University of Central Florida

STARS

2019

A Comparative Study of Two Models of Presenting Phrasal Verbs

Nagham Majeed
University of Central Florida

Part of the Language and Literacy Education Commons

Find similar works at: https://stars.library.ucf.edu/etd

University of Central Florida Libraries http://library.ucf.edu

A COMPARATIVE STUDY OF TWO MODELS OF PRESENTING PHRASAL
VERBS

NAGHAM J. MAJEED
B.A. Al-Mustansiriyah University, 2001
M.A. University of Diyala, 2005

A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in the College of Community Innovation and Education
at the University of Central Florida
Orlando, Florida

Fall Term
2019

Major Professor: Florin Mihai

ABSTRACT

Learning phrasal verbs (PVs) is of vital importance in both written and spoken English, especially for those English learners who must use English as a second language (ESL) in their daily interactions with proficient speakers. This study focused on two particles (*out* and *in*) in exploring a more effective model for presenting PVs in an ESL context. PVs are the focus of this empirical study because they are an essential component of English vocabulary but are typically regarded as very difficult for ESL students to master.

This study used a quasi-experimental design to compare the effect of instruction through image-schematic container illustrations of 16 PVs (supported by the container metaphor model) and a definition-only illustration of the same 16 PVs (supported by the traditional model of PV instruction). The participants in this experiment consisted of 28 intermediate-level students enrolled in intensive English program (IEP) courses at a metropolitan college in the southeastern United States during the summer of 2019; the students were divided into a control group and an experimental group. Four types of instruments, including one pretest and three posttests, were used in this experiment to examine the effectiveness of the container metaphor model compared with the traditional model. The findings of this study challenge the traditional view regarding the difficulty of teaching the meanings of these 16 PVs and suggest that the container metaphor model is more conducive to PV learning and retention. However, the findings of this study showed little evidence that the container metaphor model can assist in guessing the meaning of previously unknown PVs. The practical implications demonstrated from

these results can be used by ESL teachers and educational stakeholders to validate

English-teaching practices. Therefore, this model was recommended to be considered as

one model of presenting PVs. The current study demonstrated that researchers should

include infrequent PVs in their research in addition to the frequent ones. Finally,

limitations of the current study are identified and recommendations for organizing future

studies on this topic are proposed.

To the memory of my beloved martyred brother, Riyadh.

ACKNOWLEDGMENTS

First and foremost, I would like to thank God Almighty for giving me the strength, ability, and knowledge to complete my dissertation.

This achievement would not be possible without my amazing, supportive committee members. I would like to thank Dr. Florin Mihai for all of his support since the beginning of my dissertation journey. Thank you so much, Dr. Mihai, for believing in me, and for always doing so. Thank you for telling me "you can do it," for the regular meetings, and for the quick reply of my emails. Thank you for the advice, wisdom, and guidance you have given me. Thank you so much, Dr. Keith Folse, for encouraging me to write about phrasal verbs, and thank you for the amazing feedback on my dissertation. Thank you for sharing your time and expertise with me, and for always including many phrasal verbs when you emailed me. I am thankful for your part in helping me achieve my goals. Thank you, Dr. Folse. I am immensely grateful to Dr. David Boote for answering all my statistical questions; I am so grateful to have him on my dissertation committee. Many thanks for helping me with data collection and my application to the IRB approval form. I am sincerely thankful for your support and encouragement during the difficult time of my Ph.D. journey. Finally, Dr. Purmensky, thank you for always being there for me. I greatly appreciate your valuable remarks and thoughtful recommendations in responding to my dissertation. Thank you for your suggestions concerning the pretest.

I am also tremendously thankful to Ms. Tracey Partin, who allowed me to collect data from her institution. Thank you so much, Dr. Laura Monroe, for your edits and

feedback. Thank you, Colin Nohr, for answering all my questions about writing during my visits to the Writing Center. I also owe a huge debt of gratitude to HCED for granting me the amazing scholarship to pursue my Ph.D. in spite of the critical situation in my country, Iraq.

My colleagues, friends, and family, I am so grateful to you for supporting me during the journey of getting my Ph.D. My sincere gratitude to all my colleagues in the Ph.D. TESOL Track at the University of Central Florida. I am immensely thankful to my best friend, Dr. Mais Al-Jabbawi, for being such an amazing supportive friend and for always checking on me. Thank you, Mais, for always listening to me, encouraging me, and pushing me to be stronger and stronger. Thank you so much for all you have done for me. Thank you for being the best friend ever. To my friend Dr. Inaam Taher, who has always been a source of support, thank you for always being there for me. A warm word for my friend Iman Khudhair who was with me all the way during the courses in the TESOL Track.

Very special thanks go to my mother and my father. Thank you for being such supportive parents. Thank you for always believing in me, and for teaching me how to respect and love all people. My gratitude goes also to my mother-in-law, who always checked on me. Special thanks to my father-in-law, who always asked me about the details of my academic life. Thank you for everything you have done for me.

To my amazingly lovely supportive husband, Husham. Thank you for always showing how proud you are of me. I am thankful to have you in my life. You are the best!

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
EFL	English as a Foreign Language
ESL	English as a Second Language
Exetests	EXErcises + TESTs
IEP	Intensive English Program
IRB	Institutional Review Board
L1	First Language/ Native Language
L2	Second Language
LM	Landmark
PV	Phrasal Verb
PPP	Presentation, Practice, and Production
P1	Presentation
P2	Practice
P3	Production
PV	Phrasal Verb
TR	Trajector

CHAPTER ONE: INTRODUCTION

In English, phrasal verbs (PVs) represent a substantial linguistic source in communicative contexts and are very important in daily verbal and written communication (Crutchley, 2007; Kurtyka, 2001; Pütz, 2007). There are several reasons behind the importance of PVs in English. The first reason relates to their high frequency in English language use (Garnier & Schmitt, 2015). According to Biber, Johannson, Leech, Conrad, and Finegan (1999), PVs occur almost 2,000 times in every million words in both written and spoken discourse. Furthermore, Gardner and Davies (2007) emphasized the importance of PVs in academic writing, noting that second-language (L2) learners might encounter at least two PVs per page of English written text. Additionally, Nassaji and Tian (2010) note that PVs, as a subclass of English vocabulary, are extensively used by native speakers of English. Therefore, utilizing native-like multi-word idioms such as PVs gives English as a second language (ESL) learners an opportunity to produce native-like discourse (Garnier & Schmitt, 2015).

PVs are essential but also very difficult expressions due to their syntactic and semantic complexity (Dagut & Laufer, 1985; Laufer & Eliasson, 1993). For example, Gardner and Davies (2007) explained that PVs can be separable or non-separable. It is notoriously complicated for ESL learners to distinguish between the two categories. Although they are pervasive in English, according to Celce-Murcia and Larsen-Freeman (1999), very few languages have PVs. PVs exist in Germanic languages but do not occur in Romance languages (Folse, 2004). Therefore, PVs are especially difficult and strange for L2 students whose native languages are Romance languages, such as French, Spanish, Portuguese, or Italian. These students prefer to use more familiar one-word verbs from their first language (L1) instead of PVs (Folse, 2016). For example, instead of using the PV *find out*, those Romance language-speaking ESL leaners may

prefer to use the single-word verb *discover*. Other languages, such as Arabic, Chinese, or Korean, do not have PVs either, which make PVs difficult to acquire for ESL learners from those L1 backgrounds as well.

Although L2 students struggle to master PVs, those students will be unable to function in English if they do not know a large number of PVs well. Consequently, L2 students cannot participate in the simplest of exchanges if their vocabulary knowledge does not include the most frequent PVs (Folse, 2004). Clearly, PVs are an essential component of English vocabulary. Learning PVs is critical for English language use (Celce-Murcia & Larsen-Freeman, 1999; Wray, 2002), and failure to use PVs in spoken discourse makes ESL learners sound unnatural (Folse, 2016; Siyanova & Schmitt, 2007). Therefore, ESL learners need to have a strong knowledge of PVs in order to understand other speakers and to be clearly understood by others. In fact, Laufer (2013) believes that having ready access to a large number of PVs is a key factor in decreasing the gap between what ESL students want to say and what they can say.

In terms of L2 pedagogy, one challenging area is how to present or introduce PVs in the most effective manner. A great deal of research has been conducted on traditional models of teaching PVs, especially those using definitions and memorization. According to Morgan (1997), however, these traditional models have not been very productive and hence there is an urgency to develop more effective ways of presenting PVs in the context of L2 teaching and learning. Various studies have encouraged teaching PVs using the modern container metaphor as a presentation tool (Rudzka-Ostyn, 2003). Therefore, this study aimed to determine whether the container metaphor model is a more effective way of presenting PVs than a traditional model of presentation that relies on definitions and memorization.

Defining Phrasal Verbs

According to the Longman Dictionary of Applied Linguistics and Language Teaching (2000), words like *out*, *in*, *on*, *up*, and *down* can follow both nouns and verbs. When they are linked to nouns, they function as prepositions. However, they function as adverb particles when they are linked with verbs. The combination of verb + particle is called a PV. According to Folse (2004, 2016, 2018), a PV consists of two or three words where the first word is a verb, the second is a particle, and the third, if it exists, is a preposition. One example of a three-word PV is *put up with = tolerate*.

A PV is defined by Biber et al. (1999) as one type of multi-word verb that consists of a verb and an adverbial particle, and functions as a single verb. By the same token, Trask (1993) notes that a PV involves a simple verb incorporated with one particle or more than one particle. Because they contain several parts, they are called *phrasal*. A PV looks like a phrase, but functions as one word (Biber et al., 1999; Quirk, Greenbaum & Leech, 1985). Therefore, it is a characteristic of PVs that the combination of verb and particle elicits a different meaning than if each word is looked at separately (Koprowski, 2005). For example, *look up* as a PV does not mean that someone is looking up at something above him/her from a lower place. In fact, it means to consult a book or resource to locate a particular piece of information.

As far as dictionaries are concerned, McGraw-Hill's Dictionary of American Idioms and PVs states that PVs are "also called two-word verbs, … [and are] idiomatic expressions because the second element of the verb (the adverb or preposition) is not necessarily predictable" (Spears, 2005, p. v). The American Heritage Dictionary of PVs defines a PV as a "combination of an ordinary verb and a preposition or an adverbial particle that has at least one particle meaning that is not predictable from the combined literal meanings of the verb and the preposition or particle"

(Spitz, 2005, p. v). According to the Longman Dictionary of Contemporary English (2009), a PV is "a group of words that is used like a verb and consists of a verb with an adverb or preposition after it" (Mayor, 2009, p. 1232). Finally, the Oxford Advanced Learner's Dictionary defines a PV as "a verb combined with an adverb or a preposition, or sometimes both, to give a new meaning" (Turnbull et al., 2010, p. 1101).

These definitions show that PVs consist of two or three words where the first word is a verb, the second is a particle (i.e., a preposition or an adverb), and the third is a preposition. As such, a PV functions as a single unit of meaning and its meaning cannot be easily predicted from its constituents.

Traditional and Metaphor-Based Approaches of Presenting PVs

According to Yasuda (2010), the traditional model of presenting PVs provides students with a list of PVs together with their definitions or translation and asks them to memorize this list. This traditional model of teaching PVs implies that PVs are non-compositional, meaning that their idiomatic meanings cannot be predicted from a combination of their constituents (Gibbs, 1990).

In a classroom that follows the traditional model of presenting PVs, ESL learners are required to memorize the meanings of PVs as a chunk without attempting to relate the meaning of their constituents (Boers, 2004). By doing so, sometimes ESL learners may feel frustrated because they cannot use their prior knowledge of the verb and particle meanings in determining the meaning of PVs. Researchers who focused on traditional model such as Live (1965), Lipka (1975), and Fraser (1976) either considered the meaning of the PVs as arbitrary and idiosyncratic (Kovacs, 2007; Morgan, 1997) or they ignored the distinct differences in meaning (Tyler & Evans, 2003). Those linguists saw no clear connection in meaning between the individual

components and the composite meaning of the PVs. This would mean that there is no a clear systematic way of determining the overall meaning of PVs depending on their elements, and therefore PVs must be memorized as chunks.

Listing and memorizing PVs, according to the traditional model, may be useful in learning many PVs; however, this method does not ensure the inclusion of PVs in daily active conversation (Mart, 2012). Mahpeykar and Tyler (2015) pointed out that the traditional model used to teach PVs has not been very successful because it has failed to teach the semantic and systematic behavior of PVs. Therefore, the difficulty of learning PVs is sometimes exacerbated due to the method in which PVs are presented. In sum, the analyzed literature suggests that the traditional model has not been a very effective method of teaching PVs (Celce-Murcia & Larsen-Freeman, 1999; Kovecses & Szabco, 1996; Mahpeykar & Tyler, 2015).

In addition to the traditional model, there has been a focus on using conceptual metaphors as a pedagogical tool in teaching PVs. Lakoff and Johnson (2003) defined a conceptual metaphor as "an imaginative understanding of one kind of thing in terms of another" (p. 194). According to cognitive linguistics researchers such as Dirven (2001), Kovecses and Szabco (1996), Kurtyka (2001), Lindner (1982), Morgan (1997), Rudzka-Ostyn (2003), and Tyler and Evans (2003), it is possible to predict or infer the meanings of some PVs by exploring the metaphors contained in the components of PVs, especially in the particles but not so often in the main verbs. The modern notion of conceptual metaphors that defied the traditional view was first introduced in Lakoff and Johnson's book entitled *Metaphors We Live By* (1980). In this publication, Lakoff and Johnson confirmed the significance of the metaphor in relation to how L2 learners think and select vocabulary to reflect their ideas and thoughts. Lakoff and Johnson

identified two important types of conceptual metaphors that can be used in explaining, analyzing, and presenting PVs: orientational metaphors and ontological metaphors.

Orientational metaphors. The orientational metaphor is one type of conceptual metaphor which can be considered as an extension of a cognitive structure that emerges "from our tendency to employ an up-down orientation in picking out meaningful structures of our experience" (Johnson, 2013, p. xiv). The cognitive linguistic approach of PVs asserts that particles are a type of orientational metaphor. Additionally, most of them have to do with spatial orientations that are related to our daily physical activity, such as *up-down* and *on-off* (Lakoff & Johnson, 2003). For example, increasing and power are *up*, while *decreasing* and *sickness* are *down*.

Many recent studies have focused on finding a difference between the traditional model and the orientational metaphor model in introducing and teaching PVs (Ansari, 2016; Ganji, 2011; Kartal & Uner, 2017; Kovecses & Szabco, 1996; Lu & Sun, 2017; Talebinezhad & Farhadian, 2014; Yasuda, 2010). The results of these studies suggest that orientational metaphors can potentially help L2 students learn PVs.

Ontological metaphors. The most influential type of conceptual metaphor is the ontological metaphor. Ontological metaphors present insubstantial concepts as palpable objects, meaning that an abstract concept such as an emotion, a thought, or a relation is perceived as something concrete such as a person, mountains, and body (Lakoff & Johnson, 2003). One of the most prominent uses of ontological metaphors is revealed through container metaphors (Nhu & Huyen, 2009).

Container metaphors. The container metaphor is one of the most important ways to understand and conceptualize abstract ideas (Johnson, 2013). Accordingly, many abstract

conceptual ideas can be conceptualized as containers that provide a systematic explanation for

PVs represented by the particles *out* and *in*. Literally, *out* and *in* indicate an outside and inside

position. However, these particles can be visualized from the mental image of a container.

Leaving a container is represented by the particle *out*, and being inside or entering a container is

represented by the particle *in*.

Based on studies by Lee (2012), Lakoff and Johnson (2003), and Rudzka-Ostyn (2003),

containers can be classified into many semantic clusters such as home, problem, jobs, groups,

bodies, mouths, minds, and situations. For example, *home* is conceptualized as a container in

which people spend a lot of time inside. Therefore, it is normal to use *out* when they leave their

homes (Rudzka-Ostyn, 2003). Figure 1 shows the schematic representation of the home being a

container. The idea of conceptualizing home as a container is adapted from Rudzka-Ostyn

(2003).
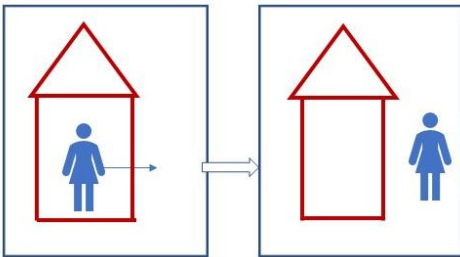
Figure 1. Use of the container metaphor with schematic representation.

> *I might <u>eat out</u> with you tonight.*
>
> *I would like to <u>ask</u> you <u>out</u> to lunch.*
>
> *I would <u>invite</u> you <u>out</u> to dinner.*

According to the Longman PVs Dictionary (2000), *eat out* means "to eat a meal in a restaurant, instead of at home" (p. 147). *Ask out* means "to ask someone to go to a restaurant, a film, etc." (Longman, 2000, p. 8), and *invite out* means "to ask someone to go to a film, restaurant, concert, etc." (p. 261). These examples show that the container metaphor serves as a visual representation to help ESL students understand and remember the meaning of these PVs. *Eating in* suggests that the home is viewed as a container; therefore, anything outside of that container is outside of home.

Another semantic cluster that can be considered as a container is Problem. The particle *out* indicates figurative meaning in *figure out* and *work out*. In that sense, problem can be conceptualized as a container that keeps people inside. For example,

I finally figured out the solution to that problem.

According to the Longman PVs Dictionary (2000), *figure out* means "to understand something or someone, or find the answer to a question, problem, etc. after thinking about them carefully" (p. 163). *Work out* means "to think carefully about something in order to decide what you should do or how you should do it" (Longman, 2000, p. 596). Superficially, it seems that there is no connection in meaning between the verb *figure* and the particle *out*. However, if a problem is considered to be a container, a connection between the verb and the particle can be recognized. So, if a problem is figured out, a person finds the solution to get out of that container. Therefore, container metaphors can be used to reveal the underlying meaning of PVs.

Requejo and Diaz (2008) added that computers and the Internet can also be conceptualized as containers. Consequently, all the various meanings of particles in general and PVs in particular are a semantic network of organized related meanings (Requejo & Diaz, 2008). The association of the PVs with the mental image of a container can be helpful for ESL students

in their attempt to visualize, determine, and remember the metaphoric meaning of PVs (Kövecses, 2010).

It was hypothesized that enhancing ESL students' awareness of container metaphors represented by the particles *out* and *in* would facilitate the learning of the PVs rather than only memorizing their meanings. Therefore, the present study aimed to compare the differences between the traditional presentation model that relies on explanation and memorization and the container metaphor model that uses graphic representations in presenting PVs.

Statement of the Problem

PVs are an important component of the English language because of their frequent use in daily conversations and in the written language. However, they are difficult for ESL students due to two main reasons: their inconsistent form and meaning, and their absence in the students' L1 (Garnier & Schmitt, 2015; Neagu, 2007). Because PVs do not have uniform patterns, ESL students have difficulty in learning them. ESL students are also not accustomed to the idea that multiple words consisting of a verb and a particle can express the same meaning of one verb (Folse, 2016).

The traditional way of teaching PVs presents memorization as the best strategy; however, it does not provide any explanation about how the components of the PVs are structured or why one particle must go with a particular verb. The traditional model has been problematic for teaching and learning PVs (Ansari, 2016; Ganji, 2011; Kartal & Uner, 2017; Kovecses & Szabco, 1996; Lu & Sun, 2017; Talebinezhad & Farhadian, 2014; Yasuda, 2010). Hence, there is a need to develop more effective ways of teaching PVs from which their meanings can be explained more efficiently and systematically.

According to Lindner (1982) and Rudzka-Ostyn (2003), conceptual metaphor-based approaches provide a way of teaching PVs in meaningful and systematic cognitive ways. Many researchers (Kartal & Uner, 2017; Kovecses & Szabco, 1996; Talebinezhad & Farhadian, 2014; Yasuda, 2010) have previously sought to determine the best way of introducing and teaching PVs. Those researchers suggested that an approach which focuses on orientational metaphors helps ESL students learn PVs. The problem that this study addressed was that a considerable amount of research (Ansari, 2016; Ganji 2011; Kartal & Uner, 2017; Kovecses & Szabco, 1996; Lu & Sun, 2017; Talebinezhad & Farhadian, 2014; Yasuda, 2010) had focused on finding a difference between the traditional model and the orientational metaphor model in teaching PVs. However, little to no experimental studies have been conducted in an ESL context to determine the effectiveness of the container metaphor model. Therefore, this study examined whether presenting PVs via the container metaphor model facilitated the learning of PVs by ESL students in a more effective manner compared to the traditional model.

Research Question

This study aimed to investigate whether the container metaphor model at the presentation stage of the Presentation, Practice, and Production (PPP) pedagogical approach has a positive effect on the acquisition of PVs for ESL learners. Therefore, the following research question was posed:

Is there a significant difference in ESL students' success rate of learning PVs between a traditional model and container metaphor model of presentation?

Hypotheses

As a result, the following null hypothesis was formulated.

Null hypothesis: There was no significant difference in L2 students' success rate of learning PVs between the group of L2 students exposed to a traditional model and the group of L2 students exposed to the container metaphor model of presenting PVs.

Alternative hypothesis: The effect of learning PVs based on the container metaphor presentation model was higher than that of the traditional presentation model.

Selection of the PVs

The PVs that were used in this comparative quantitative study were unknown to the participants since knowing some of the PVs could have negatively influenced the results of the study. The rationale for working with previously unknown PVs was to observe whether, and to what degree, the container metaphor model had an advantage over the traditional model on student learning of the PVs. The selection of the PVs ultimately used in this study was determined by the number of the correct answers provided during the pilot test of students who were at a higher level of language proficiency than the students in the control and experimental groups. Previously known PVs were excluded in the control and experimental groups' pretest and posttests. Given that PVs have polysemous meanings and some meanings are more frequent than the others, only the uncommon meanings were selected.

Research Design

Two groups of participants were involved in this study: control and experimental. The participants in both groups were exposed to the same PVs. The control group followed a traditional model of presenting the PVs while the experimental group followed the container metaphor model. This study adopted a quantitative research method, utilizing a non-randomized experimental design following a pretest, a posttest 1, a posttest 2 and a posttest 3 sequence. The sample according to the G* power can include (28-74) participants. The selected participants

were at an intermediate level between the ages of 18 and 35 and who were enrolled in intensive English Program (IEP) courses at a metropolitan college in the southeastern United States in the summer of 2019.

Purpose Statement

The purpose of the study was to investigate the effect of using a container metaphor model of introducing the meaning of PVs, as well as to measure and evaluate whether the contained metaphor model, was more effective than the traditional model of presenting PVs. In addition, the study intended to judge whether there was a significant difference between the control and experimental group in short-term and long-term PV recall. This study also examined whether participants could transfer their knowledge to figure out new PVs.

Importance of the Study

This study was perhaps the first experimental design using the container metaphor model of presenting PVs in an ESL context. The findings could potentially lead to important pedagogical suggestions in teaching PVs to students from different native-language backgrounds who are studying in English-speaking countries. Since this study followed a quantitative design, the results were verifiable, accurate, and reliable (ACAPS, 2012).

Definitions of Major Terms

The following terms were frequently used throughout the dissertation. Therefore, the definitions of the terms were provided below.

- English as a Foreign Language (EFL): English in this context is taught in a country where it is not the native or dominant language.

- English as a Second Language (ESL): English in this context is taught in a country where it is the native or dominant language.

12

- First language (L1): the native language of the students which is acquired initially from birth; it is also called *mother tongue*.

- Second language (L2): the second language that is learned some time after the student's first language; it is also called *target language*.

