(3), 231-251.

Coady, J. &. Huckin, T. (1997). *Second language vocabulary acquisition*. Cambridge: Cambridge University Press.

Common European framework of reference for languages. n.d. Retrieved December 12, 2015, from http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf

Compare TOEFL® Scores. n.d. Retrieved November 28, 2015, from https://www.ets.org/toefl/institutions/scores/compare/

Conklin, K., & Schmitt, N. (2008). Formulaic sequences: Are they processed more quickly than nonformulaic language by native and nonnative speakers? *Applied Linguistics*, *29*(1), 72-89.

Coughlan, P., & Duff, P. A. (1994). Same task, different activities: Analysis of SLA task from an activity theory perspective. In J. P. Lantolf, & G. Appel (Eds.), *Vygotskian approaches to second language research*. Westport: Greenwood Publishing Group.

Crookes, G. (1986). Task classification: A cross-disciplinary review. *Linguistics*, *29*(1), 72-89.

Davies, M. (2008-) The Corpus of Contemporary American English: 450 million words, 1990-present. Retrieved from http://corpus.byu.edu/coca/.

DeKeyser, R. M., & Sokalski, K. J. (2001). The differential role of comprehension and production practice. *Language Learning*, *51*(1), 81-112.

de la Fuente, M. J. (2002). Negotiation and oral acquisition of L2 vocabulary. *Studies in Second Language Acquisition*, *24*(1), 81-112.

Ellis, R., & He, X. (1999). The roles of modified input and output in the incidental acquisition of word meanings. *Studies in Second Language Acquisition*, *21*(2), 285-301.

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

Fan, M. (2009). An exploratory study of collocational use by ESL students–A task based approach. *System*, *37*(1), 110-123.

Farghal, M., & Obiedat, H. (1995). Collocations: A neglected variable in EFL. *IRAL-International Review of Applied Linguistics in Language Teaching*, *33*(4), 315-332.

Folse, K. S. (2006). The effect of type of written exercise on L2 vocabulary retention. *TESOL Quarterly*, *40*(2), 273-293.

Gavioli, L. (1997). Exploring texts through the concordancer: Guiding the learner. In *Teaching and language corpora* (pp. 83-99). Harlow: Addison Wesley Longman.

Griffin, G., & Harley, T. A. (1996). List learning of second language vocabulary. *Applied Psycholinguistics*, *17*(4), 443-460.

Gyllstad, H. (2007). *Testing English collocations: Developing receptive tests for use with advanced Swedish learners*. Lund: Lund University Publications.

Hashemzadeh, M. (2012). The effect of exercise types on EFL learners' vocabulary retention. *Theory and Practice in Language Studies*, *2*(8), 1716-1727.

Henriksen, B. (1999). Three dimensions of vocabulary development. *Studies in Second Language Acquisition*, *21*(2), 303-317.

Hill, J. (1999). Collocational competence. *Readings in Methodology*, *162*.

Hill, J. (2000). Revising Priorities. In M. Lewis (Ed.), *Teaching collocation: Further developments in the lexical approach* (pp. 47-69). Hove: Language Teaching Publications.

Hirsh, D., & Nation, P. (1992). What vocabulary size is needed to read unsimplified texts for pleasure?. *Reading in a Foreign Language*, *8*, 689-689.

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

Izumi, S. (2002). Output, input enhancement, and the noticing hypothesis. *Studies in Second Language Acquisition*, *24*(4), 541-577.

Izumi, S., & Bigelow, M. (2000). Does output promote noticing and second language acquisition?*. *TESOL Quarterly*, *34*(2), 239-278.

Jahangiri, K., & Abilipour, I. (2014). Effects of collaboration and exercise type on incidental vocabulary learning: Evidence against involvement load hypothesis. *Procedia-Social and Behavioral Sciences*, *98*, 704-712.

Joe, A. (1998). What effects do text-based tasks promoting generation have on incidental vocabulary acquisition?. *Applied Linguistics*, *19*(3), 357-377.

Johns, T. (1994). From printout to handout: Grammar and vocabulary teaching in the context of Data-driven Learning. In T. Odlin (Ed.), *Perspectives on pedagogical grammar* (pp. 293-317). Cambridge: Cambridge University Press.