CHAPTER TWO: LITERATURE REVIEW

The purpose of this chapter is to review, compare, and present the existing literature on the pedagogy of PVs, with special attention paid to both the traditional model and the container metaphor model of PV presentation. This chapter first introduces the two components of PV, namely the verb and the particle, and shows the importance of the particle constituent to the PV. Difficulties with learning and teaching PVs are discussed. Next, three kinds of PVs are explained: non-idiomatic, semi-idiomatic, and idiomatic. The last main section of this chapter concentrates on addressing the traditional-based approach and metaphor-based approach of teaching PVs.

Components of PV: Verb and Particle

Both constituents of a PV, the verb and the particle, are important because PVs cannot be interpreted by relying on the meaning of either the verb or the particle (Mahpeykar & Tyler, 2015). These two components of PVs form an innovative lexical unit or chunk. However, the particle is more important than the verb in explaining the meaning of a PV (Side, 1990).

The verb constituent. Dixon (2005) listed the kinds of verbs that can form PVs, such as "motion (e.g., bring, carry), rest (e.g., sit, stand), affect (e.g., cut, kick, scrape), give (e.g., give, get, have), making (e.g., make, let), or the grammatical verbs *be* and *do*" (p. 294). It is important to mention here that Fraser (1976) indicated that stative verbs, the verbs that express a state rather than an action, do not combine with particles, except for the verb "hear" which combines with "out" to form "hear out."

Abstract actions can be understood easier by conceptualizing them as concrete movements. Therefore, most verbs of motion are used to signify abstract changes. This is evident in the following examples from Rudzka-Ostyn (2003, p. 2):

Physical Motion (literal)	**Abstract Motion (Metaphorical)**
To <u>drag</u> a person <u>out of</u> the house	The meeting <u>dragged on/dragged out</u>
To <u>throw out</u> old clothes, shoes	To <u>throw</u> a person <u>out</u> of a club
To <u>get out of</u> the house	To <u>get out of</u> the mess/ the problem
To <u>run out of</u> a building on fire	To <u>run out of</u> money; my pen has <u>run out</u>

In order to understand the meaning of *drag out, throw out, get out* of, and *run out of*, it is essential to understand the meaning of the verbs *drag, throw, get,* and *run*. However, knowing the meaning of the verb alone is not enough to understand the meaning of the entire PV. The other important part in a PV is the particle; therefore, understanding the meaning of the particles and why this particle is used instead of the others is very important to grasp the meaning of the PVs.

  The particle constituent. The word "particle" is derived originally from the Latin word *particulla,* which means "small portion." A particle denoting a set of uninflected words is found in many languages such as English, German, Dutch, Classical Greek, and Norwegian (Neagu, 2007). Traditionally, the meaning of particles has been regarded as idiomatic and arbitrary. Fraser (1976) stated that particles do not carry any meaning in PVs, and PVs should be listed as unanalyzable idiomatic expressions. However, cognitive researchers identify particles as the meaning indicator of the PVs because they carry an essential meaning of PVs (Flower, 1993; Goodale, 1998). Cognitive linguistics have concentrated on studying particles, starting with Lindner (1982) who discussed the meaning of *out* and *up*. Rudzka-Ostyn (2003) identified the literal and metaphorical meanings of many particles such as *out*, *in*, *up*, and *down*. Rosca and de Altamirano (2016) analyzed the meaning and the frequency of the *up* and *down* in a spoken

corpus. The results showed the important role of the particle in understanding the meaning of PVs.

Bolinger (1971) divided PV particles into two groups; the first group consisted of particles with literal meaning, and the second group consisted of particles conveying metaphorical meaning. Accordingly, Morgan (1997) defined the particle as the part that can be represented either literally or metaphorically. If the meaning of the particle is not predictable, it can be illustrated and this will lead us to reject the idea of unpredictability (Tyler & Evans, 2003). The meaning of PVs becomes more difficult to predict when the particle's literal meaning obscures its metaphorical meaning in abstract notions such as thoughts, feelings, and relations (Rudzka-Ostyn, 2003). For those particles that cannot be illustrated literally, meaning can be explained by using other concepts. An example is when an abstract concept (e.g., *difficulties*) is conceptualized as containment. The particle *out* below is utilized metaphorically to show how to remove oneself from a difficult situation.

How do you <u>get out</u> of this situation? (Thom, 2017, p. 55).

Kovacs (2011b) defined the literal and metaphoric meanings of the particle *up,* where this particle literally refers to upward movement and metaphorically it means increasing in number, size, or strength. For instance,

Teachers <u>came up</u> with a good approach to teach students.

Conversely, the particle *down* refers to moving downward. Metaphorically, it means decreasing in number, size, and strength. For example,

My car <u>broke down</u> yesterday.

Therefore, it is possible to find a connection among the different meanings of particles, both concrete and abstract, even if they seem unrelated on the surface. Metaphors can serve as a

connection between concrete and abstract meanings of the same particles. For example, the

particle *out* has many different meanings but can comprise unified concepts. Consider these two

examples:

> *He <u>throws out</u> the trash.*

> *Please <u>throw out</u> any idea you have.*

The unified concept in these two examples is leaving a place and go into another one. This will

be represented later in this chapter as "leaving a container."

Since ESL learners do not always see a connection between concrete and abstract and

also do not always perceive the abstract meaning implied in metaphors, they often face

difficulties in understanding PVs (Kovacs, 2011a). Flower (1993) promoted the idea that

students should set out their own lists of PVs that share the same particle. Traditionally, PVs are

usually listed according to the verb component. However, if the PVs are grouped based on the

particle constituent, the meaning of the particle can clarify the meaning of the whole PV (Nhu &

Huyen, 2009). Grouping PVs according to the same particle can be useful if the particle fulfills a

consistent function with regard to its effect on the root verb meaning (Gairns & Redman, 1986).

For example, the particle *off* implies a sense of separation such as *break off, take off, turn off*, and

set off. The particle *up* adds a sense of completion and emphasis the meaning of the root verb as

in *drink up*, *grow up*, and *eat up*. The particle *on* adds a sense of continuation to the root verb

like *go on*, *drive on*, *keep on*, and *carry on* (Gairns & Redman, 1986). Therefore, PVs in this

study were grouped based on two particles: *out* and *in*. The particle *out* implies the meaning of

exiting a container, while the particle *in* implies the meaning of entering a container.

Difficulties Associated with Teaching and Learning PVs

PVs in English are an important linguistic feature in English because of their frequent occurrence in daily communication. Yet, PVs are difficult expressions due to their syntactic and semantic complexity. Quirk et al. (1985) classified PVs semantically into three kinds: non-idiomatic such as *hold on* and *look at,* semi-idiomatic as in *write down* and *write out*, and highly idiomatic such as *work out = come to a successful solution, bring up = suggest a topic,* and *bring up = raise children.* Syntactically, PVs can be transitive or intransitive (Celce-Murcia and Larsen-Freeman, 1999; Quirk et al., 1985). A transitive PV requires an object (e.g., *She gave up smoking last month).*

It is better to set up a filter in your email inbox.

Additionally, intransitive PVs which cannot be separated do not require an object (e.g., *let's eat out tonight*).

The worker passed out after working for four hours in the sun.

There are many other reasons why PVs are difficult for ESL and English as a foreign language (EFL) students. These difficulties include:

1. There is no specific way of teaching or learning PVs (Side, 1990).

2. Most PVs are highly polysemous and have multiple different meanings. Gardner and Davies (2007) found more than 500 distinct meanings for the top 100 frequent PVs. For example, the PV *go on* has more than 20 meanings. This highly polysemous nature adds to the difficulty of learning and teaching PVs.

3. A PV can be separable or inseparable, for example,

   A. *Turn out the lights* (correct)

   B. *Turn the lights out* (also correct)

In the first sentence, the noun phrase "the lights" comes after the particle, while in the second sentence, the noun phrase occurs between the verb and the particle. In this case, the PV *turn out* would be regarded as separable.

     1. *Turn them out* (obligatory)

     2. **Turn out them.*

If the noun phrase "the lights" is replaced by the pronoun "them," *turn out* should be separable. This is the only correct position for the pronoun "them."

4. According to Celce-Murcia and Larsen-Freeman (1999), there are very few languages that have PVs. Therefore, they are difficult for students whose L1 does not have PVs (Arabic, Chinese, Spanish, Korean, Italian, and many more).

5. PVs are overwhelmingly reduced in speech. Therefore, L2 learners not only face the semantic challenges, but also face difficulty hearing PVs (Folse, 2004).

    This is evident in this example from Folse (2004):

    *A: What did you **think of** the test?*

    B: I thought it was kind of tough, especially the last part.

    *A: Yeah, it was. Hey, did you **come up with** a good answer for the essay question?*

    *B: At first, no, but then I started writing down a few things, and then the answer just sort of **took off*** (p. 7).

It is hard for ESL students to hear the parts of each of PVs; for example, *took off* sounds like *to cough*.

       Avoidance of phrasal verbs. The difficulty of PVs leads to avoidance, which make L2 students prefer a one-word verb instead. Research confirms such avoidance. Dagut and Laufer (1985) observed Hebrew-speaking college students of English whose native language lacks PVs

to determine whether the avoidance was valid and if so, to what extent. The result of their study confirmed that the majority of the Hebrew-speaking students exhibited a strong tendency to avoid utilizing PVs like *let down*, and they preferred one-word verbs like *dissatisfy* when expressing themselves in English. Similarly, Liao and Fukuya (2004) showed that Chinese students avoided using literal and figurative English PVs compared with English native speakers who preferred to use PVs because of the differences between L1 and second/target language (L2). This conclusion indicated that L1-L2 structural and semantic differences lead to the avoidance of PVs. Hulstijn and Marchena (1989) followed up on a study by Dagut and Laufer (1985) to determine whether Dutch students, whose L1 has PVs, avoid PVs. The result showed that Dutch learners did not avoid PVs. In another study, Laufer and Eliasson (1993) examined whether Swedish learners differed from Hebrew-speaking learners regarding their avoidance of PVs. The results of the study demonstrated that Swedish learners, whose L1 has PVs, did not avoid figurative PVs compared with Hebrew learners who did not possess PVs in Hebrew. These results suggested that the avoidance of PVs was caused by the contradictions between the L1 and L2 rather than due to the difficulty of the L2 structure. Therefore, Laufer and Eliasson's (1993) study showed an agreement with both Dagut and Laufer's (1985) and Hulstijn and Marchena's (1989) studies, which indicated the semantic difficulty was due to the differences between students' L1 and L2.

Phrasal Verbs as Idioms: Idiomatic (Figurative) and Non-Idiomatic (Literal) Phrasal Verbs

PVs are one of the most difficult constructions to learn in English because of their random and arbitrary meanings (Walkova, 2012). Moreover, in some languages, there are not always equivalent PVs (Deignan, Gabrys, & Solska, 1997; Irujo, 1986; Neagu, 2007). In addition, the meanings of the individual parts of PVs convey little or nothing about the meaning

20

of the whole construction. For example, students might be familiar with the meanings of the verb *look* and the particle *after* or *for*. However, such familiarity does not assist in understanding the meaning of *look after* or *look for*. Accordingly, PVs are classified as one category of English idioms by many researchers like Celce-Murcia and Larsen-Freeman (1999).

According to Baker (2011), idioms are frozen forms of language that reveal little and sometimes nothing about the meaning of the individual parts. Morgan (1997) discovered various productive meaning of the particle *out*; therefore, she recommended that that variety of meanings should be included in the grammar of English. She proposed an approach that consisted of four possibilities with PVs. The verb could be represented either literally or metaphorically; similarly, the particle contributed to the expression of a cognitive image schema that could be explained literally or metaphorically. The most significant outcome of this approach of analyzing reflected the fact that PVs were not only idiomatic; they could also be literal or semi-idiomatic. It also showed how the physical meaning was extended to a figurative meaning.

Table 1 presents the four possibilities that are proposed for metaphorical extensions with PVs.

Table 1

The Four Extension Possibilities for PVs Adapted from Morgan (1997, p. 355)

	Verb	Particle
1. He <u>throws</u> <u>out</u> the trash	Literal verb	Literal container
2. We <u>fished</u> <u>out</u> the ring	Extended verb (Metaphorical)	Literal container
3. We <u>handed</u> <u>out</u> the brochures	Literal verb	Metaphorical container
4. We <u>picked</u> <u>out</u> a name for the baby	Extended verb (Metaphorical)	Metaphorical

Table 1 shows that the particle *out* can be explained either literally or metaphorically. In Sentence 1 *He <u>throws</u> <u>out</u> the trash*, both the verb and the particle hold literal meanings; therefore, the PV "throw" is literal, while in Sentences 2 and 3, *we <u>fished</u> <u>out</u> the ring*; *We <u>handed</u> <u>out</u> the brochures*, it could be the case that only the particle or only the verb carries the literal meaning. In Sentence 2, *We <u>fished</u> <u>out</u> the ring*, the verb *fish* is used metaphorically while the particle *out* has literal meaning, so the PV *fish out* is semi-idiomatic. In Sentence 3, *We handed out the brochures*, the verb *hand* represents the literal handling of the brochures (i.e., gave with hands), so there is a literal verb. According to Morgan (1997), a source (i.e., the pile of brochures) is a metaphorical container. In Sentence 4, *We <u>picked</u> <u>out</u> a name for the baby*, both constituents in *pick out* have metaphorical meaning; therefore, this PV is idiomatic.

Many different names have been given to idiomatic and literal PVs. McArthur (1975) called the non-idiomatic PVs *literal*, while he termed the idiomatic PVs *figurative* (Aldahesh, 2008). Bolinger (1971) named the "semi-idiomatic" as "first-level metaphors," and the idiomatic PVs as "second-level metaphors" (p. 109). Sawyer (1999) termed them *compositional* and *non-*

compositional. PVs are semantically categorized as non-idiomatic (literal), semi-idiomatic (aspectual), and idiomatic. Some of the PVs can be regarded as literal while the majority of them are aspectual and idiomatic in meaning (Jackendoff, 2002). Accordingly, PVs are categorized into the three following groups:

1. Non-idiomatic (literal PVs): Those PVs are not difficult for ESL students simply because their meaning is transparent from the parts of PVs (e.g., *stand up, sit up,* and *throw away*). Morgan (1997) stated that literal meaning of the PVs can occur only when both the verb and the particle carry literal meaning.

2. Semi-idiomatic (aspectual PVs): If one component of a PV construction retains its individual meaning while the other component is less clear, the PV is semi-idiomatic, as in *knock out*, *find out*, *drink up*, and *wrap up* (Aldahesh, 2008).

3. Idiomatic PVs: The idiomatic kind of PVs pose difficulty for ESL learners since the meaning of the phrasal construction cannot be deduced from the constituent words (Celce- Murcia & Larsen-Freeman, 1999; Side, 1990; Trask, 1993; Wyss, 2002). This kind of PV (e.g., *figure out*) is considered the most difficult one for ESL students.

Lindner (1982) classified researchers into two groups according to their ways of studying PVs:

1. Researchers who deal with both idiomatic and non-idiomatic combinations of PVs, such as Bolinger (1971), Lipka (1972), and Lindner (1982).

2. Researchers who deal with only idiomatic PVs, such as Live (1965) and Fraser (1976).

In general, PVs are categorized as a kind of idiomatic expression whose meaning ranges from being literal or transparent (e.g., *fall down*) to semi-idiomatic or aspectual (e.g., *write up*) to idiomatic (e.g., *work out*; Celce-Murcia & Larsen-Freeman 1999; Gries, 2002; Walkova, 2012). For the purpose of this study, the researcher focused on both idiomatic and non-idiomatic PVs that consist of two parts.

According to Kovacs (2011a), the different meanings of the same PVs are connected to each other in a natural way, but some are more prototypical than the others, implying that a PV has central meaning (prototypical) from which other meanings (less prototypical) are derived. The less prototypical meanings are formed by metaphoric mapping; that is, the literal meaning can be extended to abstract meaning, such as feelings, thoughts, attitudes, as well as economic and social relations (Rudzka-Ostyn, 2003).

The Traditional-Based Approach of Teaching PVs

PVs have different meanings; however, researchers who focused on traditional model have failed to illustrate the individual different meanings of each PV. They have called the differences in meaning homonyms or arbitrary. One of the greatest weakness of the traditional view is its explanation of the distinct differences in meaning as homonymous (Tyler & Evans, 2003). This approach also fails to outline the relationship among the multiple meaning of some PVs (Kovacs, 2011a). It is generally recognized that the traditional approach has also failed to address the reasons behind the multiple meanings for the same PVs and how those meanings are formed.

Learning PVs is a hard task, according to Live (1965), Bolinger (1971), Lipka (1972), and Fraser (1976). These researchers stated that the particles like *out*, *in*, and *up* carried only a partial meaning of the whole PV. Bolinger (1971) observed that the particle *out* has many

24

different meanings such as the metaphorical meanings as in *hold out* and *mete out*, literal

meaning as in *take out.* Lipka (1972) pointed out that in some contexts the particle *out* means

"leaves" as in *comb out* meaning "remove by combing" (p. 99). Although Bolinger (1971) and

Lipka (1972) recognized the sematic roles of some particles, they did not define a systematic

way of analyzing the PVs and they did not reveal much about the metaphor that links the abstract

and concrete meanings.

Cognitive Linguistic Approach of Teaching PVs

Many ESL teachers consider teaching PVs a very difficult and problematic task (Celce-

Murcia & Larsen-Freeman, 1999). In spite of these difficulties, cognitive linguistic researchers

argued that conceptual motivation can be found in the particle meaning of PVs (Dirven, 2001;

Kurtyka, 2001). Therefore, conceptual metaphors can facilitate the teaching and acquisition of

PVs.

According to several cognitive linguistics researchers (Boers, 2000; Kovecses & Szabco,

1996; Kurtyka, 2001; Morgan, 1997; Lakoff, 1987; Lindner, 1982; Rudzka-Ostyn, 2003; Tyler &

Evans, 2003), the meanings of the PVs are connected or closely related to the component verb

and particle of the PVs by way of metaphorical extension. With the advent of cognitive

linguistics, the traditional view of PVs has changed (Lakoff & Johnson, 1980). One of the new

movements in teaching PVs is using a cognitive approach. This approach asserts that language is

a complete part of the cognitive system and it is a dependent system of the brain (Condon &

Kelly, 2002).

Contrary to traditional linguistics, the cognitive approach reveals degrees of motivated

meanings by asserting the connection between the form of a word and its meaning (Holme, 2012;

Taylor, 1989). Therefore, it proposes a systematic and analyzable way of presenting PVs

(Morgan, 1997). The cognitive approach reveals degrees of motivated meanings by asserting the connection between the form of a word and its meaning (Taylor, 1989). Moreover, it views the meaning as a dynamic entity instead of a static entity. Therefore, unlike linguists focused on traditional model who think that meaning is arbitrary, cognitive linguists discovered that the meaning of PVs is in many, if not most, connected to the individual meaning of the verbs and particles (Morgan, 1997).

According to Fraser (1976), "there is no need to associate any semantic feature with the particle, only phonological and syntactic features" (p. 77). Fraser ignored the semantic function of the particles and its effect on the meaning of the PV. Challenging this claim, Lindner (1982) analyzed nearly 2,000 PVs with the particle *out* and *put* cognitively. The essential claim of her study was that particles had concrete and abstract meanings, and they always contributed to the meaning of the PVs. In their book, Lakoff and Johnson (2003) confirmed the significance of the metaphor in relation to how individuals think and select vocabulary to reflect their ideas and thoughts.

As mentioned in Chapter One, PVs are one of the most difficult lexical chunks for ESL students to learn due to their arbitrary and polysemous meanings. Cognitive linguistics regard all of the meanings in a polysemous word connected to each other in one way or another. According to this approach, all possible meanings of particles are related and share something in common. However, some of the meanings are more central than others. The linguists' interpretation of the traditional view is that those multiple meanings are arbitrary, random and have no relation with the meanings of the constructions.

Conceptual metaphors. The conceptual metaphor theory was first introduced by Lakoff and Johnson (1980). They argued that "conceptual metaphor is a natural part of human thought, and linguistic metaphor is a natural part of human language" (Lakoff & Johnson, 1980, p. 247).

Lakoff and Johnson (2003) emphasized the importance of the metaphor, pointing out that it plays an important portion in our language because "system is metaphorically structured, that is, most concepts are partially understood in term of other concept" (p. 57). They added that the only way to understand things that are not concrete is "metaphor," and this metaphor that can be either "pervasive" or "integral" is indicated by our language. When individuals talk about their emotions, they try to use similar concrete entities, for instance,

> *Her impolite behavior made his blood boil.*

Therefore, the abstract ideas that individuals have are determined by conceptual metaphors that enables them to comprehend the world in which they live.

It is easy for native speakers to realize and understand implicit metaphors; however, ESL learners face difficulty in recognizing them (Kovacs, 2011a). Condon (2008) asserted the benefits of using explicit conceptual metaphors as a method of teaching PVs.

Source domain and target domain. There are two important domains of knowledge involved in the metaphor. The first and most important is the "source domain" or what is called "experimental domain," which is structured by the physical body and the space around it (e.g., *heat* which can be an *up* or *down* orientation). The second domain is called the "target domain" or "abstract domain," which is abstract and less familiar such as relationships, emotion, love, and time. Source domain is used to understand the target domain by using a metaphor; for example, *time* is usually used to refer to *money* (Condon & Kelly, 2002). For example, *buy some time* and *use your time,* among others.

The ability to utilize metaphors which enables learners to comprehend one domain of experience with regard to other is called "metaphorical mapping"; that is, individuals collect ideas in their source domains and attempt to "map" those ideas onto the target domain to understand and conceptualize the abstract ideas (Lakoff & Johnson, 1980). The metaphorical use of the PVs represented by particles allow people to visualize many abstract domains by means of concrete domains.

Orientational and ontological metaphors. Lakoff and Johnson (2003) classified conceptual metaphors into four types: structural, orientational, ontological (container), and conduit metaphors. Orientational and ontological metaphors can be used in teaching PVs.

Orientational metaphor. Orientational metaphor is one type of conceptual metaphor and could be considered as an extension of a cognitive structure that "emerges from our tendency to employ an up-down orientation in picking out meaningful structures of our experience" (Johnson, 1987, p. xiv).

The cognitive linguistic approach of PVs asserts that particles are a type of orientational metaphor, and most of them have to do with spatial orientations that are related to daily physical activity, such as *up-down*, *on-off*, and *in-out* (Lakoff & Johnson, 1980). For example, individuals pick *up*, lie *down*, and stand *up*. Stefanowitch and Gries (2005) pointed out the importance of particles, stating that particles are basically image-schematic in their meanings; therefore, they improve the awareness of the orientational metaphor.

Lakoff and Johnson (1980) explained many individual orientational metaphors, for example,

1. Increasing is up – decreasing is down

    (a) The new update *slows down* the computer.

(b) Prices have *gone up* again.

   2.   Power and health are up – weakness and sickness are down

Lakoff and Johnson (1980) explained sickness according to a physical basis and stated that

serious sickness forced people to *lie down* physically. When people are dead, they are physically

down.

(a) They have come up in the world of finance.

(b) The police clamped down on the strike.

   3.   Conscious is up; unconscious is down

Human beings and most other creatures sleep lying down and when they awaken, they *stand up,*

get up, or *wake up.*

Example: She *dropped off* to sleep

   4.   Happiness and health are up – sadness and sickness are down

When individuals are doing well, they feel literally *up*. When they do not feel well, they

feel literally *down*. When someone is feeling up, his or her spirits are boosted. This means he or

she is in high spirits. Alternately, if someone is feeling *down*, he or she is depressed, meaning

that he or she is in low spirits (Lakoff & Johnson, 2003).

(a) *Things are <u>looking up</u>.*

(b) *You should study hard so that you won't <u>let</u> your parents <u>down</u>.*

Container metaphor. The container metaphor is one of the most important image

schemas that is used to understand and conceptualize abstract ideas in terms of physical

containers (Lakoff & Johnson, 2003; Tyler & Evans, 2003). Lakoff (1987) stated that

      the container schema defines the basic distinction between *in* and *out*. We understand

      our own bodies as containers–perhaps the most basic things we do are ingest and excrete,

take air into our lungs and breathe it out. But our understanding of our own bodies as containers seems small compared with all the daily experiences, we understand in container terms. (p. 271)

Therefore, breathing in and out, inviting someone to eat in, cleaning out a refrigerator, and figuring out a problem reveal a great number of daily experiences conceptualized as containers; some of these containers are obvious like room and others are not obvious like problem.

According to Lakoff and Johnson (1980) and Lakoff (1987), individuals as human beings can be viewed as a container with inside or outside orientation. For example,

She <u>stretched out</u> her hand to greet us.

If the body is considered a container and she moved one of her hands away from her body and made it straight, that means her hand is outside of the container represented by her body.

Kurtyka (2001) adds that bodily activities enable individuals not only to consider their bodies as containers, but also as things outside or inside containers (e.g., home, room, buildings). For example, *we enjoyed <u>hanging out</u> at the shopping center.* In this sentence, the home is the container and bodies represented by "we" are outside the container.

Morgan (1997) mentioned the purpose behind the idea of containment, which is holding persons, things, emotions, restriction of movement, protection, and so on. According to Tyler and Evans (2003), these functional consequences are reflected in some PVs associated with the particles *out* and *in*. For example,

Two criminals <u>broke out</u> of the prison.

Jewelry must be <u>kept in</u> a jewelry's box.

In the first sentence *the container* the prison conveys a restriction (i.e., the prison restricts the movement of a prisoner), while the container *jewelry's box* functions as a protection to the entities inside. In general, anything that frames a given entity like a person, an object, a building, or an emotion can be considered a container, and entities are either inside or outside the container or moving into the container (Rudzka-Ostyn, 2003).

The concept of trajector and landmark. There are two important notions that are related to the schematic representations of container metaphors. Those notions are the trajector (TR) and the landmark (LM). The TR is moving, small, and flexible; it is also called the foregrounded entity. The entity can be a person like, ***my friends*** *ask me to* <u>*hang out*</u> *tonight*; it also might be an object, thought, or feeling as in *Finally,* ***your feeling*** *is* <u>*poured out*</u>. LM, on the other hand, is called the background entity; it is usually immobile, larger, and is usually a physical object (Neagu, 2007).

Lindner (1982) proposed the container embodied schema theory of the particle *out*. The framework includes common features of containers which are TR and LM.
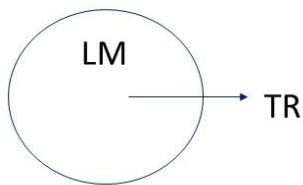
Figure 2. Lindner's (1982) representation of container-embodied schema.

Rudzka-Ostyn (2003) created the symbols used to draw the representation of containers. For example, a small black rectangle refers to the TR, a white rectangle that is bigger than the trajector represents a container (i.e., the LM), while a big rectangle represents the visual field. The relation between the TR and the LM can be static or dynamic (Kurtyka, 2001). When the

notions of TR and LM are applied to PVs, the subject is regarded as the TR and the container is

conceptualized as LM (Thom, 2017).
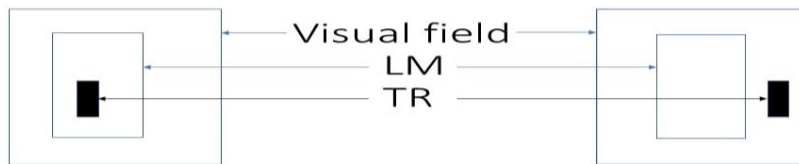
Figure 3. Rudzka-Ostyn's (2003) representation of container metaphors.

Rudzka-Ostyn (2003) has represented the entities that are leaving and entering a

container in many visuals. These abstract drawings that indicate any TR and any LM conceive

the basic meaning of the PV formed by *verb + out, and verb + in*. Rudzka-Ostyn (2003) created

different images to illustrate the meaning of the PVs accompanied with *out* and *in*. Each image

consists of two parts; the first part reflects the state before any movement while the second part

delineates the results after the movement. For example, "home is container" is represented by

Rudzka-Ostyn (2003) in Figure 4 and Figure 5:
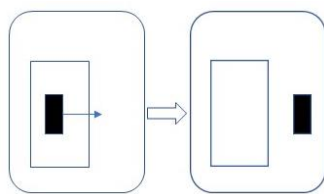
Figure 4. Out: Entity moving out of a container.

In the first part of Figure 4, the TR is inside the container whereas in the second part, the TR is

out of the LM.
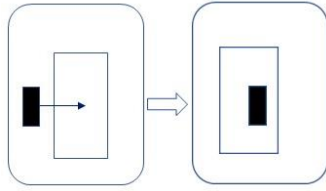
Figure 5. In: Entity entering a container.

In the first part of Figure 5, the TR is outside the container whereas in the second, the TR is inside the LM or the container.

The researcher of this study adapted, modified, and constructed these useful images to explain the meaning of PVs; for example, the white rectangle that Rudzka-Ostyn (2003) used to refer to containers is replaced with a prison, house, body, and so on, and the boundaries of containers are presented in a red color in order to differentiate them from the visual field. The visual field is bigger than the container with blue boundaries. The small black rectangle that refers to the TR is replaced with the image of a person, a thing, or emotion. The images are accompanied by both explanations and examples. Accordingly, the PV *break out* is explained based on Figure 6.

One of the convicts broke out of the prison.

The moving entity is the TR *convicts*, and the container is the LM *prison*; this relation is expressed by the PV *break out.*
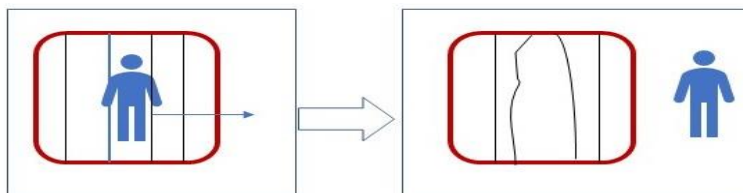
Figure 6. Break out: Prison is a container.

This image shows that the container schemata serves to explain the meaning of *break out* in a visual representation. Such an explanation is expected to increase students' memorability of PVs.

According to Lindner (1982), the particle *out* includes "paths in the spatial domain" connecting a TR to LM. The different extended meanings of the particles can be characterized based on a central image-schema that includes a specific connection between the TR and LM. Rudzka-Ostyn (2003) says that the TR and LM are not always clear or apparent. However, giving special attention to identifying these two notions may help to enhance the students' understanding of the meaning of PVs.

The container particles out *and* in. Speaking about the container is speaking about being inside something; it might be out of, into, on the top of, or on the bottom of a container (Johnson, 2013).

Leaving a container represented by the particle "out". The most frequent particle used after *up* is *out*. It contains the idea of containment and a moving object out of a container. *Out* and some other particles depend on the image of a container used as a source domain.

1. *Out***: Buildings are Containers**

Buildings like homes, universities, hospitals, hotels, and prisons are viewed as containers. Individuals spend a significant amount of time inside their homes; therefore, it is normal to use *out* when they leave it (Rudzka-Ostyn, 2003).

I locked myself out of my house, therefore I decided to leave a spare key with my friend. To *lock out* means "to leave your keys inside a building, room, car, etc. by mistake, with the result that you cannot get back inside it after the door has shut" (Longman PVs Dictionary, 2000, p. 314). Figure 7 shows how a house can be conceived as a container.
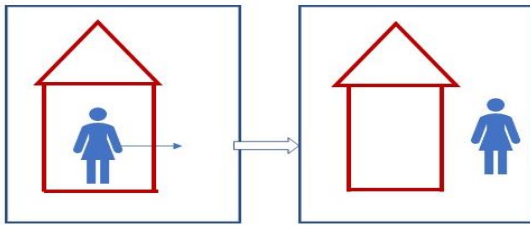
Figure 7. Go out: House is a container.

- *Let's <u>go out</u> today for lunch.*

- *I do not think he would <u>invite us out</u> tonight.*

- *A criminal managed to <u>break out</u>, but he was caught by the police.*

- *What time do you have to <u>check out</u>?*

In addition to buildings, a refrigerator can be regarded as a container. For example, *National*

<u>*Clean Out*</u> *Your Refrigerator Day is on November 1.*

  Clean out, according to Longman PVs Dictionary (2000), means "to clean the inside of

something and throw away anything in it that you do not need or want" (p. 77).
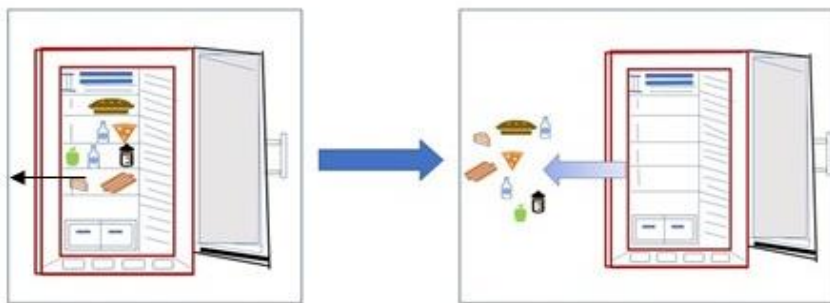
Figure 8. Clean out: Refrigerator is a container.

2.   Out: Groups, Sets are Containers

For Rudzka-Ostyn (2003), group containers consist of many members and those members might be rearranged or taken other positions inside the sets, or they might be moving outside of the set.

> *The noisy customer was <u>kicked out</u> of the store.*
>
> *Katy Perry <u>picked</u> a fan <u>out</u> of the crowd.*
>
> *The judges were <u>forced out</u> of their position.*
>
> *<u>Cross out</u> all the spelling mistakes in the following sentences.*

Therefore, PVs like *kicked out*, *picked out*, *forced out* and *cross out* can be represented by Figure 9.
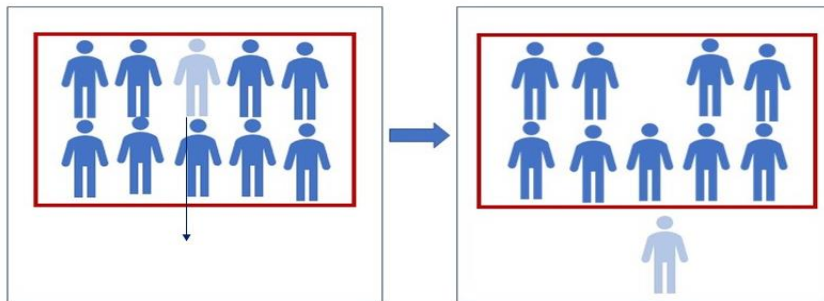
Figure 9. Pick out: A group of people is a container.

Without these visuals, ESL learners might find difficulty in remembering the meanings of *kicked out*, *picked out*, and *forced out* (Thom, 2017). These visuals lead learners to better retention of PVs and a stronger understanding of the metaphorical connections among those PVs.

3.   Out: Bodies, Mouths, Minds are Viewed as Containers

Rudzka-Ostyn (2003) identified another extension of the particle *out* which is "body is considered as a container." Other parts of the bodies like mind, mouths, and lungs are also conceptualized as containers.

I *reached out* to greet him.

Rudzka-Ostyn (2003) explained such sentence by saying the speaker stretched out his hand to shake hand. The hands, which are the part of human body, are usually against our body and therefore they are seen to being inside the container. Reaching out to greet someone is conceptualized as leaving the container.

Figure 10 is presented to explain the meaning of the PV *reach out.*
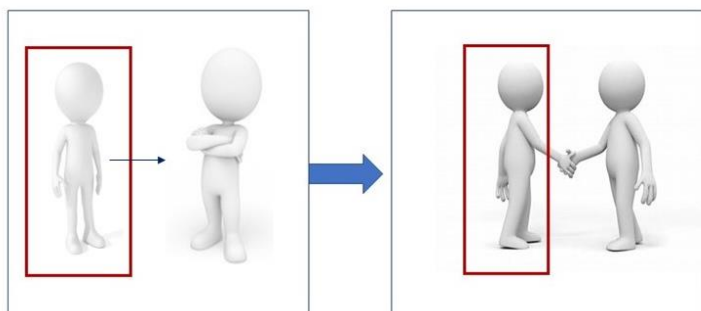
Figure 10. Reach out: Body is a container.

He *throws out* the trash, in this sentence, *body* is regarded as a container.
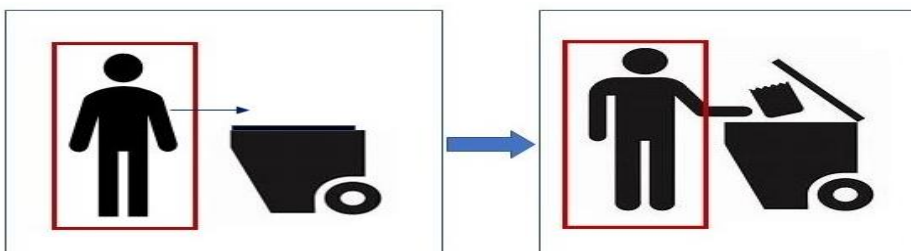
Figure 11. Throw out: Body is the container.

He finally poured out his heart and shared his story.

He wanted to see me yesterday and poured out all his troubles.

In these examples, the LM represents the mind, body, or heart in which the TR that represents emotions and thoughts is contained.

I will speak out against this decision.

When someone speaks, his or her words are represented as leaving the container (i.e., mouth), while when the person listening is told something, the words are conceptualized as entering the container (Moon, 2005).

She shouted out words of abuse (Kurtyka, 2001, p. 38). So, words are represented as leaving the container.
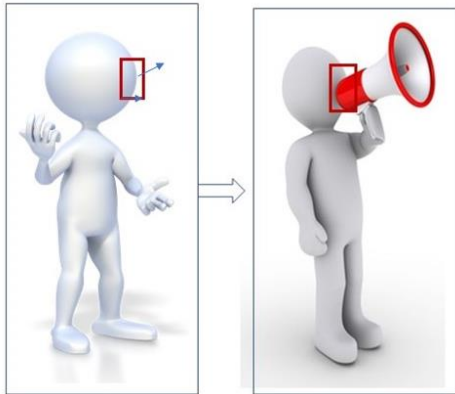
Figure 12. Speak out: Mouth is a container.

The little baby stuck out his tongue.

In this sentence, the mouth of the little baby is regarded as a container from which his or her tongue (physical object) is moving outside.

I saw the snake stuck out its tongue at me.

My crown fell out while I was eating.

He <u>yelled out</u> orders to attack the herd (Thom, 2017, p. 17).

In these sentences above, the abstract ideas (words and sentences) are moving outside the

container (mouth).

<u>*Think out*</u> *carefully before making any decision.*

The mind is conceptualized as a container from which thoughts are moving from inside the mind

to the outside.
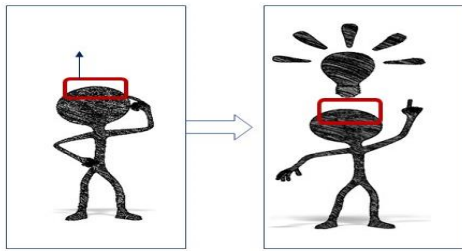
Figure 13. Think out: Mind is a container.

4.   Out: Situations and States are Containers

Lindner (1982) and Rudzka-Ostyn (2003) both noted that normal states like

consciousness, existence, and usability can be thought of in terms of containers. As such, when

someone stops participating in one of these states, he or she is thought to be leaving the state or

the container.

Table 2

General Principle of States and Situations as Containers

The state of		With out
Existence		Cease to exist
Being conscious		Cease to be conscious
Being known		Cease to be known
Being remembered	⇒	Cease to be remembered
Being visible		Cease to be visible
Being used		Cease to be used
Being in one's possession		Cease to be possession
Being possible		Cease to be possible

(adapted from Rudzka-Ostyn, 2003, p. 22)

It can be inferred from Table 2 that being in the normal state (e.g., being conscious) is being inside the containers, while being unconscious means being outside of the containers.
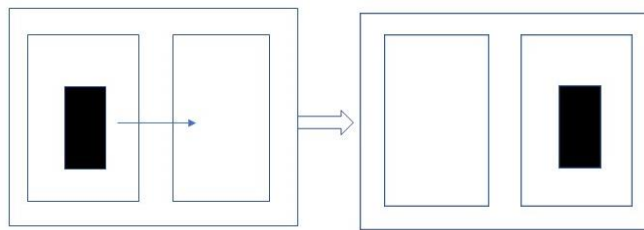
Figure 14. Rudzka-Ostyn's (2003) representation of situations and states are containers.

Rudzka-Ostyn's (2003) illustration of leaving the state of consciousness, possession, and usability can be explained in the following examples.

The anesthetic put the patient out for three hours.

Their current apartment lease will run out at the end of this semester.

The current lease will be no longer in their possession; it will run out of their possession.

Please put out the lights.

Thom (2017) added that when individuals focus on something, their attention is given to that item and everything else is thought to be outside of that focus. When individuals focus on something, it consumes (i.e., contains) mental energy, and when they shift our focus, it is thought of as leaving that container (p. 62).

Look out for pedestrians while you are driving.

Please, check out the names of participants.

In these sentences, the focus is thought of as a container for mental energy. Therefore, if people shift their focus, it is conceptualized as leaving the focus (i.e., container).

5.   Out: Difficulties are Containers

Difficulty, which is an abstract concept, is conceptualized in terms of a container (Thom, 2017).

I am trying to get out of this situation.

The speaker in this example shows his or her effort to escape from a difficult situation. A difficult situation which refers to abstract entity can be conceptualized as a container.

6.   Out: Bad Habits are Viewed as Containers

My brother managed to get out of smoking.

I do not believe that you can get out of this mess.

In the sentence *My brother finally managed to get out of smoking,* smoking is considered a container. Figure 15 illustrates how smoking can be conceptualized as a container.
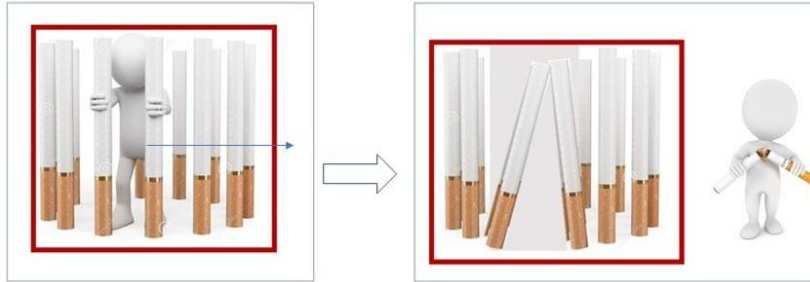
Figure 15. Get out: Smoking is a container.

7.   Out: A Source is a Container

A candle (i.e., the source) is regarded as a container; *out* means that the light which comes from the candle is visible and observed (Morgan, 1997).

That candle <u>*gives out*</u> *lots of light* (Lindner, 1982, p. 138).

If the sound of a bell rings out, it can be heard loudly. Therefore, the bell itself can be conceptualized as a container.

The bells are <u>*ringing out*</u> *over the streets.*

The whale <u>*sends out/puts out*</u> *distinctive sounds* (Morgan, 1997, p.337).

Food itself can be regarded as a container. *Out* means that the flavor which comes from the food is more noticeable after frying it.

You can <u>*bring out*</u> *the flavor of the vegetables by frying them.*
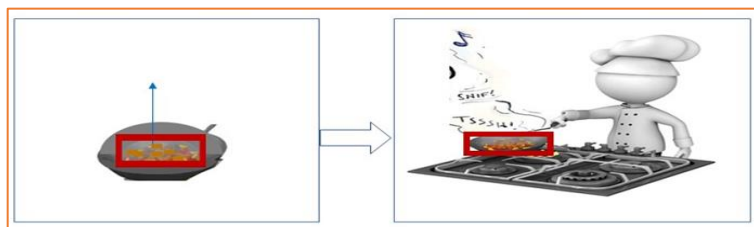
Figure 16. Bring out: Food is a container.

8.   Out: Activity is a Container

Activities can be regarded as containers that have physical boundaries (Moon, 2005).

Paul does not feel well, therefore he will <u>sit out</u> the next competition.

Sit out means "to not take part in a game, competition, dance, etc. because you are injured or tired" (Longman PVs Dictionary, 2000, p. 469).
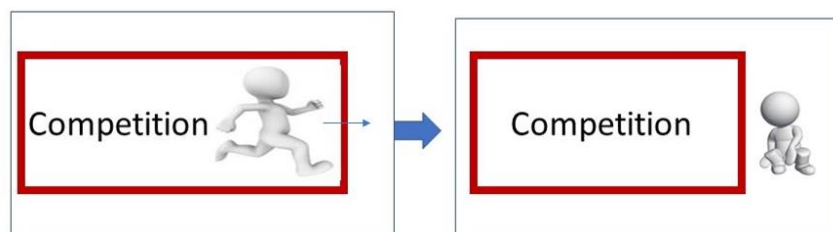
Figure 17. Sit out: Competition is a container.

Some participants <u>dropped out</u> when the challenge got harder.

According to Longman PVs Dictionary (2000), *drop out* means "not to take part in an activity, or to leave it before it has finished" (p. 141).

The British tennis player, Joe Durie, had to <u>pull out</u> with a knee injury (Longman PVs Dictionary, 2000, p. 387).

Bow out means "to give up an important position or job, so that someone can take your place, or to stop taking part in an event or competition" (Longman PVs Dictionary, 2000, p. 33).

Sam <u>bowed out</u> after being coach for many years.

9.   Out: Computer is a Container

A computer can be regarded as a container. For example,

He <u>printed out</u> the required documents so that we can keep a copy of them.

Print out means "to produce a printed copy of something, especially from a computer" (p.

382).
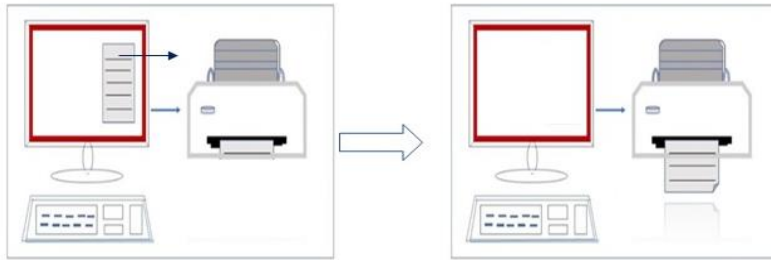
Figure 18. Print out: Computer is a container.

10.   Out: Trajectors (Containers) Increasing to Maximal Boundaries

"Concrete objects with a minimal shape when not in use (a map is folded, nets are rolled

up when not in use) expand to their maximal shape when used with *out"* (Rudzka-Ostyn, 2003,

p. 32). For example,

Could you spread out the map on the table?

I think you have to <u>hang</u> the net <u>out</u> because it still wet.

Spread out, according to Longman PVs Dictionary, (2000) is "open something that is folded and

lay it flat on a surface" (p. 490). Therefore, *spread out the map* means to open it to its maximal

size.
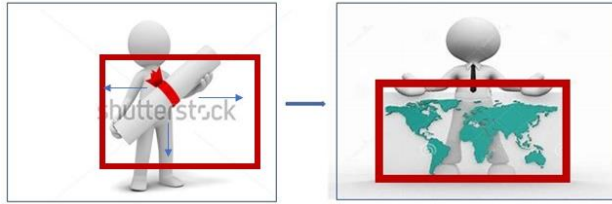
Figure 19. Spread out: Trajectors increasing to maximal boundaries.