Keating, G. D. (2008). Task effectiveness and word learning in a second language: The involvement load hypothesis on trial. *Language Teaching Research*, *12*(3), 365-386.

Kim, Y. (2011). The role of task-induced involvement and learner proficiency in L2 vocabulary acquisition. *Language Learning*, *61*(1), 100-140.

Koç, G. (2006). *Developing collocational awareness*. Unpublished MA thesis, Bilkent University, Ankara.

Koosha, M., & Jafarpour, A. A. (2006). Data-driven learning and teaching collocation of prepositions: The case of Iranian EFL adult learners. *Asian EFL Journal*, *8*(4), 192-209.

Krashen, S. (1985). *The input hypothesis: Issues and implications*. London: Longman.

Krashen, S. (2002). The comprehension hypothesis and its rivals. In *Selected papers from the eleventh international symposium on English teaching/fourth Pan-Asian conference* (pp. 395-404).

Krashen, S. (1982). *Principles and practice in second language acquisition*. Oxford, NY: Pergamon.

Laufer, B. (1990). Words you know: How they affect the words you learn. In J. Fisiak (ed.) *Further insights into contrastive linguistics* (pp. 573-593). Amsterdam: John Benjamins.

Laufer, B., Elder, C., Hill, K., & Congdon, P. (2004). Size and strength: do we need both to measure vocabulary knowledge?. *Language Testing*, *21*(2), 202-226.

Laufer, B., & Hulstijn, J. H. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. *Applied Linguistics*, *22*, 1–26.

Laufer, B., & Nation, P. (1995). Vocabulary size and use: Lexical richness in L2 written production. *Applied Linguistics*, *16*(3), 307-322.

Laufer, B., & Nation, P. (1999). A vocabulary-size test of controlled productive ability. *Language Testing*, *16*(1), 33-51.

Laufer, B., & Paribakht, T. S. (1998). The relationship between passive and active vocabularies: Effects of language learning context. *Language Learning*, *48*(3), 365-391.

Leech, G. (1997). Teaching and language corpora: a convergence. In *Teaching and Language Corpora* (pp. 1-23). Harlow; England: Addison Wesley Longman.

Lewis, M. (1993). *The lexical approach: The state of ELT and a way forward*. Hove: Language Teaching Publications.

Lewis, M. (2000). Language in the lexical approach. In M. Lewis (Ed.), *Teaching collocation: Further developments in the lexical approach* (pp. 126-154). Hove: Language Teaching Publications.

Lewis, M. (2000). Materials and testing. In M. Lewis (Ed.), *Teaching collocation: Further developments in the lexical approach* (pp. 186-204). Hove: Language Teaching Publications.

Lewis, M. (2000). There is nothing as practical as a good theory. In M. Lewis (Ed.), *Teaching collocation: Further developments in the lexical approach* (pp. 10-27). Hove: Language Teaching Publications.

Lewis, M., & Gough, C. (2008). *Implementing the lexical approach: Putting theory into practice*. London: Heinle/Cengage Learning.

Li, J. (2014). Effect of task-induced online learning behavior on incidental vocabulary acquisition by Chinese learners—revisiting involvement load hypothesis. *Theory and Practice in Language Studies*, *4*(7), 1385-1394.

Long, M. H. (1985). Input and second language acquisition theory. *Input in second language acquisition*, 377-393.

Longman Collocations Dictionary and Thesaurus. (2013). Harlow, Essex: Pearson Education.

McCarten, J. (2007). *Teaching vocabulary: Lessons from the corpus, lessons for the classroom*. New York: Cambridge University Press.

McCarthy, M. (1998). *Vocabulary.* Oxford: Oxford University Press.

McCarthy, M. (2004). *Touchstone: From corpus to course book.* New York: Cambridge University Press.

Meara, P., & Buxton, B. (1987). An alternative to multiple choice vocabulary tests. Language Testing, 4, 142–154.

Meara, P., & Fitzpatrick, T. (2000). Lex30: an improved method of assessing productive vocabulary in an L2. *System*, *28*(1), 19-30.

Milton, J. (2009). *Measuring second language vocabulary acquisition*. Buffalo, NY: Multiligual Matters.