Stepping inside a container is represented by the particle "in"

While the most frequently used particles are *up, out*, and *off*, *in* is the fourth most frequent important particle (Rudzka-Ostyn, 2003). Names of containers are not always mentioned with PVs that consist of verb + *in*.

For example, *I cannot <u>pack</u> more dresses <u>in</u>,* the meaning of the container is obvious from the context. It could be anything that the person tries to press the dresses into (e.g., *a wardrobe*, *closet*, *locker*, *cabinet*). The name of the containers might also be deleted when we talk about places where someone is easily expected to go. For example, a classroom, a hospital, a house, and so forth.

1. **In: Bodies, Mouths, Minds are Viewed as Containers**

The body, mouth, and mind can be seen as containers. For example,

In history studies lots of facts have to be just <u>hammered in</u> (Rudzka-Ostyn, 2003. p. 58).

In this sentence, the mind where facts and information stay through repeated efforts is conceptualized as container.

The doctor asked the patient to <u>breathe in</u> and out.

She tried to <u>hold in</u> the tears, but she cried.

I must <u>turn</u> my paper <u>in</u> on time.

2. **In: Buildings are Containers**

45

Buildings can be conceptualized as containers, like hospitals, large boxes, home where people get inside. For example, *stay in* means "stay at home" or "stay at school."
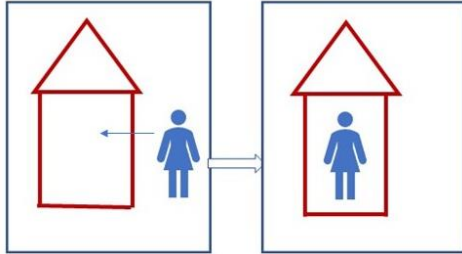
Figure 20. Stay in: House is a container.

> *My supervisor <u>called </u>me <u>in</u> to his office since I was late yesterday.*
>
> *She was too sick to <u>come in</u> yesterday.*
>
> *Take in* means "to let someone stay in your home or in your country when they have nowhere else to stay" (Longman PVs Dictionary, 2000, p. 531).
>
> *The USA <u>took in</u> many refugees from Iraq.*
>
> *That is so sweet of you, but I want to <u>stay in</u> tonight.*

3. In: Circumstances, Relations and Situations are Viewed as Containers

Abstract conditions like circumstance, relations, activities, and situations are also viewed as containers (Thom, 2017). For example, the state of being presented in specific way and the motion from one case into another.

> *I had to <u>step in</u> when my roommates started fighting.*

In this sentence, the difficult situation or fighting is a container.
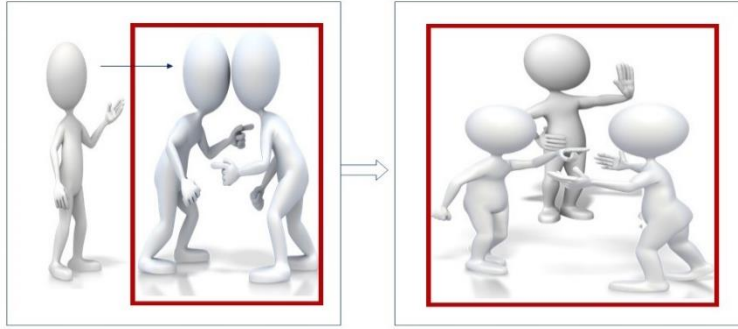
Figure 21. Step in: Fighting is a container.

4. In: Computer and Internet are Containers

In the online registration process, boxes are provided in the computer system to write down an individual's name and password. Those boxes can also be regarded as containers.

Type in your response in the following answer box.

Please, fill in the fields below to register.

The Internet itself can be conceptualized as a container rather than a network. It is considered a big box where people can look for information (Requejo & Diaz, 2008). Since the computer has a box shape, it can be perceived as a container where information is kept. In addition, all the parts of computer system (e.g., the keyboard, the monitor) can be conceptualized as containers. The non-physical system like software, hardware, and data can be conceptualized as containers as well (Requejo & Diaz, 2008).
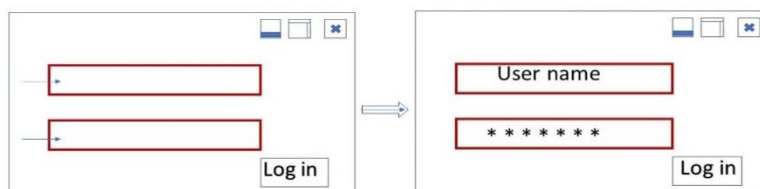
Figure 22. Log in: Box is a container.

Plug in: *plug in your phone*.

Plug in is more commonly used when computer's battery runs out, and one must plug in the computer to electric point.

Put in: *put your password in* (or *key in* means "type"). *Log in* is very common PV that is used when individuals type a username name and password to open computer, email, Facebook, and so on.

We need a password to log in.

You have to plug your computer in and power it up.

If you are not a robot put in the words, and key them in.

5. In: Physical and Psychological States Viewed as Container

"Any state, knowledge, condition, attitude or activity – whether physical, emotional, mental or intellectual – which affects a given object – is seen as a container" (Rudzka-Ostyn, 2003, p. 58). For example,

Despite all the pressure put on her, she would not give in (Rudzka-Ostyn, 2003, p. 58). In this sentence, the pressure is considered a container.
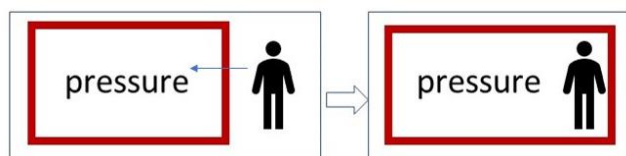
Figure 23. Give in: Pressure is a container.

6. In: Blank is a Container

You need to key in to access your account.

Key in means "to type information into a computer: if you key your message in first, I'll show you how to send it" (Longman PVs Dictionary, 2000, p. 271).

Consider these sentences where blanks are regarded as containers:

Fill in the blanks in the following sentences (Requejo & Diaz, 2008: p.124).

In this sentence, the blanks are conceptualized as containers.

Read the statements carefully and fill in the missing PVs. Although the container is not mentioned in this sentence, blanks are still regarded as containers.
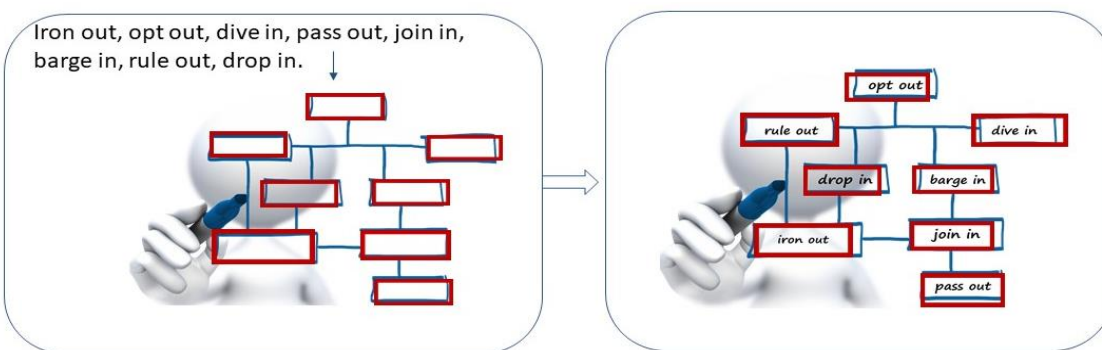
Figure 24. Fill in: Blank is a container.

7. **In: A Group of People is a Container**

The particle *in* denotes the meaning of being involved (Moon, 2005).

She did not like to join in the celebration.

Join in means "to start doing or becoming involved in something with other people, especially when they are already doing it" (Longman PVs Dictionary, 2000, p. 264).
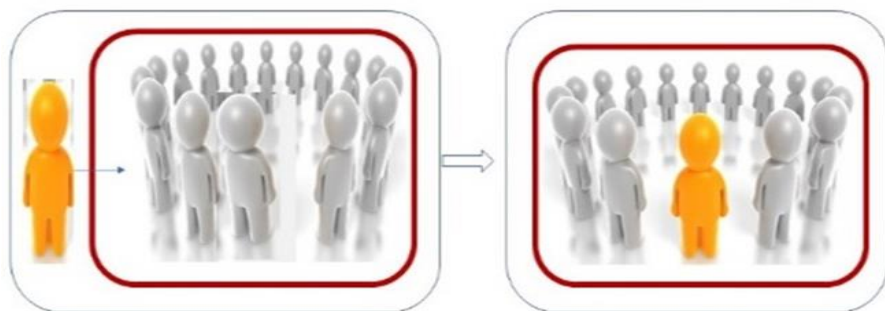
Figure 25. Join in: A group of people is a container.

Muscle in means "to use your power, influence, or strength to become involved in something that other people, companies etc. are involved in, when they do not want you to do this" (Longman PVs Dictionary, 2000, p. 340).

He always wanted to <u>muscle in</u>.

These are the categories of container metaphor representations used to explain the meaning of the PVs accompanied by *out* and *in* that are found in the literature. However, any other state that does not fit in the established categories, whether emotional or physical, can be expanded to other container metaphor representations such as "bed is a container." That means new semantic clusters (e.g., bed, refrigerator, ear) can be added to clarify the meaning of *out* and *in*.

Traditional Versus Conceptual Metaphor Models of Teaching Phrasal Verbs

Kovecses and Szabco (1996) conducted an experimental study explaining how metaphoric competence plays an essential role in teaching PVs. They compared two groups of Hungarian intermediate-level students; one group learned PVs through conceptual metaphors while the other group of leaners were instructed to memorize a list of PVs without any motivation. The study included metaphors that were exemplified by an *up-down* orientation, such as *chew up* and *break down*. The outcomes showed that students who followed

orientational metaphors to learn PVs achieved better results in both learning and retaining than their peers who were not exposed to orientational metaphors.

In a study by Boers (2000), three experiments were designed to measure the effect and benefit of metaphor awareness in teaching PVs. Participants were university students whose L1s were either French or Dutch. Students who had an intermediate level of English proficiency were divided into experimental ($n= 58$) and control ($n= 60$) groups and asked to read a text entitled "Managing the Emotion." After reading the text, the experimental group received vocabulary explanatory notes regarding orientational metaphors of particles while the control group received the same input listed along different lines without metaphoric themes. The results showed that students in the experimental group responded to the PVs in the cloze test better than the control group, meaning that conceptual metaphor facilitated students' PVs retention. The results of this study confirmed Kovecses and Szabco's (1996) claim about the importance of enhancing metaphor awareness in facilitating the learning and retaining of PVs. However, Boers (2000) reported that students in the experimental group did not show any evidence of applying knowledge of taught PVs to untaught ones.

Condon (2008) conducted her research on teaching PVs using the conceptual metaphor model. Two groups of students of intermediate level participated in the study. A traditional model was chosen to teach 28 PVs accompanied with the particles *up, down, out* and *in* to the control group. However, the orientational metaphor model was used to teach the same 28 PVs to the experimental group. The results of the study showed that conceptual metaphor model had the potential to be more beneficial for teaching PVs than the traditional model. Therefore, the findings of this research supported the findings of Kovecses and Szabco (1996). This study also supported Boers' (2000) findings that showed no indication of strategy transfer.

Yang and Hsih (2010) conducted a study to find out whether high school students benefit from conceptual metaphors on PVs learning and retaining. Two groups of students were involved in this study: the experimental group learned PVs through conceptual metaphors while the control group was instructed to memorize a list of PVs. The findings showed that students who followed conceptual metaphors learned PVs better than their peers in the control group. However, they concluded that the conceptual metaphor had no role in fostering students' PVs on memory recalling.

Yasuda (2010) explored the concept of educating students further on the use and understanding of orientational metaphors nested in particles that construct PVs and whether that action aided Japanese EFL learners in grasping PVs. This was based on the concept of raising the perception of idiomatic learning through learning conceptual metaphors enclosed in individual PVs. The study was conducted by firstly splitting 115 Japanese EFL students into two groups. The learners in the control group were given the traditional instructions for studying 21 PVs. Then the experimental group was taught the same 21 PVs using the orientational metaphor model. Afterward, both groups were told to write in the omitted adverbial particles of the PVs. The experimental group's work was superior in comparison to the control group's work. What was gleaned from this research was the conclusion that instructors should implement a teaching method allowing PVs to be stored as an entity in the student's mental lexicon. The biggest challenge to this was the fact that students tended to stay attentive to locating conceptual metaphors, and therefore seemed to over-rely on metaphorical thought to compose a proper adverbial particle.

A comparison of conceptual metaphors, contextualization, and prognosis of the definition of PVs was explored by Ganji (2011), who divided 45 Iranian EFL university students into three

groups. Each group included 15 students. The control group members were presented with 20 PVs accompanied by their Farsi equivalents, and were asked to memorize those verbs. Experimental Group 1was given the PVs within a sentence and told to construct a new sentence. Experimental Group 2 obtained the orientational metaphors concealing the definition of PVs. Three tests were administered to the three groups which required providing the fundamental particles of the PVs. Carried out just two hours after the instructions were given, the first test involved the studied PVs. Five weeks later, a delayed test was performed to measure the long-term confinement of the PVs' meaning. Afterward, a third test was conducted that introduced 20 new PVs which had the same particles as the taught ones. From the results obtained, it was concluded that the metaphorical conceptualization played the best role in the teaching and learning of PVs.

Ansari (2016) conducted a study that focused on teaching PVs using the orientational metaphor. Thirty undergraduate native Persian-speaking students at intermediate English proficiency level between the ages of 19 and 35 were chosen and divided into control ($n = 15$) and experimental ($n = 15$) groups. A traditional model of translation was used to teach the six particles to the control group, while the orientational metaphor method was chosen to teach the experimental group in sessions lasting for 25 minutes. Each participant was given the six particles *across, down, in, off, out* and *up* embedded into 36 sentences. The results showed that using the orientational metaphor technique to teach PV resulted in a better outcome regarding the learning of PVs compared to the traditional approach of using dictionary definitions and memorization.

In addition, the performance of all participants on the unexposed PVs was significantly lower than the taught PVs in the control group, while those in the experimental group did much

better than participants in the control condition. This difference was obvious in the test results providing strong evidence of generalization rather than just recall.

Kartal and Uner (2017) examined the effects of enhancing awareness about the orientational metaphor technique of the learning of PVs by 20 Turkish EFL learners. Participants were divided according to their proficiency level into three different levels: beginner, elementary, and intermediate. The students in the experimental group received a set of PVs presented through orientational metaphor-based teaching, while those in the control group were provided with the same list of PVs based on the traditional method of definition and memorization. Three student samples of pre-test and post-test were run to examine the effect of orientational metaphors in the proficiency of the three levels. Results showed that the conceptual metaphor model worked better than the traditional method in the learning of PVs for both elementary and intermediate levels. The outcomes of this research showed that when the level of students was higher, the effectiveness of the orientational metaphor technique was higher as well. These studies provide evidence that conceptual metaphor facilitated learning can potentially affect the learning of PVs for non-native speakers in a positive manner.

A 2009 study by Nhu and Huyen sought to find out whether there was a difference between traditional model and conceptual metaphor model. Two particle pairs were chosen to be presented: *in–out* and *up–down*. The sample of the study included 124 Vietnamese students of English who were divided into three groups. Each group was subdivided randomly into control and experimental groups. The students in the control groups were given the traditional instructions for presenting and studying the PVs. Both container metaphor and orientational metaphor models were used to present the PVs for experimental groups. The results showed that all three experimental groups' work was superior in comparison with the control groups' work.

The results suggested that the conceptual metaphor model of teaching PVs to EFL learners can be an alternative model of teaching PVs. However, this study did not specify which conceptual metaphor model, orientational or container, contributed more to the results of the experimental groups. Although that study used the container metaphor model in presenting a set of PVs, the researchers did not use image schemas to explain the PVs. Moreover, most of the PVs used in that study were easy to figure out as the researchers used *speak out*, *read out*, *stay out*, *breathe in*, and *write in* in their study.

PV-related research has focused on finding a difference between the traditional model and the orientational metaphor model in teaching PVs. However, little to no research has addressed the differences between the traditional model and the container metaphor model in presenting and teaching PVs. Hence, the aim of the current study was to investigate which of the two models (traditional or container metaphor) is more effective in presenting PVs.

Chapter Two examined the existing literature on the pedagogy of PVs with special attention paid to both the traditional model and the container metaphor model of PV presentation. This chapter includes the research question and its hypotheses, research design, instructional materials, participants, data collection procedures, the selection of the PVs as well as the presenting and teaching of the 16 PVs.

Research Question

The study was designed to thoroughly examine the differences between presenting the PVs using the traditional and container metaphor models. The research question that led to the present study was:

Is there a significant difference in L2 students' success rate of learning PVs between a traditional model and container metaphor model of presentation?

Hypotheses

The following null hypothesis was formulated.

Null hypothesis: There is no significant difference in L2 students' success rate of learning PVs between the group of L2 students exposed to a traditional model and the group of L2 students exposed to the container metaphor model of presenting PVs.

Alternative hypothesis: The effect of learning PVs based on the container metaphor presentation model is higher than the traditional presentation model.

In order to achieve the aim of this study, presenting the PVs was organized according to a Presentation-Practice-Production (PPP) pedagogical approach. PPP is defined by Nassaji and Fotos (2011) as a three-stage approach, or *3 Ps*. The PPP stages corresponded sequentially to presentation (P1), practice (P2), and production (P3) (Criado, 2013). The key feature of the

approach was the P1; therefore, P2 and P3 were applied in the same way for both control and experimental groups. P1 in the experimental group (container metaphor) was expected to help students to visualize and understand the complex semantic networks of the particles *out* and *in*.

Research Design

The present study followed a quantitative comparative research method, utilizing a non-randomized experimental design following a pretest, a posttest 1, a posttest 2 and a posttest 3 sequence. The study aimed to investigate whether the container metaphor model at the presentation stage of PPP lesson has a positive effect on learning English PVs for ESL students. A pretest and a sequence of three posttests were conducted to determine the improvement of the students' control of the selected PVs. In all tests, the researcher did not assist the students with unknown meanings of the PVs. Figure 26 below provides a visual overview summary of the research design.

Stage 1	Stage 2	Stage 3	Stage 4			Stage 5	Stage 6
Selecting the PVs	Selecting the Groups		P1		P2 & P3		
Pilot test 18 PVs	Control	Pretest 16 PVs	Definitions	Posttest 1 16 PVs	Exercises	Posttest 2 16 PVs	Posttest 3 22 PVs
	Experimental	Pretest 16 PVs	Definitions + metaphor-based approach	Posttest 1 16 PVs	Exercises	Posttest 2 16 PVs	Posttest 3 22 PVs
Advanced-level students	**Intermediate-level students**						

Figure 26. Research design of the study.

Power Analysis and Sample Size

According to Hair, Hult, Ringle, and Sarstedt (2014), the recommended sample size is formed from the desired power value. Prior research has determined a moderate to large effect size, so an *a priori* power analysis was completed for this study by using G*Power 3. 1. In order to calculate the sample size that was required and in order to meet adequate statistical power, the following options were selected:

(a) test family: F tests,

(b) statistical test: ANOVA: repeated measures, within-between interaction, two groups, three measures, with an alpha of .05, and a power of .80. It was found that with $f=.13$, the maximum sample size should be 74. When $f= .25$, and the minimum sample= 28.

Therefore, the estimated sample size according to the G*Power analysis was between 28 and 74 students.

(c) Type of power analysis: *a priori:* Compute required sample size- given *a,* power and effect size. IRB approvals received and the students who were given the option of participating were proficient enough to understand what they were being asked to do.

Instructional Materials

The researcher used the Longman PVs Dictionary (2000) to locate one meaning for each PV. All definitions in the five tests are taken from Longman PVs Dictionary (2000); however, the researcher adapted the definitions of *drop out* and *sink in* order to avoid revealing the answers in the corresponding posttest.

The Longman PVs Dictionary lists PVs in order of frequency, which means that the most common meanings are listed first. For example, meaning number one of the PV *turn in,* according to The Longman PVs Dictionary (2000), is "to give something to a person in authority so that they can deal with it"; meaning number four is "to go to bed" (p. 568). Therefore, meaning number four was selected.

Instrumentation

Description of tests. Five tests, as shown in Figure 27 below, were administered over the course of this study.
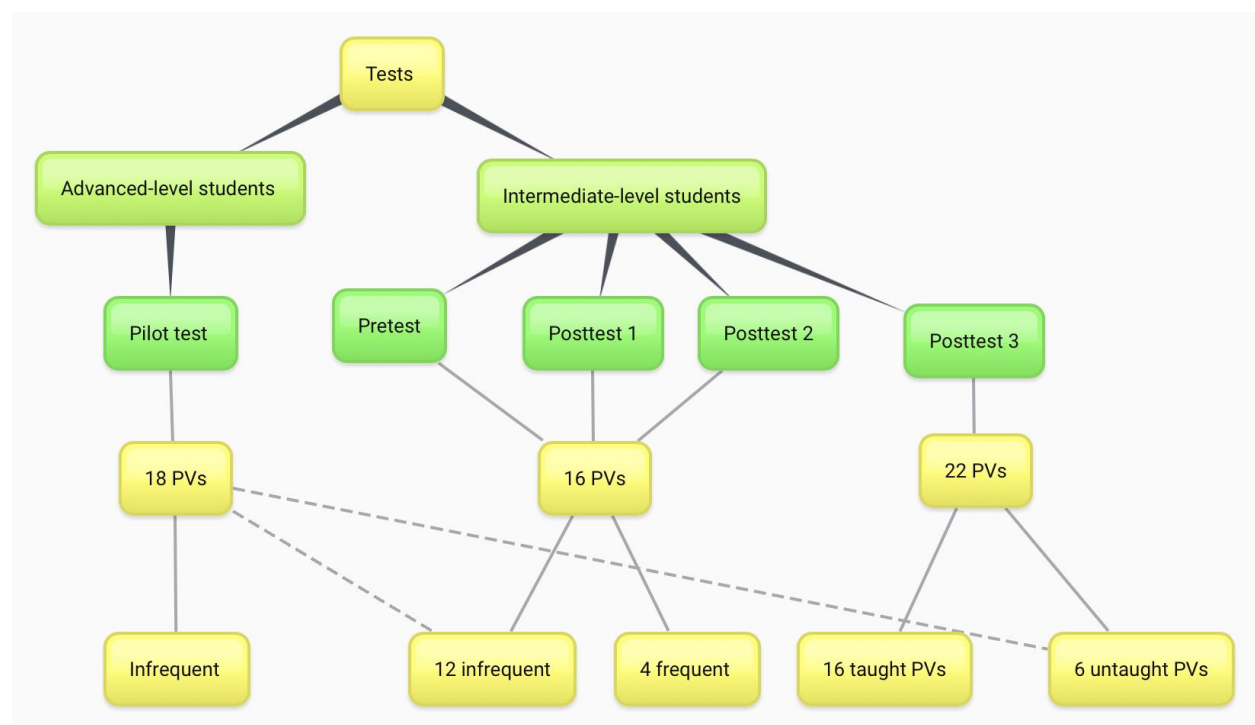
Figure 27. Test data groups.

The pilot test, discussed later in this chapter, contained 18 infrequent PVs. All pretest, posttest 1, posttest 2 and posttest 3 parts which included the 16 PVs have the same format, which is the same PVs but with different order. The 16 PVs consisted of 12 infrequent PVs which were

taken from the pilot test, plus four frequent PVs. Students were given the same amount of time during the pretest, posttest 1 and posttest 2. Posttest 3 consisted of the same 16 PVs of the pretest, posttest 1 and posttest 2, as well as six untaught PVs taken from the pilot test.

Participants

Two groups of participants were involved in this study: control and experimental. The participants in the control group (n= 14) were presented with a set of PVs through the traditional model, while those in the experimental group (n= 14) received the same input through the container metaphor model. The sample for this study comprised of 28 intermediate-level students enrolled in IEP courses at a metropolitan college in the southeastern United States in the summer of 2019. IEP programs are designed for students with an English limited background. Students were enrolled in the intermediate level based on their performance in the placement test. Participants were between the ages of 18 and 35. The IEP is the only center that teaches English as a second language at that college. Students in this sample reported five languages: Arabic, Chinese, Portuguese, Spanish, Turkish. Therefore, there were no students with a Germanic language background. This was important because PVs exist in Germanic languages, but they do not occur in Romance languages (Folse, 2004).

Previous studies (Ansari, 2016; Boers, 2000; Condon, 2008; Kövecses & Szabó, 1996; Talebinejad & Sadri, 2013) focused on using conceptual metaphors with intermediate-level students. Boers (2000) claimed that intermediate-level students' comprehension of figurative expressions would be facilitated by the sufficient amount of vocabulary they already have. On the other hand, beginners' comprehension of figurative expressions can be impeded by limited vocabulary. Accordingly, the researcher chose students who were in Level 3, which is an intermediate level of English proficiency based on their scores on the placement test.

Data Collection Procedures

        After Institutional Review Board (IRB) approval was obtained, a pilot test consisting of 18 PVs was conducted on 18 advanced-level students to ensure that the PVs used in the study would be unknown by the participants. Based on the pilot test results, 12 PVs were selected from the initial 18 PVs, as explained in the next section.

Selection of the PVs

        Selecting the 12 infrequent PVs for the present study. In order to select the most optimal 12 PVs for the study, a pilot test, which can be seen in Appendix C, was conducted. Although the present study focused on intermediate-level students, it was anticipated that PVs which were unknown to higher-level students were likely to be unknown to intermediate-level students as well. Therefore, the pilot test was given to advanced-level students enrolled in IEP courses at a metropolitan college in the southeastern United States in the summer of 2019.

        The pilot test consisted of 18 PVs: *branch out, bring out, duck out, drop out, hand out, lock out, opt out, pass out, tune out, barge in, dive in, join in, kick in, pencil in, pop in, sink in, step in,* and *turn in*. Those specific PVs were selected because they were of infrequent occurrence and were easily illustrated in the container metaphor. None of these PVs were found in the pedagogical list of PVs and their most frequent meanings conducted by Garnier and Schmitt (2015).

        The researcher asked 18 advanced-level students to participate in a study of PVs. All students agreed to take the pilot test. Participants were instructed to write their first names, last initials, and native languages. They were asked to match the 18 PVs with their definitions.

        According to the Item Difficulty Measurement of the Pilot Test (see Table 3 below), the PVs with the highest score was *join in* (.78) while the PV with the lowest score was turn in (.11).

This result was not surprising because literal PVs like *join in* are very clear in comparison to the

non-literal PVs like *turn in*. This result reinforces the claim that L2 students have a better

understanding of literal PVs than idiomatic ones (Dagut & Laufer 1985; Hulstijn & Marchena,

1989; Kurtyka, 2001; Liao & Fukuya, 2004). Any previously known PVs which had the highest

means were excluded in the presentation, pretest, posttest 1, and posttest 2: *bring out, hand out,*

drop out, join in, kick in, and *step in.*

Table 3

Item Difficulty Measurement of the Pilot Test

	Mean	Std. Deviation	N
branch out	.33	.485	18
bring out	.50	.514	18
hand out	.72	.461	18
drop out	.56	.511	18
opt out	.28	.461	18
pass out	.22	.428	18
duck out	.44	.511	18
turn in	.11	.323	18
lock out	.28	.461	18
barge in	.17	.383	18
dive in	.28	.461	18
join in	.78	.428	18
kick in	.50	.514	18
pencil in	.22	.428	18
pop in	.22	.428	18
sink in	.17	.383	18
step in	.61	.502	18
tune out	.17	.383	18

Additional four frequent PVs for the present study. The selected PVs contained the 12 infrequent PVs taken from the pilot test plus four frequent PVs. Four frequent PVs were the additional items that were added for statistical verification: *figure out, give out, fill in* and *get in*. The researcher added these PVs in order to avoid a near-zero mean in the pretest, which would have made the posttest results more difficult to compare with the pretest results.

Presenting and Teaching the PVs

Day one: Consent form and pretest. The consent form and the pretest occurred three days before the presentation day. They were given to the control group during their second class; however, they were given to the experimental group during their third class.

A consent form as shown in Appendix D was read, and students were informed that their participation was voluntary. The researcher made sure that participants understood the contents of the consent form. Students in both groups were informed that the research involves a very important feature of English, which is the learning of PVs with the particles *out* and *in*.

The researcher asked the participants in both groups if they would participate in the research. All students agreed to participate in the study. After that, the pretest was given to each group to determine the possible meanings of the selected 16 PVs.

On the pretest form, which can be seen in Appendix E, participants were asked to write their first names, last initials, and native languages. Then participants were instructed to match the 16 PVs in Column A with their corresponding ones in Column B. They were also informed that no dictionary use was allowed, and the researcher would not help with unknown meanings of the PVs. The pretest was conducted to determine how many PVs were known to the students who would participate in the study. In addition, the pretest measured if there was a significant

difference between the control and the experimental group and functioned as a baseline for what would occur after the treatment.

Day two: Presentation (P1), Posttest 1, Practice (P2), and Production (P3). At the P1 stage, the selected 16 PVs were introduced. The only difference in the procedure of teaching PVs between the control and experimental groups was at the P1 stage. One important concern in the presentation design was to control for time on task and to get the researcher and participants in each group, both control and experimental, to spend approximately the same amount of time learning each PV.

As Knight (1994) mentioned, the group of students who used a dictionary spent a significant amount of time on learning vocabulary than those who did not use a dictionary; as a result, the dictionary group students performed better. Conversely, Hulstijn and Laufer (2001) did not control for time on task. In their study, retention of ten infrequent words was examined in three tasks: writing a composition task, filling in target words, and a reading task. Overall, the writing a composition task was given 70- 80 minutes, filling in the target words was given 50- 55 minutes, and the reading task was given 40-45 minutes. Hill and Laufer (2003) explained that the composition task took longer than filling in the gaps; therefore, if students spent more time on the task of writing, that does not mean that they spent all of their time on learning the target words. For example, if students spent 50 minutes on writing a composition, they might spend only 15 minutes on using the target words in their writing. Since the writing composition task group outperformed the other groups, there is a possibility that the task effectiveness might be due to the time on task rather than the type of task.

In order to ensure that the task effectiveness was due to the type of task and not due to the time on task, the latter variable was controlled after careful review of the literature. The

researcher converted the presentation of the PowerPoint slides into two video recordings with audio narration. The first video was for the control group, while the second video was for the experimental group.

Classroom scenarios for presenting the 16 PVs using the two models, that is, the container metaphor and traditional model. The researcher was the instructor for both groups. The participants in the control group followed the traditional model, while those in the experimental followed the container metaphor model. PVs were presented to the control group during their second class; however, the same PVs were presented to the experimental group during their third class.

The participants in both groups were informed that they would watch a PowerPoint video in which 16 PVs would be presented. The researcher told the participants that questions were not allowed during the presentation of the PVs. However, they could write down their questions and the researcher would answer them at the end of the presentation.

Presenting the 16 PVs to the control group. In the PowerPoint video, participants in the control group watched a brief, five-minute introduction about the traditional model of presenting the PVs. In the introduction, the PV was defined as a combination of two parts, the first part is a verb and the second one is a particle such as *check in* and *work out*. The traditional model of presenting PVs was explained as an attempt to teach meaning of PVs by heart and trying to keep them in memory because of the idiomaticity of the PVs. The combination of the verb and the particle of the PV elicits a different meaning than if each word is looked at separately. For example, *work out* as a PV does not mean that someone is working abroad. In fact, it means to calculate the answer to a problem that involves numbers, amounts, prices, and so on. Therefore, the meaning of the particle *out* has no bearing on the meaning of *work out*,

meaning that the idiomatic meanings of PVs cannot be predicted from a combination of their constituents. As such, a PV functions as a single unit of meaning. Therefore, based on the traditional model the best way to learn the meaning of any PV is to memorize it. In sum, the focus of defining PVs in the introduction of the control group was on memorization.

After that, participants watched the presentation of the 16 PVs according to the traditional model. For example, they watched recorded PowerPoint slide with narration in which the PV *branch out* is defined. Examples were provided as well.

Presenting the 16 PVs to the experimental group. The participants in the experimental group were presented with the same 16 PVs which were presented to the control group but according to the container metaphor model. Before presenting the 16 PVs, participants watched a PowerPoint video recording in which a brief, five-minute introduction about the container metaphor model was presented. In the introduction, a container metaphor was defined as one of the most important image schemas used to understand and conceptualize PVs associated with the particles *out* and *in* in terms of containers. The particle *out* implies the meaning of exiting a container, while the particle *in* implies the meaning of entering a container. Participants were informed that each image they would see consisted of two parts: the first part reflects the state before any movement, while the second part refers to the results after the movement.

First part   Second part
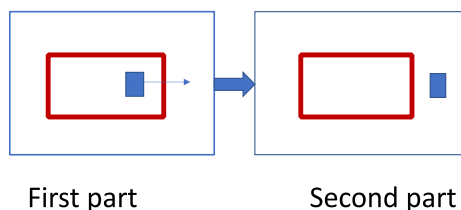
Figure 28. PVs with the particle out.
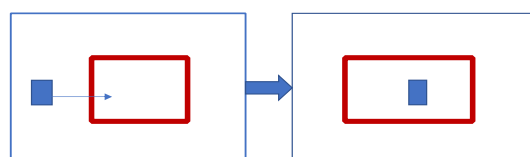
First part   Second part

Figure 29. PVs with the particle in.
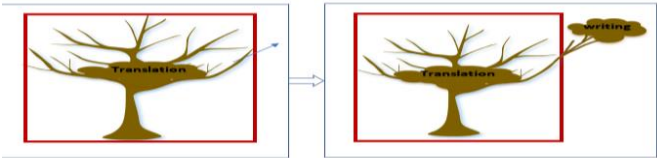
For example, to explain the PV *work out* according to the container metaphor model, a problem was regarded as a container. If a problem was considered to be a container, a connection between the verb and the particle could be recognized. So, *working out* the problem which was a container meant that a person found the solution to the problem to get out of that container. Therefore, container metaphors could be used to reveal the underlying meaning of PVs.
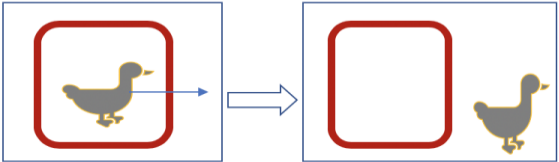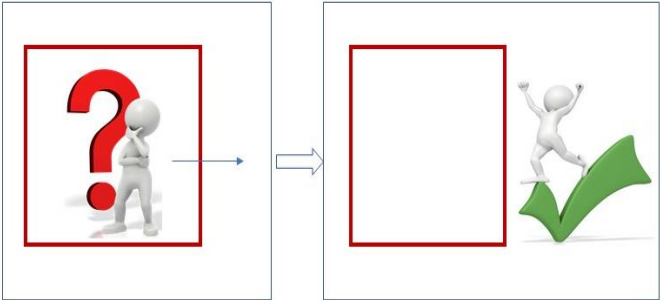
Participants also learned from Figures 28 and 29 that all boundaries of containers were represented by a red color. The large blue rectangles referred to the visual field. The blue arrow indicated the movement of the TR and the impact it could have on the LM. This representation could be then applied to all other PVs that could be explained using the container metaphor model. The focus of presenting PVs in the experimental group was on the manner in which the container metaphor of the adverbial particle contributes to the meaning of the whole PVs. Definition, examples, and images were also provided. After that, participants watched the presentation of the 16 PVs according to the container metaphor model.
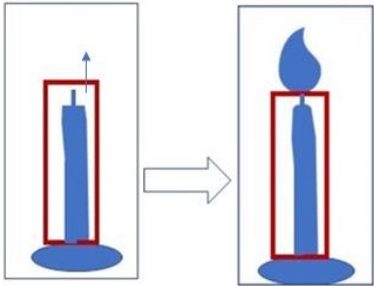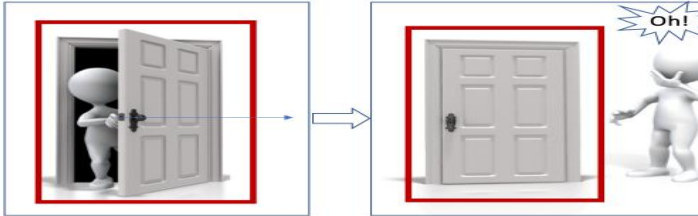
The 16 PVs were presented for the control group and experimental group in two different ways as shown in Table 4.

Table 4
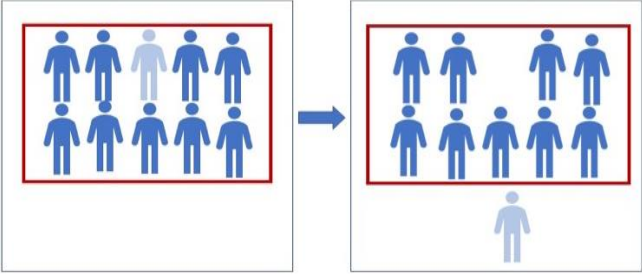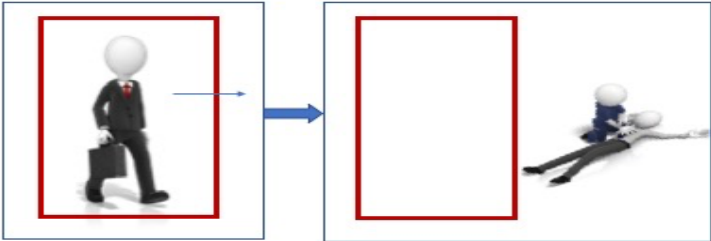
Presenting the 16 PVs (Control versus Experimental)

Control group	Experimental group
Branch out	**Branch out: Regular Activity is a Container**
Branch out means to start doing something different from what you usually do in your business, job, work, etc.	When you *branch out* of the regular activities container that means that you start doing something different from what you used to do in your business, job, work, etc.
*Suzan used to work as a translator. She has now **branched out** from translating work into writing her own books.*	*Suzan used to work as a translator. She has now **branched out** from translating work into writing her own books.*

Control group	Experimental group
Duck out	**Duck Out: Duties are container**
Duck out: to avoid doing something that you do not want to do but have to do or have promised to do.	Duties can be conceptualized as a container, therefore if you *duck out* of the container which is duties that means you try to avoid doing something that you do not want to do.
*I am not trying to **duck out**, but I do think someone else could do this job.*	*I am not trying to **duck out**, but I do think someone else could do this job.*
Figure out	**Figure out: A Problem is a Container**
Figure out means to understand something or someone, or find the answer to a question, problem, etc. after thinking about them carefully.	A problem can be considered as a container, so if you *figured out* the container which is the problem that means you find the answer to a question, problem, etc. after thinking about them carefully.
*It took her a few minutes to **figure out** what he was trying to say.*	*It took her a few minutes to **figure out** what he was trying to say.*

Control group	Experimental group
Give out	**Give out: Source is a Container**
Give out means to produce something such as a smell, heat, light, energy, gas, or a sound.	Consider the source or the candle itself as a container, therefore if the light is *given out* of the container which is the candle that means the light is produced.
Oil stoves **give out** *a lot of heat.*	*Oil stoves* **give out** *a lot of heat.*
Lock out	**Lock out: Building is a Container**
Lock out means to leave your keys inside a building, room, car etc. by mistake, with the result that you cannot get back inside it after the door has shut.	Building can be regarded as a container, so if you *lock* yourself *out* of the container which is the building, that means you leave your keys inside a building by mistake, with the result that you cannot get back inside it after the door has shut.
Oh no! I have **locked** *myself* **out** *of my room!*	*Oh no! I have* **locked** *myself* **out** *of my room!*

Control group	Experimental group
Opt out	**Opt out: A Group of People is a Container**
Opt out means to decide not to join a group or take part in a system.	Consider a group of people as a container, therefore if you *opt out* of the container which is the group of people that means you decide not to join this group.
*The company had its own pension plan, but individual employees were given the right to **opt out**.*	*The company had its own pension plan, but individual employees were given the right to **opt out**.*
Pass out	**Pass out: Conscious State is a Container**
Pass out means to become unconscious, usually for a short time.	Conscious state can be regarded as a container, therefore, being inside the container means being conscious while *passing out* the container means being unconscious.
*Firemen rescued the two workers who had **passed out** after breathing in smoke.*	*Firemen rescued the two workers who had **passed out** after breathing in smoke.*

Control group	Experimental group
Tune out	**Tune out: Listening is a Container**
Tune out means to ignore something or stop listening to it.	Listening is conceptualized as a container, therefore if you *tune out* of the listening container that means you ignore something or stop listening to it.
*Harget says he hopes people will not start **tuning out** warnings about the virus.*	*Harget says, he hopes people will not start **tuning out** warnings about the virus.*
Barge in	**Barge in: Meeting is a Container**
Barge in means to rudely enter a building or room without being asked, especially when it is a private place and other people are in there.	The meeting can be regarded as a container, therefore if you *barge in* the container which is the meeting that means you rudely enter a room without being asked, especially when it is a private place.
*Connors **barged in** when we were in the middle of a meeting.*	*Connors **barged in** when we were in the middle of a meeting.*
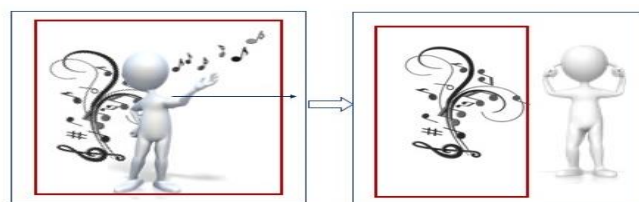
Control group	Experimental group
Dive in	**Dive in: A Project is a Container**
Dive in means to start doing something very eagerly, especially without stopping to think before you do it. *This project is so exciting, I want to **dive in**.*	A project is a container, so to *dive in* a container which is the project means to start doing something very eagerly, especially without stopping to think before you do it. *This project is so exciting, I want to **dive in**.*
Fill in	**Fill in: Blanks are Containers**
Fill in means to write all the necessary information in the empty spaces on an official document or test. *Before you can open your account, you will need to **fill in** this application form.*	Consider these blanks or spaces as containers so if you *fill in* these blanks which are the containers that means you write the necessary information in the empty spaces. *Before you can open your account, you will need to **fill in** this application form.*
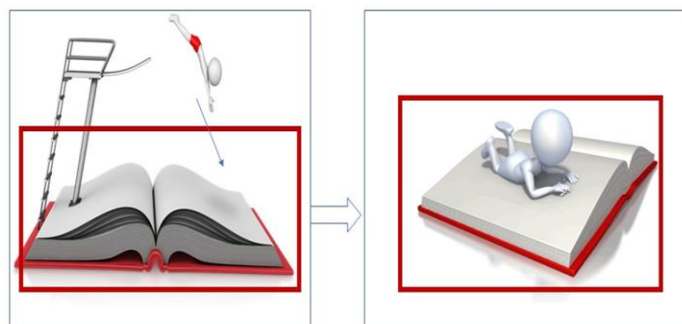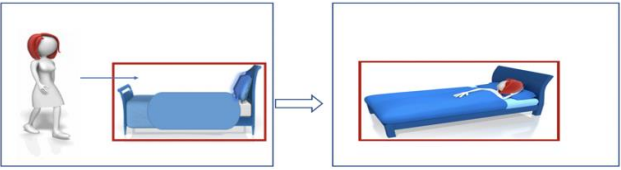
Control group	Experimental group
Get in	**Get in: Home is a Container**
Get in means to arrive at your home or at work.	Home can be regarded as a container, therefore if you *get in* the container which is the home that means you arrive at your home.
*What time did you **get in** last night?*	*What time did you **get in** last night*?

Pencil in	**Pencil in: A Schedule is a Container**
Pencil in means to make an arrangement for someone to do something or something to happen, which is not definite, and which may be changed later.	Consider the schedule as a container, so if you *pencil* someone *in* a container which is the schedule that means you make an arrangement for someone to do something which is not definite and maybe change later.
*I will **pencil** you **in** for next Tuesday morning at 10 o'clock.*	*I will **pencil** you **in** for next Tuesday morning at 10 o'clock.*

Control group	Experimental group
Pop in	**Pop in: Building is a Container**
Pop in means to go into a friend's house, an office, a shop etc., for a short time, usually without having arranged your visit.	Building can be regarded as a container, therefore, to *pop in* the container, which is the building means you go into a friend's house for a short time, usually without having arranged your visit.
*She sometimes used to **pop in** for a cup of tea and a chat on her way home.*	*She sometimes used to **pop in** for a cup of tea and a chat on her way home.*

Sink in	**Sink in: The Mind is a Container**
If information, ideas, or facts *sink in*, you gradually understand them and realize their full meaning.	If information, ideas, or facts are *sunk in* a container which is the mind, they are gradually understood, and their meanings are realized.
Ron paused, as if to let the message sink in.	*Ron paused, as if to let the message **sink in**.*

Control group	Experimental group
Turn in	**Turn in: Bed is a Container**
Turn in means to go to bed, or to go to sleep.	The bed can be regarded as a container, so if you *turn in* the bed which is the container, that means you go to bed or to sleep.
For example,	
*Well, I think I will **turn in** now because I have to get up early tomorrow.*	*Well, I think I will **turn in** now because I have to get up early tomorrow*.

After P1, participants in the control group received a handout to review. The handout corresponding to the control group (Appendix F) was designed according to the traditional model of presenting PVs. That means participants of this group received a list of 16 PVs focusing on the two particles *out* and *in* together with their definitions and examples.

The participants in the experimental group were also instructed to review the meanings of the taught PVs with reference to an explanatory handout as shown in Appendix G, which was designed in explicable container metaphor. The PVs were categorized under different semantic clusters, examples and images were provided as well.

After asking participants in both the control and experimental groups to review the 16 PVs, the researcher collected the handouts. The procedure of presenting the 16 PVs and reviewing them took 20 minutes. In order to address the research question whether the container

metaphor model had an advantage over the traditional model in presenting PVs, participants were then asked to take three posttests (i.e., posttest 1, posttest 2 and posttest 3).

Posttest 1. In order to assess the short-term effects of learning the selected PVs after P1, posttest 1 as shown in Appendix H was conducted. The entire procedure of presenting the PVs, reviewing them, and taking Posttest 1 lasted 30 minutes.

Practice (P2) and Production (P3). In P2, participants in both groups were asked to practice what they had learned in P1. Participants were given some *exetests* (EXErcises + TESTs) which were adopted from Rudzka-Ostyn (2003). Exetests were used to shape students' understanding and measure their comprehension (Thom, 2017). Kurtyka (2001) asserted the usefulness of exetests in learning and retention of the PVs. The PVs to be used were alphabetically organized on top of each exetest as shown in Appendix I. The procedure of P2 took 10 minutes.