Mondria, J. A., & Wiersma, B. (2004). Receptive, productive, and receptive+ productive L2 vocabulary learning: What difference does it make. In P. Bogaards & B. Laufer (Eds.), *Vocabulary in a second language: Selection, acquisition, and testing* (pp. 79-100). Philadelphia: John Benjamins Publishing.

Nation, I.S.P. (1990). *Teaching and learning vocabulary*. New York: Newbury House.

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

Nation, P. (2007). The four strands. *International Journal of Innovation in Language Learning and Teaching*, *1*(1), 2-13.

Nation, P., & Chung, T. (2009). Teaching and testing vocabulary. In M. H. Long & C. J. Doughty (Eds.), *The handbook of language teaching* (pp. 543-559). Singapore: Wiley-Blackwell.

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

Nesselhauf, N. (2003). The use of collocations by advanced learners of English and some implications for teaching. *Applied Linguistics*, *24*(2), 223-242.

Nunan, D. (1989). *Designing tasks for the communicative classroom.* Cambridge; New York: Cambridge University Press.

Paribakht, T.S., & Wesche, M.B. (1993). The relationship between reading comprehension and second language development in a comprehension based ESL program. *TESL Canada Journal*, *11*, 9–29.

Prabhu, N. S. (1987). *Second language pedagogy*. Oxford: Oxford University Press.

Read, J. (1988). Measuring the vocabulary knowledge of second langauge learners. *RELC Journal*, *19*(2), 12-25.

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

Reppen, R. (2010). *Using corpora in the language classroom*. Cambridge; New York: Cambridge University Press.

Revier, R. L. (2009). Evaluating a new test of whole English collocations. In B. Andrew & H. Gyllstad (Eds.), *Researching collocations in another language* (pp. 125-138). UK: Palgrave Macmillan.

Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge; New York: Cambridge University Press.

Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language teaching research, 12*(3), 329-363.

Schmitt, N. (2010). Researching vocabulary: A vocabulary research manual. University of Nottingham, UK. Palgrave Macmillan.

Schmitt, N., & Meara, P. (1997). Researching vocabulary through a word knowledge framework. *Studies in Second Language Acquisition, 19*(1), 17-36.

Sinclair, J. (1991). *Corpus, concordance, collocation*. Oxford: Oxford University Press.

Stoddard, G. D. (1929). An experiment in verbal learning. *Journal of Educational Psychology, 20*(6), 452-457.

Sun, Y. C., & Wang, L. Y. (2003). Concordancers in the EFL classroom: Cognitive approaches and collocation difficulty. *Computer Assisted Language Learning, 16*(1), 83-94.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. *Input in Second Language Acquisition, 15,* 165-179.

Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97-114). New York: Oxford University Press.

Tsui, A. B. M. (2004). What teachers have always wanted to know – and how corpora can help. In J. McH. Sinclair (Ed.), *How to use corpora in language teaching* (pp. 39-61). Philadelphia: John Benjamins Publishing Company.

Waring, R. (1997). A comparison of the receptive and productive vocabulary sizes of some second language learners. *Immaculata, 1*, 53-68.

Webb, S. (2005). Receptive and productive vocabulary learning: The effects of reading and writing on word knowledge. *Studies in Second Language Acquisition, 27*(1), 33-52.

Webb, S. (2009). The effects of receptive and productive learning of word pairs on vocabulary knowledge. *RELC Journal, 40*(3), 360-376.

Webb, S., & Kagimoto, E. (2009). The effects of vocabulary learning on collocation and meaning. *TESOL Quarterly, 43*(1), 55-77.

Wesche, M., & Paribakht, T. S. (1996). Assessing second language vocabulary knowledge: Depth versus breadth. *Canadian Modern Language Review, 53*(1), 13-40.

Woolard, G. (2000). Collocation – encouraging learner independence. In M. Lewis (Ed.), *Teaching collocation: Further developments in the lexical approach* (pp. 28-46). Hove: Language Teaching Publications.

Wu, W. S. (1996). Lexical collocations: One way to make passive vocabulary active. In *The Proceedings of the 11th Conference on English Teaching and Learning in the Republic of China* (pp. 461-480).