Finally, in P3, participants were encouraged to work in groups of three students to use what they had learned in P1 and P2. Participants were asked to pick up any three PVs from the list they had learned to write a short story in 15 minutes.

Figure 30 illustrates a traditional model of teaching PVs based on a PPP pedagogical approach, which was employed with the control group.

P 1	P 2	P 3
Turn in **Turn in means to go to bed.** **I am tired, so I think I will _turn in_ early tonight.**	**Replace the following definitions by phrasal _verbs_ with _out_ or _in_.** **Replace the expressions in bolds by phrasal verbs with _out_ or _in_.**	**Pick up any three PVs from the list you had learned to write a short story in 15 minutes.**
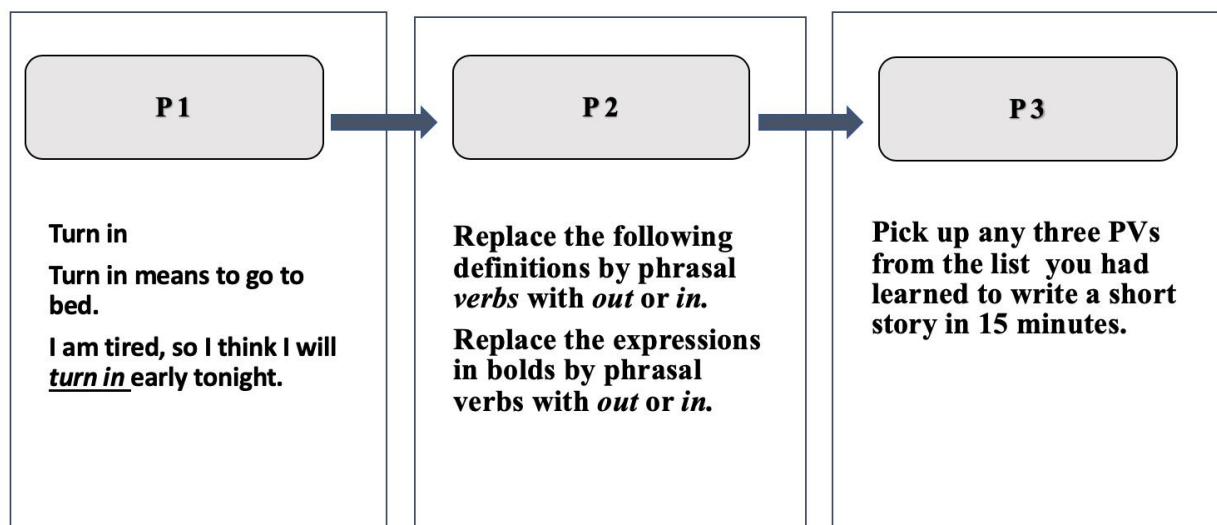
Figure 30. PPP pedagogical approach of teaching PVs using the traditional presentation model.

Figure 31 illustrates a container metaphor model of teaching PVs, which was employed with the experimental group.

P 1	P 2	P 3
Turn in: Bed is a Container **If someone turns in the bed which is the container, that means he goes to bed.** **I am tired, so I think I will _turn in_ early tonight.**	**Replace the following definitions by phrasal _verbs_ with _out_ or _in_.** **Replace the expressions in bolds by phrasal verbs with _out_ or _in_.**	**Pick up any three PVs from the list you had learned to write a short story in 15 minutes.**
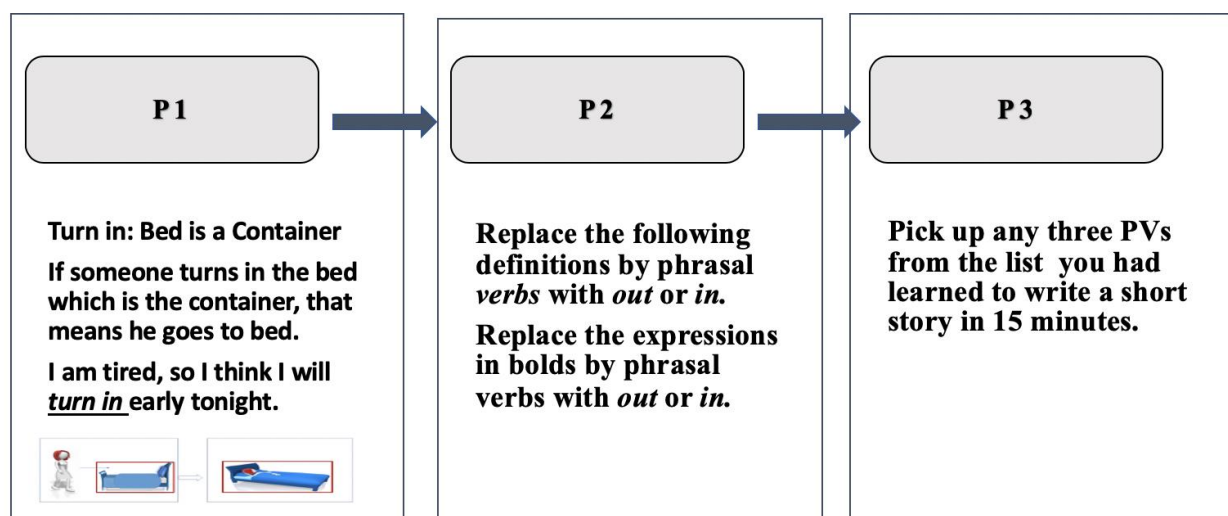
Figure 31. PPP pedagogical approach of teaching PVs using the container metaphor presentation model.

Day three: Posttest 2. Posttest 2 was conducted one day after the PPP lesson to examine participants' improvement after P2 and P3. Posttest 2 served to check students' acquisition of the PVs by asking students to match the 16 PVs in Column A with their corresponding ones in Column B. Posttest 2 can be seen in Appendix J.

Day four: Posttest 3. Posttest 3 (Appendix K) was administrated one week later to assess the long-term effects of learning the selected PVs. It consisted of the same 16 PVs of the previous tests (pretest, posttest 1, and posttest 2), and six unexposed PVs that were not explicitly taught in the control and experimental conditions. These unexposed PVs were included to see if participants could not only recall the meaning of the taught PVs but also generalize to new PVs. Therefore, posttest 3 measured the ability of the students to recall and generalize the meaning of the PVs. The procedure of P3 took 15 minutes.

The independent variables were the type of presenting PVs: a: traditional model (i.e., definitions and examples only), and b: container model (i.e., definitions and examples plus images). The dependent variable in this study was students' scores on the PV measures included in the pretest, and the three posttests.

Data Analysis Procedures

The correct pretest percentage of the two groups of students was compared with the posttests' percentage for the 16 chosen PVs. ANOVA was used to analyze data, and SPSS was used to calculate the results.

Threats to Validity

Table 5

Threat to Validity

Threat	Status	Explanation
Internal		
Confounding	Mostly addressed	Time for the control and experimental groups was the same between testing and retesting.
		Students in both groups spent approximately the same amount of time learning each PV.
		There was not statistically significant difference in the pre-intervention scores between the experimental and control groups.
		However, the validity and reliability of the placement test were not known, so there may have been other differences in English language fluency between the groups that may have differentially affected learning.
		The researcher taught the two groups, so the possibility of an "instructor effect" threat to internal validity was eliminated.
		The instructional materials used underlining for emphasis because some written languages do not use italics.
		Only low-frequency meanings of PVs were used to ensure that students' prior knowledge did not influence the results.
		Students whose L1 includes PVs were not included in the sample.
Selection bias	Addressed	The researcher had no prior knowledge of the students in either group, so no selection bias could have occurred.

History	Addressed	The relatively short time duration of the entire experiment made it unlikely that student learning outside of class influenced their final test scores.
Maturation	Addressed	The relatively short time duration of the entire experiment made it unlikely that student maturation influenced their final test scores.
Repeated testing	Mostly addressed	The same test was used several times in this study, so some student learning in both groups may have been the result of students learning from those tests. However, both the experimental and control groups received the same tests and frequency of tests, so differences in posttest results cannot be attributed to repeated testing.
Instrument change	Addressed	The same tests and frequency of tests were used throughout the experiment, with the exception of six new PVs on posttest 3, so differences in posttest results cannot be attributed to instrument change.
Regression toward the mean	Partially addressed	There were no extremely high scores on the pretest, so downward regression toward the mean was not evident in this study. Some students had extremely low scores on the pretest, so some of the improvements evident in the posttests may be evidence of regression toward the mean. However, there were not statistically significant differences between the experimental and control group on the pre-test, so differences seen between the two groups in the posttest results cannot be attributed to regression toward the mean.

Differential attrition	Addressed		All participants completed the study so there was no differential attribution between the experimental and control groups.
Researcher bias	Addressed		In order to avoid biasing in this study, the researcher converted the PPT slides into video recordings with audio narration. Therefore, participants in both groups spent about the same amount of time learning each PV.
			In addition, time for the both groups was the same between testing and retesting.

External

Generalizability across situations	Mostly addressed		In most language learning classrooms, the teacher would answer student questions during instruction. This was not done during this study to avoid researcher bias or confounding variables, but not answering questions during instruction likely decrease student learning.
			In most language learning classrooms, students in the control condition likely would have moved through the instruction more quickly. In this study they were slowed to ensure that the same amount of time was spent on instruction in both the experimental and control groups.
Generalizability across people	Partially addressed		Students whose L1 includes PVs were excluded from the study. The results cannot be generalized to students whose L1 use PVs.
			The students in this study were classified by the IEP as "intermediate-level students", but the validity and reliability of the placement tests are unknown. As a result, the findings cannot be generalized to

		"intermediate-level students" in other contexts.
		Similarly, the results cannot be generalized to students at other levels of proficiency.
		Participants in this sample included some diversity of ESL learners, both by country of origin and L1. However, students from all countries and L1s were not represented nor did we have a large enough sample to analyze for differential treatment effects across sub-samples.
Replication	Partially addressed	The results of this study corroborate several other studies suggesting that conceptual metaphor model is a more effective method of teaching PVs.
		However, posttest 3 results for the untaught PVs contradicts some of the previous studies that assessed whether students were able to transfer learning.

CHAPTER FOUR: RESULTS

Introduction

This chapter describes the results of the study which examined the differences between the container metaphor model and the traditional model of presenting PVs. The chapter revisits the research question, hypotheses, and research design previously discussed in Chapter Three.

Research Question and Hypotheses

The research question was presented below along with its corresponding hypotheses.

1. Is there a significant difference in L2 students' success rate of learning PVs between a traditional model and a container metaphor model of presentation?

In order to answer the research question, the study followed a quantitative comparative research design. Studies conducted by Ansari (2016), Ganji (2011), Kartal and Uner (2017), Kovecses and Szabco (1996), Lu and Sun (2017), Talebinezhad and Farhadian (2014), and Yasuda (2010) revealed significant differences between the orientational metaphor model, which is one type of conceptual metaphor model, and the traditional model in presenting and teaching PVs. Based on suggestions and evidence from previous literature concerning the differences between the two models, it was posited that there would be significant differences in students' performance after acquiring PVs via container metaphor model, the other type of conceptual metaphor, comparing to the traditional model. It was hypothesized that the effect of learning PVs based on the conceptual metaphor—specifically the container metaphor model—was better than the traditional model.

Therefore, the following null hypothesis was formulated:

H_0: There is no significant difference in L2 students' success rate of learning PVs between the group of L2 students exposed to a traditional model and the group of L2 students exposed to the container metaphor model of presenting PVs.

The statistical software tool IBM SPSS Version 24 was used to perform the data analysis. A pilot test was employed to select the best 12 out of 18 infrequent PVs. In order to select the most difficult PVs that students might not know, an item difficulty test was run. After selecting the 12 difficult PVs, four frequent PVs were added for statistical purpose, therefore 16 PVs were used in pretest, presentation, posttest 1, posttest 2 and posttest 3. An independent-samples *t*-test was conducted to determine if there was a significant difference in a pretest between the experimental group (i.e., container) and the control group (i.e., traditional). An ANOVA with four ×2 groups was explored to establish if there were statistically significant differences between the groups' performance on a pretest, posttest 1, posttest 2, and posttest 3. Finally, an independent-samples *t*-test was administered to ascertain if container metaphors play a role in determining the meaning of six untaught PVs. This chapter then concluded with a summary to the results in the final section.

Descriptive Data Results

Pretest, Posttest 1, Posttest 2 and Posttest 3. An independent-samples *t*-test was run using an alpha of .05 to determine if there was a statistically significant difference between the control group and the experimental group.

Pretest.

Table 6

Group Statistics for Pretest

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pretest	Control	14	4.93	.917	.245
	Experimental	14	4.57	1.828	.488

The results showed that there was no statistically significant difference in scores between the control group (M= 4.93, SD=.92) and the experimental group (M= 4.57, SD= 1.83).

Table 7

Independent t-test Descriptive Results for Pretest

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pretest	Equal variances assumed	3.651	.067	-.654	26	.519	-.357	.547	-1.480	.766
	Equal variances not assumed			-.654	19.153	.521	-.357	.547	-1.500	.786

Since the significance level was greater than 0.05, $p>.05$ as shown in Table 7, the group variances were equal.

Participants' answers of the pretest were coded based on the correctness to the PVs (i.e., one point was added for each correct answer). The results of the Group Statistics for Pretest in Table 6 show that participants in the control group (*M*= 4. 93, *SD*= .92) worked slightly better

than those in the experimental group (*M*=4. 57, *SD*= 1.83). Statistically, however, the mean

scores and *p* value confirmed that neither of the two groups had much prior knowledge about the

selected PVs and there was no significant difference between them.

Table 8 reflects to what extent participants were familiar with the 12 infrequent PVs and

the four frequent PVs.

Table 8

Descriptive Statistics of Pretest for the Control and Experimental Groups

PV	Control group	Experimental group
branch out	.21	.29
duck out	.21	.07
figure out	.71	.71
give out	.64	.57
lock out	.29	.21
opt out	.14	.14
pass out	.14	.14
tune out	.22	.21
barge in	.14	.07
dive in	.21	.14
fill in	.79	.79
get in	.64	.71
pencil in	.14	.14
pop in	.14	.07
sink in	.21	.21
turn in	.00	.00

Valid *N* (listwise)

The analysis of the PVs in the Descriptive Statistics of Pretest for the Control and

Experimental Groups in Table 8 confirms the difficulty of the 12 PVs extracted from the pilot

test. It also showed that the four frequent PVs *fill in, figure out, get in,* and *give out* had the

highest scores. These results were expected because these PVs were chosen from the

pedagogical list of PVs and their most frequent meaning senses conducted by Garnier and

Schmitt (2015). In both control and experimental groups, the PV *fill in* received the most correct

responses at .79, this was followed by *figure out* which received .71. *Get in* received .71 in the

experimental group and .64 in the control group. *Give out* received .64 in the control group and

.57 in the experimental group.

On the other hand, the performance of participants in the 12 PVs extracted from the pilot

test was very low. *Turn in* received .00 in both groups. *Opt out, pass out, barge in, pop in*, and

pencil in received .14 in the control group. *Opt out, pass out*, and *pencil in* received the same

results of the control group, which was .14, however, *barge in* and *pencil in* received only .07.

In sum, the results of the pretest indicated that the 12 PV selected for this study were

unknown to participants in both groups.

Table 9 describes how the participants in both groups performed differently with

reference to pretest, posttest 1, posttest 2, and posttest 3.

Table 9

Descriptive Statistics of Pretest, Posttest 1, Posttest 2, and Posttest 3 for Both Groups

	Group	Mean	Std. Deviation	*N*
Pretest	Control	4.93	.917	14
Time 1	Experimental	4.57	1.828	14
	Total	4.75	1.430	28
Posttest 1	Control	7.71	1.899	14
Time 2	Experimental	13.00	2.112	14
	Total	10.36	3.336	28
Posttest 2	Control	8.93	1.817	14
Time 3	Experimental	14.36	1.008	14
	Total	11.64	3.118	28
Posttest 3	Control	7.00	2.631	14
Time 4	Experimental	14.29	1.383	14
	Total	10.64	4.245	28

There was the correct number of participants in each group for all four tests. The lowest mean score was for the experimental group in pretest (time 1) and the highest one was for experimental group in posttest 2 (time 3).

Table 10

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Pillai's Trace	.942	129.832[b]	3.000	24.000	.000	.942
	Wilks' Lambda	.058	129.832[b]	3.000	24.000	.000	.942
	Hotelling's Trace	16.229	129.832[b]	3.000	24.000	.000	.942
	Roy's Largest Root	16.229	129.832[b]	3.000	24.000	.000	.942
time * group	Pillai's Trace	.793	30.686[b]	3.000	24.000	.000	.793
	Wilks' Lambda	.207	30.686[b]	3.000	24.000	.000	.793
	Hotelling's Trace	3.836	30.686[b]	3.000	24.000	.000	.793
	Roy's Largest Root	3.836	30.686[b]	3.000	24.000	.000	.793

a. Design: Intercept + group
Within Subjects Design: time
b. Exact statistic

A 2×4 measures ANOVA was conducted to compare the scores of the participants in the experimental group with the control group at Time 1 (pretest), Time 2 (posttest 1), Time 3 (posttest 2), and Time 4 (posttest 3). The means and standard deviations were presented in Table 9. There was a significant effect for time, Wilks' Lambda = .06, F (3, 24) = 129.83, $p < .0005$, multivariate partial eta squared = .94. According to Cohen (1988), if the multivariate partial eta square = .14, it is considered to have a large effect. As such, the result suggested a very large effect size (.94).

Therefore, it was concluded that after P1 (presentation), the experimental group did better and outperformed the control group in posttest 1. After P2 (practice) and P3 (production), the

experimental group also did better and outperformed the control group in posttest 2. The

decrease in performance for the experimental group between posttest 2 and posttest 3 was

statistically not significant. However, the decrease in performance for the control group between

posttest 2 and posttest 3 was statistically significant. Therefore, the mean difference showed that

the experimental group scored doubled of what control group scored in posttest 3. That means

the container metaphor model improved the participants' performance in retaining the meaning

of the 16 PVs after one week.

Table 11

Pairwise Comparisons for Experimental and Control Groups, Measure 1

(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	-5.607*	.444	.000	-6.876	-4.338
	3	-6.893*	.348	.000	-7.888	-5.898
	4	-5.893*	.419	.000	-7.089	-4.697
2	1	5.607*	.444	.000	4.338	6.876
	3	-1.286*	.300	.001	-2.143	-.429
	4	-.286	.419	1.000	-1.482	.910
3	1	6.893*	.348	.000	5.898	7.888
	2	1.286*	.300	.001	.429	2.143
	4	1.000	.370	.072	-.058	2.058
4	1	5.893*	.419	.000	4.697	7.089
	2	.286	.419	1.000	-.910	1.482
	3	-1.000	.370	.072	-2.058	.058

Based on estimated marginal means
*. The mean difference is significant at the .05 level.

The pairwise comparison of the two groups across the four different times was significant. The only insignificant difference occurred between time 3 and time 4, and time 4 and time 3.
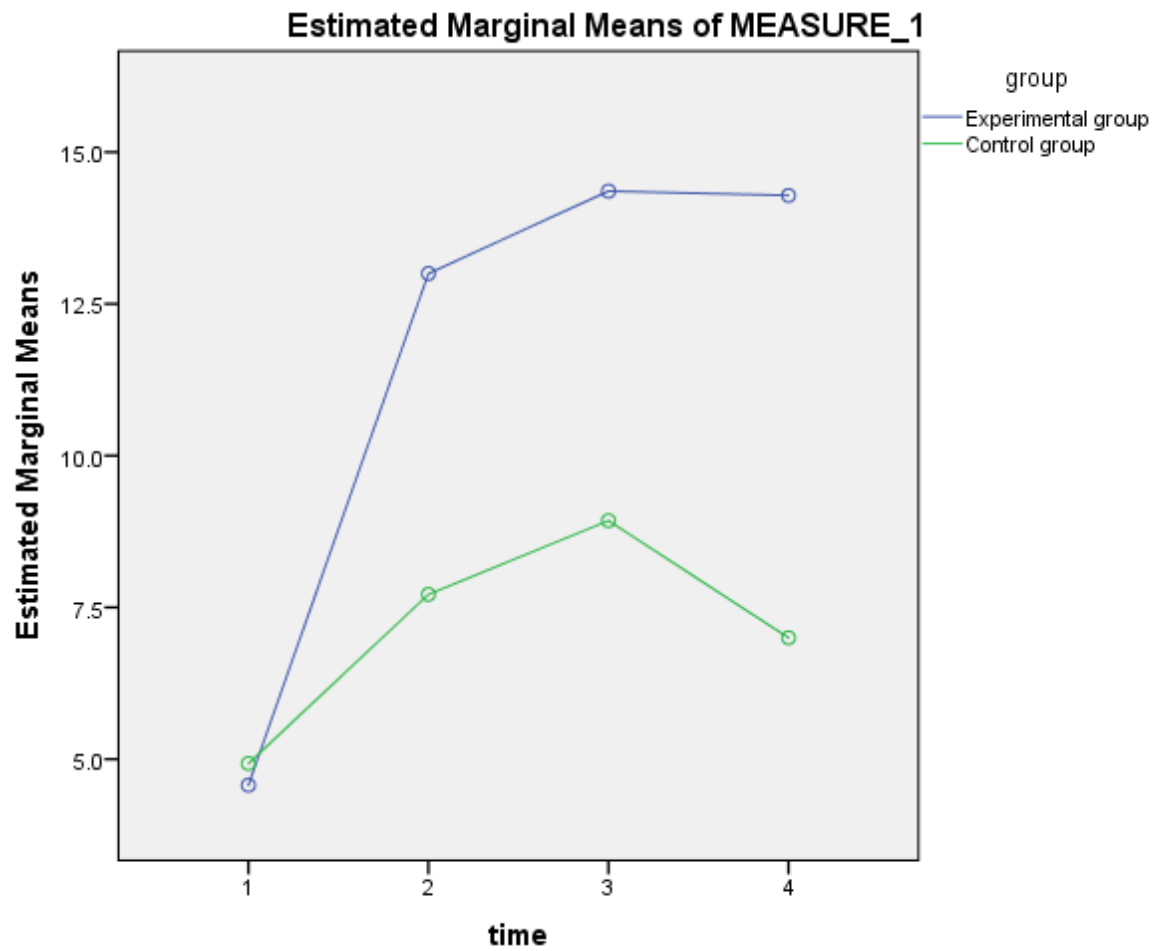
Figure 32. Students' achievement across groups.

Figure 32 above demonstrates the results of the descriptive statistics for the achievements
of experimental and control groups on the pretest, posttest 1, posttest 2 and posttest 3.

Table 12

Descriptive Statistics of the Control Group for the 16 PVs

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	14	3	6	4.93	.917
Posttest 1	14	4	11	7.71	1.899
Posttest 2	14	6	12	8.93	1.817
Posttest 3	14	3	13	7.00	2.631
Valid N (listwise)	14				

Table *13*

Descriptive Statistics of the Experimental Group for the 16 PVs

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	14	2	9	4.57	1.828
Posttest1	14	9	16	13.00	2.112
Posttest 2	14	12	16	14.36	1.008
Posttest 3	14	11	16	14.29	1.383
Valid N (listwise)	14				

From Tables 12 and 13, it can be concluded that the experimental group performed better than the control group as the difference between these two groups was evident. The minimum scores of the experimental group in posttest 1, posttest 2, posttest 3 were 9, 12, and 11, while the minimum scores of the control group were 4, 6, and 3, respectively. The maximum score of the experimental group was 16 in all the three tests, while the maximum scores of the control group

were 11, 12, 13. These scores confirm that the way of presenting the PVs by the container

metaphor model improved students' performance comparing with the traditional model.

Posttest 3: Untaught PVs. Posttest 3 contained additional six untaught PVs with the

particle *out* and *in*. These six PVs were taken from the pilot test that were excluded from the

pretest, posttest 1 and posttest 2. The idea behind adding the untaught PVs was to determine if

the participants could figure out the new PVs that accompanied the same particles and to see if

there was performance difference between the two groups.

t-**test**. An independent-samples *t*-test was conducted to compare the six untaught PVs

scores for control and experimental groups. The alpha level was set at 0.05. The descriptive

statistics of the performance of students in posttest 3 of the six untaught PVs was reported and

summarized in Table 14. The table indicates that the means of both groups were low.

Table *14*

Group Statistics for Posttest 3: Untaught PVs

	Group	*N*	Mean	Std. Deviation	Std. Error Mean
Scores	Control	14	2.43	.756	.202
	Experimental	14	2.64	1.336	.357

Table 15

Independent Samples Test

		Levene's Test for Equality of Variances		*t*-test for Equality of Means							
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
									Lower	Upper
scores	Equal variances assumed	3.907	.059	.522	26	.606	.214	.410	-.629	1.058
	Equal variances not assumed			.522	20.547	.607	.214	.410	-.640	1.069

Even though the experimental group (*M*= 2.64, *SD*= 1.34) did slightly better than the control group (*M*= 2.43, *SD*= .76), the difference between these two groups was not statistically significant (*p* > .05). Therefore, the two models did not have a direct influence on the performance of the students in the untaught PVs of posttest 3.

Conclusion

Chapter Four discussed the results of data analysis that examined the difference between participants' performance of learned PVs by both the container metaphor model and the traditional model. Data were collected by giving participants in both groups a serious of tests. The scores of students in both groups on the pretest, posttest 1, posttest 2, and posttest 3 were recorded.

The results of both groups were analyzed based on independent samples *t*-test, a 2×4 ANOVA, and descriptive statistics. The results of the independent samples *t*-test indicated that the control and experimental groups' performances on the pretest were relatively very close. Therefore, there was no statistically significant difference between the two groups.

Comparing the results indicated that the experimental group performed significantly better than the control group in posttest 1, posttest 2, and posttest 3. Of note were the highest scores some students earned in the experimental group in posttest 1, posttest 2, and posttest 3. Since there was a statistically significant difference between the means at the different time points ($p < .05$), the null hypothesis was rejected, and the alternative hypothesis was accepted.

However, the difference between the two groups in the six untaught PVs was not significant. Unlike the previous studies from Kovecses and Szabco (1996) and Yasuda (2010), which found that participants in the orientational metaphor group performed better than those that followed the traditional model in determining the meaning of the untaught PVs, these results reveal that the participants' performance in both groups was low in the untaught PVs and that there were no significant differences between the two groups. The results indicated that transfer did not occur to new PVs with the particles *out* and *in*. Therefore, neither the container metaphor model nor the traditional model made a difference in figuring out the untaught PVs.

In summary, the mean of the experimental group was higher than the mean of the control group in posttest 1, posttest 2, and posttest 3 that contained the 16 taught PVs. In addition, the mean of the experimental group was slightly higher than the mean of the control group in posttest 3 that contained the six untaught PVs. Overall, the results supported the alternative hypothesis and reject the null hypothesis.

CHAPTER FIVE: DISCUSSION

This study was designed to investigate a more effective model of presenting PVs by finding the differences between one kind of conceptual metaphor – the container metaphor – and the traditional model. Therefore, this study provided promising data to answer whether PVs could be taught and not memorized. Moreover, the study examined whether there was a significant difference in short-term and long-term PV recall for a control group and an experimental group.

Both to what extent and in which way container metaphor model inspired PVs were discussed. This study also explored whether participants could discern the novel PVs in posttest 3. The results obtained from the pretest, posttest 1, posttest 2, and posttest 3 were interpreted. In addition, pedagogical implications, suggestions for future research and conclusions were presented.

The traditional model views PVs as difficult idiomatic expressions that should be learned through memorization because their meaning is non-compositional (Gibbs, 1990), while in the conceptual metaphor model the meaning of the PVs can be explained and taught (Yasuda, 2010). The idea of studying the new metaphorical container model of presenting PVs stemmed from the gap found in the literature review.

Discussing the Results of the Traditional and Container Metaphor Models of Presentation in the Learning of PVs

Posttest 1. A descriptive statistics analysis of posttest 1 was carried out to find the frequency of the correct answers of the 16 PVs after P1 for the control and experimental groups that followed different models of presenting PVs. Table 16 describes how the participants in both the control and experimental groups performed differently with reference to posttest 1.

Table 16

Descriptive Statistics of Posttest 1 for the Control and Experimental Groups

PV	Control group	Experimental group
branch out	.57	.79
duck out	.21	.79
figure out	.93	1.00
give out	.64	.93
lock out	.36	.71
opt out	.29	.57
pass out	29	.71
tune out	.21	.71
barge in	.21	.64
dive in	.50	.71
fill in	1.00	1.00
get in	.86	1.00
pencil in	.29	.93
pop in	.57	.86
sink in	.38	.71
turn in	.43	1.00

Valid *N* (listwise)

The four frequent PVs were of highly correct responses: *fill in* received 1.00, *figure out* received .93, *get in* = .86, and *give out* got .64 in the control group. However, participants in the experimental group worked better in answering these four PVs. The results of Table 16 above show that the frequencies of the three frequent PVs *fill in, figure out,* and *give out* received 1.00, and .93 of correct answers was for the PV *give out*.

Of note in the results of the experimental group were the 1.00% of correct answers of the PV *turn in*, which received zero in the pretest. *Pencil in* was the other PV that improved the most. *Pencil in* was also one of the difficult PVs in the pretest; however, in the posttest it received .93. These results showed that some types of PVs are more amenable to the conceptual

metaphor than others (Condon, 2008). This improvement may have occurred because these two PVs were presented with motions as shown in Figure 33 and 34 as there were some movements in the videos that represent the PVs *turn in* and *pencil in*. Participants may have liked the representation of these PVs because they were presented using movements.

Fraser (1976) claimed that the particles did not carry any meaning of the PVs. By explaining and analyzing the meaning of the selected PVs, the present study suggested that the particle was the meaning indicator of the PV and it did carry a main meaning of the PV expressed visually at the presentation stage of the experimental group. For example, in the figures used with the experimental group, it was apparent that the girl turned *in* the bed (Figure 33), and the pencil was *in* the schedule (Figure 34).
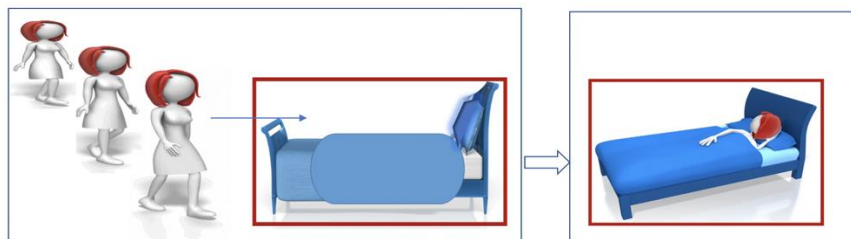
Figure 33. Turn in: Bed is a container.
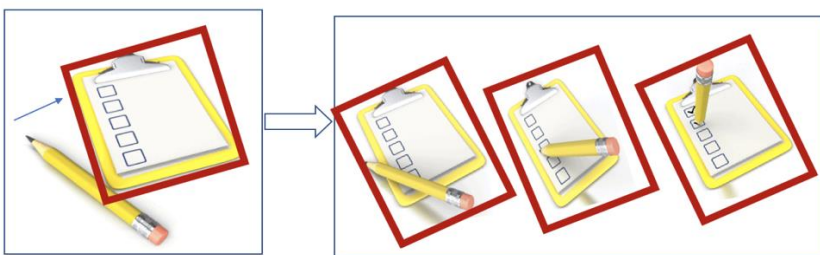
Figure 34. Pencil in: Schedule is a container.

Researchers who focused on traditional model such as Live (1965), Lipka (1975), and Fraser (1976) claimed that there was no obvious link in meaning between the constituents and the composite meaning of the PVs. That meant that there was no systematic way of teaching

PVs; therefore, PVs should be memorized. In contrast to the traditional view, this study suggested that there was a connection between the constituents and the composite meanings of the PV. For example, superficially, it might seem there is no clear connection between the constituents of *turn in* and the meaning of "going to bed". However, if a bed is regarded as a container, a connection between the constituents and the meaning of the PV can be recognized. Therefore, the container metaphor model can be used to explain the underlying meaning of PVs at the presentation stage.

Accordingly, the findings of the present study supported cognitive linguistic researchers (Boers, 2000; Kovecses & Szabco, 1996; Kurtyka, 2001; Lakoff, 1987; Lindner, 1982; Morgan, 1997; Rudzka-Ostyn, 2003; Tyler & Evans, 2003) who have suggested that the meanings of PVs are closely related to their constituents.

Therefore, the presentation of the PV was shown to be very important and might affect the process of learning. Participants in the experimental group answered the most two difficult PVs in the pretest *turn in* and *pencil in* correctly. In the control group, on the other hand, *turn in* received .43 and *pencil in* received only .29. In the experimental group, *duck out* and *branch out* each received .79, while *dive in, pass out, tune out,* and *lock out* received .71. There was clear improvement in these PVs when compared with the results of the participants in the control group. In the control group, *duck out* and *tune out* received .21, *branch out* received .57, *pass out* .29, and *lock out* .36.

The lowest scores in the experimental group were for *barge in* (.64) and *opt out* (.57). Although participants had been told no questions were allowed during the test, more than one participant asked about the meaning of the verb *opt* and *barge*. It is understandable that if students are not previously familiar with the meaning of the main verb, the process of learning becomes more difficult and some students might forget the meaning of the PVs after a while.

Although *barge in* and *opt out* got the lowest scores in the experimental group, this result was significant comparing with the results of the control group in which *barge in* received .21 and *opt out* received .29. More than 50% of participants in the control group answered *branch out, pop in,* and *dive in* correctly. Students' performance in the control group of the PVs *tune out, barge in,* and *duck out* was .21, which is considered a very low achievement when compared with the experimental group. In sum, the differences between pretest and posttest 1 were extremely high for the experimental group.

      Posttest 2. The aim of posttest 2 was to check the progress in PV learning after P2 and P3. Table 17 describes how participants in the control and experimental groups performed differently with reference to posttest 2.

Table 17

Descriptive Statistics of Posttest 2 for the Control and Experimental Groups

PV	Control group	Experimental group
branch out	.29	.93
duck out	.43	.93
figure out	.93	1.00
give out	.64	1.00
lock out	.57	.86
opt out	.43	.64
pass out	.50	.86
tune out	.57	.79
barge in	.29	.79
dive in	.57	.79
fill in	1.00	1.00
get in	.93	1.00
pencil in	.43	1.00
pop in	.36	.86
sink in	.50	.93
turn in	.43	1.00

Valid *N* (listwise)

Looking at Table 16 (posttest 1) and Table 17 (posttest 2) of the control group, the results show that the improvement of learning PVs was in the following PVs: *get in*, *sink in*, *lock out*, *pencil in*, *pass out*, *opt out*, *tune out*, *barge in*, *duck out*, and *dive in*. There were no changes in the scores of *fill in, figure out, give out,* and *turn in,* while the scores of *branch out* and *pop in* decreased.

The data in Table 16 and Table 17 reveal that participants in the experimental group improved in most meanings, but in variant degrees after the P2 (practice) and P3 (production). *Pencil in* and *give out* received full points. There was evident improvement in the learning of the following PVs: *duck out*, *pop in*, *branch out*, *sink in*, *dive in*, *pass out*, *tune out*, *lock out* and *opt out*. *Barge in* received the same result as in posttest 1.

These results align with Condon's (2008) conclusion that not all PVs are learned in the same way and students might have partial understanding of some PVs; this partial knowledge was not captured in the pretest, but it might be motivated by practicing the container metaphor model. In addition, the conceptual metaphor abilities of the students may be another reason that impacted the learning process of the PVs (Kurtyka, 2001).

In sum, participants in both groups improved after the treatment in posttest 1; however, participants in the experimental group outperformed those in the control group. Participants' achievement after P2 and P3 in the experimental group of posttest 2 improved significantly and was better than the participants' achievement in the control group. Therefore, the container metaphor model had a more positive effect on the learning of the PVs than the traditional model.

In order to gain a better understanding of the retention of PVs, the results of posttest 2 were compared to the results of posttest 3.

Posttest 3. Posttest 3, or the delayed posttest, was conducted to maintain the meaning of PVs in long term effect. In this study, posttest 3 was conducted one week after posttest 2 following the study of Boers (2000). Posttest 3 composed of the 16 PVs which were the same taught PVs and the six PVs with highly corrected responses which were taken from the pilot test. Yang and Hsih (2010) found little evidence that confirms the role of conceptual metaphor in PVs' memory retention. In contrast, the current study showed that participants in the experimental group were able to maintain PVs' meaning one week after posttest 2.

The results from Table 18 below show that the retention of the 16 taught PVs in the experimental group was significantly higher than the retention in the control group. Therefore, this result aligned with previous studies by Boers (2000), Kovecses and Szabco (1996), and

Neagu (2007), who stated that conceptual metaphor enhances students' retention of previously taught PVs.

For the experimental group, the difference between posttest 2 (*M*=14.36) and posttest 3 (*M*= 14.29) was found not be statistically significant. However, the difference in the control group between posttest 2 (*M*= 8.93) and posttest 3 (*M*= 7.00) was statistically significant. This result shows that participants in the experimental group were able retain the meaning of the 16 taught PVs better than those in the control group. The negative effect of the retention of the PVs in the control group might be related to the traditional model which depends only on memorization. In conclusion, the experimental group (*M*= 14. 29) performed better than the control group (*M*= 7.00) in the retention of the 16 taught PVs, as the difference between these two groups is evident in Table 18. Therefore, the container metaphor model can be used as an effective model in presenting and retaining PVs.

Table 18 below describes how participants in the control and experimental groups performed differently with reference to posttest 3.

Table 18

Descriptive Statistics of Posttest 3

PV	Control group	Experimental group
branch out	.21	.93
duck out	.21	.86
figure out	.93	1.00
give out	71	1.00
lock out	.50	.93
opt out	.29	.71
pass out	.29	.71
tune out	.29	.79
barge in	.29	.64
dive in	.36	.86
fill in	.86	1.00
get in	.79	1.00
pencil in	.29	1.00
pop in	.29	1.00
sink in	.36	.86
turn in	.36	1.00

Valid *N* (listwise)

Since examining whether the container metaphor could be considered an effective way of presenting PVs was at the very heart of this study, the researcher chose to compare the container metaphor model associated using pictures compared with the traditional model without using pictures. Therefore, participants in the experimental group were provided with both verbal and visual annotations. According to Plass, Chun, Mayer, and Leutner (1988), if a group of students are presented with both verbal and visual illustrations, they will learn and remember the target vocabulary better than those who are provided with only one illustration.

Baharian and Rezai (2014) investigated to what extent the pictures can help learning and retaining vocabulary. Therefore, three groups of students were involved in their study: two experimental groups and one control group. Each group included 30 pre-intermediate EFL

students. The first experimental group was instructed to learn a list of vocabulary associated with proverbs. The second experimental group was asked to learn the same list of vocabulary accompanied with both proverbs and pictures. In contrast, the control group was instructed to memorize the list of PVs following the traditional model. The results of this study showed that the experimental groups worked better than the control group. Therefore, when verbal or visual illustrations are used as a method to teach vocabulary, the meaning likely to be learned and retained more easily than when the meaning is presented though memorization only.

However, the results indicated that there was no statistically significant difference in the immediate test between the first experimental group that did not use pictures ($M = 28, 40$) and the second experimental group that used pictures ($M = 28, 76$). Therefore, using pictures may not have a significant advantage in learning vocabulary. Therefore, the superior results of the experimental group might have been due to the metaphor used in this study rather than the pictures associated with the container metaphor model.

Students in the experimental group were expected to be able to figure out the meaning of the untaught PVs based on their knowledge of the container metaphor. However, the results showed that participants in the control and experimental groups performed similarly unsuccessfully on posttest 3, which contained the six untaught PVs. Therefore, it was not verified that the experimental group outperformed the control group in the untaught PVs.

Table 19 below describes how participants in the control and experimental groups performed with reference to posttest 3, which included the six untaught PVs.

Table 19

Descriptive Statistics of the Untaught PVs

	Control group	Experimental group
bring out	.21	.14
drop out	.43	.43
hand out	.57	.64
join in	.57	.64
kick in	.36	.43
step in	.29	.36

Valid *N* (listwise)

Participants in both groups were not able to transfer their knowledge to the learning of new, untaught PVs. The results of this study lent support of no proof of strategy transfer as reported by Boers (2000) and Condon (2008). In contrast, Kövecses and Szabó (1996), Talebinejad and Sadri (2013), Nhu and Huyen (2009), Yang and Hsih (2010), and Yasuda (2010) all showed that the conceptual metaphor was beneficial for L2 students to estimate the meaning of untaught PVs. In addition, Ganji (2011) said that the conceptual metaphor played a more important role in guessing the meaning of the untaught PVs than in retaining taught PVs. The very limited explicit instruction regarding how to generalize in order to figure out new PVs may be a reason for the low achievement in the six untaught PVs. Participants in the experimental group could remember the PVs previously explained by the container metaphor model, but they might not be accustomed yet to the container metaphor that would enable them to figure out the meanings of the untaught PVs. Although the participants' achievement in guessing the meaning of the unexposed PVs in the experimental group was not as evident as in the previous studies, they did slightly better than the students in the control group.

In conclusion, using the container metaphor model allowed students to visualize meaning rather than only verbalize it. The researcher developed the adopted images in order to make them friendlier and easier to understand. A series of statistical analyses revealed that students in the experimental group benefited from the container metaphor. These results aligned with previous studies by Ansari (2016), Boers (2000), Condon (2008), Kövecses & Szabó (1996), and Talebinejad and Sadri (2013), who found that students with intermediate language proficiency can benefit by using the conceptual metaphor model.

Implications

Even though a large number of empirical studies in previous literature examined the difference between the conceptual metaphor and the traditional model, the focus was only on one kind of conceptual metaphor, the orientational metaphor. Only one study conducted by Nhu and Huyen (2009) compared the traditional model with both the container metaphor model and the orientational metaphor model. However, this study did not specify which kind of conceptual metaphor model, either orientational or container, contributed more to the results of the experimental groups. Moreover, the researchers used only frequent PVs without any image schema.

In addition, all of the previous studies examined the differences between the conceptual metaphor and the traditional model only in EFL contexts. The current study, in contrast, was one of the first studies to examine the difference between the container metaphor model and the traditional model of presenting PVs in an ESL context. Hence, it was essential to evaluate the results and explain them in order to specify practical applications in ESL contexts. Through statistical analysis, the findings identified statistically significant differences between the experimental and control groups in all three posttests.

These results show a clear benefit for using the container metaphor in teaching PVs. In light of the findings in this study, the following implications regarding presenting, teaching, and learning PVs are suggested.

First, since one of the priorities of all ESL teachers is to provide students with the method that helps them to learn English, it is vital to include the container metaphor model as an alternative model of presenting PVs accompanied with the particles *out* and *in*. Not only were the 16 PVs represented utilizing the container metaphor, but also approximately 20 PVs from the literature review were represented. Therefore, teachers can use these representations when teaching PVs.

Second, since motivation is an essential element in L2 success (Cheng & Dörnyei, 2007), image schema was used as one form of motivation. The researcher designed mental images to represent the meaning of the selected PVs. Most images contained 3-D human-like characters adopted from PresenterMedia.com. Animation of 3D characters was motivational because students were familiar with these characters; therefore, their response was positive when they saw these characters. The images made the meaning of the PVs salient to students and they were helpful in learning and retaining PVs. Therefore, for curriculum and material designers, the results of the current study demonstrated the importance of using empirical evidence to design images that can assist in the process of presenting the PVs in the teaching materials.

Third, native English speakers have automatic access to the conceptual framework of their language (Kovacs, 2011a); however, ESL students cannot instinctively access the conceptual framework of the English language. Since PVs depend heavily on the conceptual framework, ESL teachers first need to know about the supported container metaphor model and then teach PVs explicitly. If the container metaphor model is explicitly used to teach PVs, it will

help ESL students to improve their PV knowledge. Therefore, this study provided further indication of the importance of explicit teaching of PVs under the container metaphor model for intermediate-level students.

Finally, L2 students depend on a small number of high frequent PVs; however, they have difficulty with the PVs in the low frequency band (Alejo, 2012). In addition to the importance of frequent PVs that most previous studies focused on, it is also essential for students to learn and to be exposed to infrequent PVs. The lack of attention given to low-frequency PVs in the previous literature is another significant factor that this study overcomes. Therefore, researchers were recommended including infrequent PVs in their research in addition to the frequent ones.

Limitations of the Study

Although the findings of this study might have implications in presenting and teaching PVs, a few limitations in this study may restrict its generalizability. The most significant one was the small size of the sample (i.e., the number of participants was limited to 14 students in each group). In addition, the researcher was the instructor for both control and experimental groups.

Another limitation was that selecting the particles was constrained to the type of metaphor that was used in this study, which is the container metaphor; thus, the best frequent particles that could be applied in this study are *out* and *in*. Furthermore, not all the PVs associated with the particles out and in are amenable to the container metaphors.

In addition, the list of 16 PVs did not include the various meanings of the polysemous PVs. The time constraint to one session might be another limitation to this study. It was suggested that if time was not restricted to one session, the container metaphor model would be more effective, and participants would perform better on the unexposed category of PVs. The

time constraints of the class did not give the students opportunities to practice how to explain the meaning of additional PVs according to the container metaphor. Accordingly, it was expected that because of the time limit, participants could not be generalized to the six untaught PVs. Therefore, it is recommended that future studies provide students with opportunities to bring their knowledge of the container metaphor learned in the experiment and practice to explain unexposed PVs.

The current research focused on providing quantitative data, leaving out the qualitative exploration. The qualitative aspect can support and assist the findings of this study with a detailed view of the implications for the students which justify the selection of the container metaphor model. Finally, the findings may not be generalizable to larger populations because the research design of the study included a non-parametric sample. These limitations reflect a need for more studies that can either reconfirm the previous studies or contradict them. Therefore, there is still room for additional future research.

Future Studies

Although the results of this study have many vital implications for presenting, teaching, and learning PVs in an ESL context, these results can be followed up with other studies that might reconfirm the present findings with varied samples, materials, tests, and contexts.

1. This container metaphor model can be used in the presenting and teaching not only PVs, but also other idiomatic items and expressions that contain the meaning of being inside or outside the container like prepositional phrases, collocations, and proverbs.

2. Another study could compare the effect of presenting PVs across different English proficiency levels.

3. Similar studies for future research of another particle such as *into* and *through* can be conducted.

4. This study mainly focused on 16 PVs with the particles *out* and *in*. It will be of interest to extend this study with more and different PVs to reconfirm the results found in this study.

5. More empirical studies are required with a larger sample size to confirm the external validity of this study.

6. Future studies can focus on the same PVs and investigate the effect of raising metaphor attention and awareness of recognizing PVs in an EFL setting.

7. The results were based on only one meaning for each of the selected 16 PVs that included the particles *out* and *in*. The PVs have polysemous meanings; therefore, other studies might be needed to present the other meanings of these PVs.

8. This study can be replicated by investigating the difficulties that students face from two different languages and see if L1 background affects the results. One language could be a Germanic language and the other a non-Germanic language.

9. This study is a quantitative study; another study could be a mixed method that employs a questionnaire or interviews to elicit students' opinions regarding how they feel about the two models.

10. In this experiment, the list of PVs that were presented and tested were not part of the classroom syllabus; further research can be focused on using authentic materials that are included in the syllabus.

11. Future studies can investigate the difference(s) between the container metaphor model and translation or contextualization model of teaching PVs.

12. In the current study, students using the container metaphor model looked at illustrations created by the teacher; in a future study, students could be instructed in the container metaphor model and then be asked to visualize their own images.

Conclusion

On the whole, the aim of the study, which was evaluating the effect of the container metaphor model comparing the traditional model in presenting PVs, was achieved. Quantitative comparative analyses of a sequence of four tests revealed that intermediate-level students who followed the container metaphor model which used image schemas as a way of presenting PVs was significantly better than the traditional model that relied mainly on memorization in both learning and retaining PVs.

In terms of pedagogical implications, the findings of the current study may play a significant role in assisting ESL teachers and researchers in using the conceptual metaphor for presenting PVs. Therefore, this model is recommended to be considered as one model of presenting PVs.

This study, which added a different dimension to the scholarship of teaching PVs, reflected how the container metaphor model may be employed as an effective model of presenting PVs. The study indicated that the container metaphor model is a very powerful tool of explaining the meaning of PVs which contain the particles *out* and *in* because many physical and abstract constructs can be conceptualized as a container.

APPENDIX A: UCF INSTITUTIONAL REVIEW BOARD APPROVAL FORM

Institutional Review Board
FWA00000351
IRB00001138
Office of Research
12201 Research Parkway
Orlando, FL 32826-3246

EXEMPTION DETERMINATION

April 12, 2019

Dear Nagham Majeed:

On 4/12/2019, the IRB determined the following submission to be human
subjects research that is exempt from regulation:

Type of Review:	Initial Study, Category 3
Title:	A Comparative Study of Two Models of Presenting Phrasal Verbs
Investigator:	Nagham Majeed
IRB ID:	STUDY00000353
Funding:	None
Grant ID:	None

This determination applies only to the activities described in the IRB submission
and does not apply should any changes be made. If changes are made, and
there are questions about whether these changes affect the exempt status of the
human research, please contact the IRB. When you have completed your
research, please submit a Study Closure request so that IRB records will be
accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or
irb@ucf.edu. Please include your project title and IRB number in all
correspondence with this office.

Sincerely,

Racine Jacques, Ph.D.
Designated Reviewer

APPENDIX B: VALENCIA COLLEGE INSTITUTIONAL REVIEW BOARD

APPROVAL FORM

VALENCIA COLLEGE
Human Research Protection (HRP) Institutional Review Board (IRB)

<u>IRB Determination Form</u>

Title of Research Protocol: A Comparative Study of Two Models of Presenting Phrasal Verbs

Principal Investigator (PI):   Nagham Majeed

Date Received by IRB Chair: April 22nd, 2019

IRB Number: 19-0025E
Based on the IRB Protocol Initial Submission Form (or, as appropriate, the IRB Continuing Review/Termination Form or the IRB Addendum/Modification Form) submitted by the Principal Investigator and for the project identified above, the following determination has been made by the Valencia IRB:

☒ The research is exempt from IRB review. Exemption category: ___2___

☐ The research is eligible for expedited review and has been approved

☐ The research is eligible for expedited review but requires modifications and re-submission before approval can be given.

☐ The research is subject to full review and will be discussed at the next IRB meeting, currently scheduled for _____.
                            (date)

☐ The research has been subjected to full review and has been approved.

☐ The research has been subjected to full review and has been disapproved.

Period of Approval: ___5/6/2019___ to ___5/6/2020___
                      (cannot be retroactive)

Exemption from Valencia IRB review does not exempt the PI or Co-PI from compliance with all applicable institutional, Federal, State, and local rules, regulations, policies, and procedures.

Although the IRB has determined that this application is exempt from IRB review, the Principal Investigator is encouraged to read, understand, and apply the attached Investigator Responsibilities document, which is required of Principal Investigators whose research protocols are approved under the Valencia IRB full or expedited review process.

If you have any remaining questions about Valencia's IRB process, contact the IRB Chair at irb@valenciacollege.edu

_____   ___5/6/2019___
Signature of IRB Chair or Designated Representative   Date

C: IRB File, IRB Members, PI Supervisor/Administrator

1

APPENDIX C: PILOT TEST

First Name:
Initial of Last Name:
Native Language:

Please match the phrasal verbs in column A with the suitable definitions in column B. Then write the corresponding letter in the space provided. There are extra definitions in each grid in column B that you do not need to use.

A	B
1. branch out ------- 2. kick in ---------- 3. lock out -------	**a.** to break a door, window etc. by hitting it with the foot very hard especially in order to enter a building. **b.** to leave your keys inside a building, room, car, etc. by mistake. **c.** to avoid doing something that you do not want to do but have to do or have promise to do. **d.** to start doing something different from what you usually do in your business, job, etc. **e.** to choose or recognize somebody carefully from a group of people or things.

4. pencil in -------- 5. tune out -------- 6. join in ----------	**a.** to start doing or becoming involved in something with other people. **b.** to make a decision without careful thought. **c.** to ignore something or stop listening to it. **d.** to cause someone to receive money as income or profit. **e.** to make an arrangement for someone to do something which is not definite, and which might be changed later.

119

7. pass out -------	**a.** to help somebody in a disagreement or difficult situation.
8. step in ---------	**b.** to completely get rid of something that is dangerous such as crime or disease.
9. hand out -------	**c.** to go to a meeting, do a job, etc. instead of the person who usually does it.
	d. to become unconscious, usually for a short time.
	e. to give something such as a book, a piece of paper, etc. to each of the people in a group or to people who are passing.

10. dive in --------	**a.** to gradually understand information, ideas and facts and realize their full meaning.
11. opt out -------	**b.** to make an official agreement to do something or to pay someone else to do something.
12. sink in -------	**c.** to start doing something very eagerly, especially without stopping to think before you do it.
	d. to help somebody in a disagreement or difficult situation.
	e. to decide not to join a group or take part in a system.

13. pop in --------	**a.** to avoid doing something that you do not want to do but have to do or have promised to do.
14. bring out -----	**b.** to succeed in doing something that is very difficult.
15. duck out------	**c.** to avoid doing something that you do not want to do but have to do or have promise to do.
	d. to go into a friend's house, an office, a shop, etc. for a short time, usually without having arranged your visit.
	e. to make a particular quality or taste more noticeable.

16. barge in ------ 17. drop out ------ 18. turn in --------	**a.** to go to bed **b.** to rudely enter a building or room without being asked especially when it is a private place and other people are in there. **c.** to choose one particular thing or person from a group. **d.** when a word, expression, or grammar rule disappears from the language. **e.** to get an agreement with another person, after a lot of argument.

APPENDIX D: PARTICIPANT INFORMED CONSENT FORM

Title of Project: A Comparative Study of Two Models of Presenting Phrasal Verbs

Principal Investigator: Nagham Majeed, doctoral student/ TESOL Track

May, 2019
Dear student,

You must be 18 years of age or older to be included in the research study and currently attending the intensive English Program at Valencia college.

The purpose of this study is to compare two models of presenting phrasal verbs, the traditional model that relies on definition and memorization with the modern container metaphor model that relies on metaphorical representation.

You have been asked to take part in this research study because you are an international student who is studying in the Intensive English Program. You must be enrolled full time for the Summer semester of 2019.
Your participation in this study is voluntary and there is no risk to you. You are free to withdraw your consent and discontinue participation in this study at any time without prejudice or penalty. Your decision to participate or not participate in this study will in no way affect your relationship with your college, including continued enrollment, grades, employment or your relationship with the individuals who may have an interest in this study.

You will watch and listen to a video in which a list of phrasal verbs will be presented. After that, you will be given various exercises to practice what you will have learned. The following tests are required in this study:

1. Pretest
2. Posttest 1
3. Posttest 2
4. Posttest 3

Your names will be removed, meaning that we are not collecting any individually identifiable information. In any reports that use your data, it will only be reported after it has been combined with other people's responses. Therefore, no one will be able to identify you when the results are reported.

Study contact for withdrawing at any time during the study, questions about the study or to report a problem: If you want to withdraw, if you have questions, concerns, or complaints:

Nagham Majeed, Graduate Student, College of Graduate Studies: PhD Education: TESOL Track

College of Community Innovation and Education, (407) 779-2312 or nagham.majeed@knights.ucf.edu

For other question, contact the chair of Valencia's Institutional Review Board at
irb@valenciacollege.edu

APPENDIX E: PRETEST

First Name:
Initial of Last Name:
Native Language:

Please match the phrasal verbs in column A with the suitable definitions in column B. Then write the corresponding letter in the space provided. There are extra definitions in each grid in column B that you do not need to use.

A	B
1. branch out ----- 2. turn in ------- 3. lock out ------- 4. fill in ---------	**a.** to go to bed. **b.** to leave your keys inside a building, room, car, etc. by mistake. **c.** to get an agreement with another person, country, or organization, after a lot of argument. **d.** to start doing something different from what you usually do in your business, job, etc. **e.** to write all the necessary information in the empty spaces on an official document or test. **f.** to reduce something or stop it increasing especially the amount of money spent by government or company.

5. pass out --------- 6. get in --------- 7. tune out --------- 8.sink in -----------	**a.** to gradually understand information, ideas and facts and realize their full meaning. **b.** to make an official agreement to do something or to pay someone else to do something. **c.** to give or teach something to people who are younger than you or live after you. **d.** to ignore something or stop listening to it. **e.** to become unconscious, usually for a short time. **f.** to arrive at your home or at work.

9. pop in --------- 10. dive in -------- 11. opt out --------- 12. figure out -------	**a.** to help somebody in a disagreement or difficult situation **b.** to go into a friend's house, an office, a shop, etc. for a short time, usually without having arranged your visit. **c.** to start doing something very eagerly, especially without stopping to think before you do it. **d.** to understand something or someone, or find the answer to a question, problem, etc., after thinking about them carefully. **e.** to decide not to join a group or take part in a system. **f.** to leave school, college, or university before you have finished your course.

13. barge in -------- 14. give out -------- 15. duck out -------- 16. pencil in --------	**a.** to avoid doing something that you do not want to do, but have to do or have promised to do. **b.** to succeed in doing something that is very difficult. **c.** to make an arrangement for someone to do something which is not definite, and which might be changed later. **d.** to rudely enter a building or room without being asked especially when it is a private place and other people are in there. **e.** to cause someone to receive money as income or profit. **f.** to produce something such as a smell, heat, light, energy, gas or a sound.

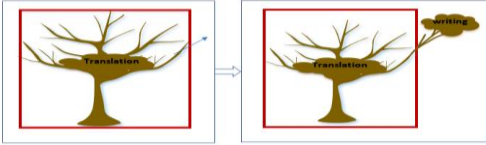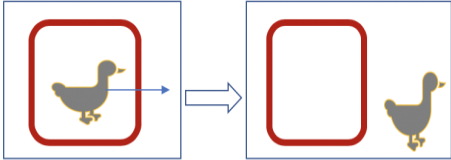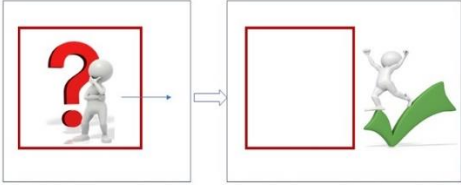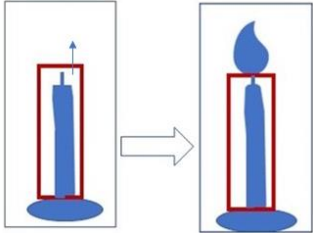**APPENDIX F: HANDOUT OF PVS FOR CONTROL GROUP**

PVs with "*out*":

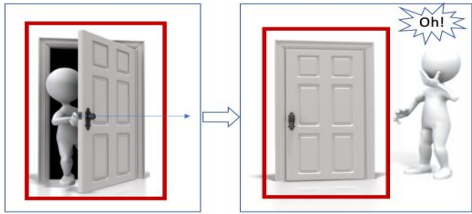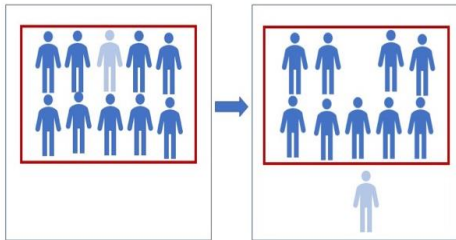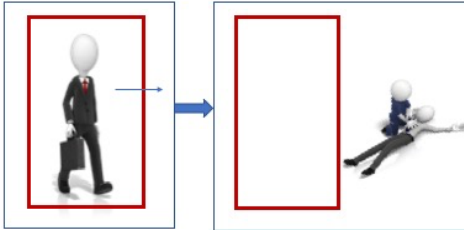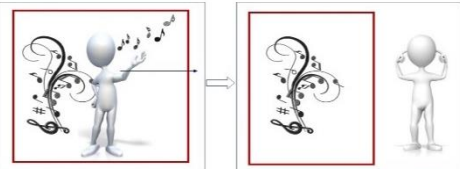| PV	Meaning	Example
1.branch out	To start doing something different from what you usually do in your business, job, etc.	*She has now **branched out** from translating work into writing her own books.*
2.duck out	To avoid doing something that you do not want to do but have to do or have promise to do.	*I am not trying to **duck out**, but I do think someone else could do this job.*
3.figure out	To understand something or someone, or find the answer to a question, problem, etc. after thinking about them carefully.	*It took her a few minutes to **figure out** what he was trying to say*
4.give out	To produce something such as smell, heat, light, energy, gas, or a sound.	*Oil stoves **give out** a lot of heat.*
5.lock out	To leave your keys inside a building, room, car etc., by mistake, with the result that you cannot get back inside it after the door has shut.	*Oh no! I have **locked** myself **out** of my room!*
6.opt out	To decide not to join a group or take part in a system.	*The company had its own pension plan, but individual employees were given the right to **opt out**.*
7.pass out	To become unconscious, usually for a short time.	*Firemen rescued the two workers who had **passed out** after breathing in smoke.*
8.tune out	To ignore something or stop listening to it.	*Harget says he hopes people will not start **tuning out** warnings about the virus.*

PVs with "*in*":

Phrasal Verb	Meaning	Example
1.barge in	To rudely enter a building or room without being asked especially when it is a private place and other people are in there.	*Gordon had an annoying habit of sitting down and **barging in** another people's conversation.*
2.dive in	To start doing something very eagerly, especially without stopping to think before you do it.	*This project is so exciting, I want to **dive in**.*
3.fill in	To add personal information such as name or address in the empty spaces on an official document	*Please, **fill in** the fields below to register.*
4. get in	To arrive at your home or at work.	*What time did you **get in** last night?*
5.pencil in	To make an arrangement for someone to do something or something to happen, which is not definite, and which may be changed later.	*He has a meeting **penciled in** with the Japanese Prime Minister in May.*
6.pop in	To go into a friend's house, an office, a shop etc. for a short time, usually without having arranged your visit.	*She sometimes used to **pop in** for a cup of tea and a chat on her way home.*
7.sink in	If information, ideas, or facts sink in, you gradually understand them and realize their full meaning.	*Ron paused, as if to let the message **sink in**.*
8.turn in	To go to bed.	*Well, I think I will **turn in** now— I have to get up early tomorrow.*
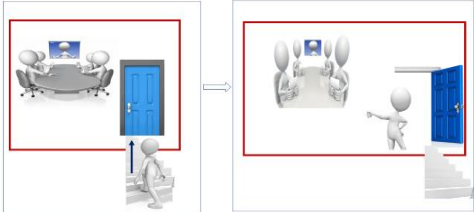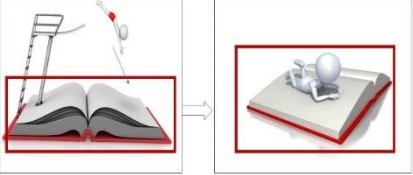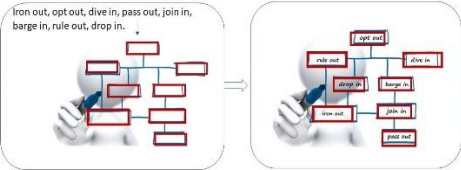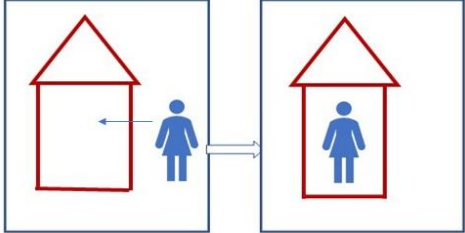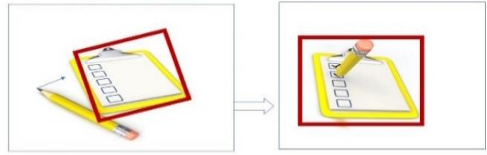
APPENDIX G: HANDOUT OF PVS FOR EXPERIMENTAL GROUP
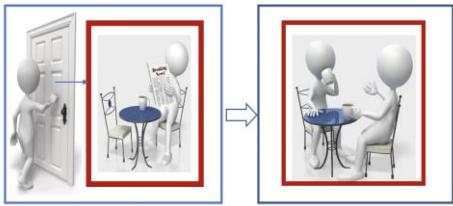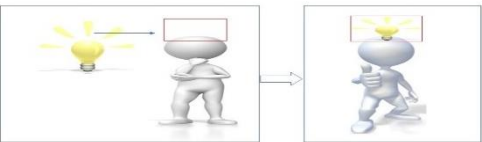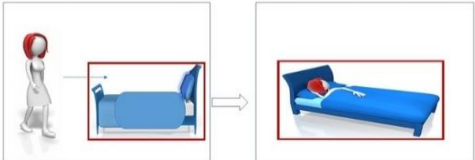
PVs with "*out*":

PV	Container Metaphor	Meaning	Example
1.branch out	Regular activities are containers	To start doing something different from what you usually do in your business, job, etc.	*She has now* ***branched out*** *from translating work into writing her own books.*
2. duck out	Duties are container	To avoid doing something that you do not want to do but have to do or have promise to do.	*I am not trying to* ***duck out***, *but I do think someone else could do this job.*
3.figure out	A problem is a container	To understand something or someone, or find the answer to a question, problem, etc. after thinking about them carefully.	*It took her a few minutes to* ***figure out*** *what he was trying to say.*
4.give out	Source is a container	To produce something such as smell, heat, light, energy, gas, or a sound.	*Oil stoves* ***give out*** *a lot of heat.*

5. lock out	Building is a container	To leave your keys inside a building by mistake, with the result that you cannot get back inside it after the door has shut.	*Oh no! I have **locked** myself **out** of my room.*
6. opt out	A Group of People is a Container	To decide not to join a group or take part in a system.	*The company had its own pension plan, but individual employees were given the right to **opt out**.*
7. pass out	Conscious state is a container	To become unconscious, usually for a short time.	*Firemen rescued the two workers who had **passed out** after breathing in smoke.*
8. tune out	Listening state is a container	To ignore something or stop listening to it.	*Harget says, he hopes people will not start **tuning out** warnings about the virus.*

PV	Container Metaphor	Meaning	Example
1.barge in	Meeting is a container	To rudely enter a building or room without being asked, especially when it is a private place and other people are in there.	*Connors **barged in** when we were in the middle of a meeting.*
2.dive in	Project is a container	To start doing something very eagerly, especially without stopping to think before you do it.	*This project is so exciting, I want to **dive in**.*
3.fill in	Blank is a container.	To add personal information such as name or address in the empty spaces on an official document.	*Please, **fill in** the fields below to register.*
4.get in	Home is a container	To arrive at your home or at work.	*What time did you **get in** last night?*
5.pencil in	Schedule is a container	To make an arrangement for someone to do something or something to happen, which is not definite, and which may be changed later.	*I will **pencil** you **in** for next Tuesday morning at 10 o'clock.*

133

6. pop in	Building is a Container	To go into a friend's house, an office, a shop etc. for a short time, usually without having arranged your visit.	*She sometimes used to* ***pop in*** *for a cup of tea and a chat on her way home.*
7.sink in	Mind is a container	If information, ideas, or facts sink in, you gradually understand them and realize their full meaning.	*Ron paused, as if to let the message* ***sink in***.
8.turn in	Bed is a container	To go to bed.	*Well, I think I will* ***turn in*** *now— I have to get up early tomorrow.*

APPENDIX H: POSTTEST 1

First Name:
Initial of Last Name:
Native Language:

Please match the phrasal verbs in column A with the suitable definitions in column B. Then write the corresponding letter in the space provided. There are extra definitions in each grid in column B that you do not need to use.

A	B
1. pass out --------- 2. get in ---------- 3. tune out ---------- 4.sink in --------	**a.** to become unconscious, usually for a short time. **b.** to gradually understand information, ideas and facts and realize their full meaning. **c.** to give or teach something to people who are younger than you or live after you. **d.** to ignore something or stop listening to it. **e.** to make an official agreement to do something or to pay someone else to do something. **f.** to arrive at your home or at work.

5. lock out --------- 6.fill in -------- 7.branch out ------ 8. turn in ---------	**a.** to reduce something or stop it increasing especially the amount of money spent by government or company. **b**. to leave your keys inside a building, room, car, etc. by mistake. **c.** to get an agreement with another person, country, or organization, after a lot of argument. **d.** to start doing something different from what you usually do in your business, job, etc. **e.** to write all the necessary information in the empty spaces on an official document or test. **f.** to go to bed.

13. give out ------ 14. barge in ------- 15. duck out ------ 16. pencil in ------	**a.** to cause someone to receive money as income or profit. **b.** to succeed in doing something that is very difficult. **c.** to avoid doing something that you do not want to do, but have to do or have promised to do. **d.** to make an arrangement for someone to do something which is not definite, and which might be changed later. **e.** to rudely enter a building or room without being asked especially when it is a private place and other people are in there. **f.** to produce something such as a smell, heat, light, energy, gas or a sound.

9. Pop in ------- 10. dive in -------- 11. opt out ------- 12. figure out ----	**a.** to help somebody in a disagreement or difficult situation **b.** to go into a friend's house, an office, a shop, etc. for a short time, usually without having arranged your visit. **c.** to start doing something very eagerly, especially without stopping to think before you do it. **d.** to understand something or someone, or find the answer to a question, problem, etc., after thinking about them carefully. **e.** to decide not to join a group or take part in a system. **f.** to leave school, college, or university before you have finished your course.

APPENDIX I: EXETESTS

Exetest 1: Replace the following definitions by phrasal *verbs* with *out* or *in*

(*branch out, dive in, figure out, lock out, pencil in, pop in, sink in, tune out*)

1. To understand something or someone, or find the answer to a question, problem, etc. after thinking about them carefully. ---------------

2. To ignore something or stop listening to it. -------------

3. To start doing something very eagerly, especially without stopping to think before you do it. ---------------

4. To start doing something different from what you usually do in your business, job, work, etc. --------------

5. To make an arrangement for someone to do something or something to happen, which is not definite, and which may be changed later. ---------------

6. To leave your keys inside a building, room, car etc. by mistake, with the result that you cannot get back inside it after the door has shut. ----------------

7. To go into a friend's house, an office, a shop etc. for a short time, usually without having arranged your visit. ----------------

8. To gradually understand information, ideas or facts and realize their full meaning. ---------------

Exetest 2: Replace the expressions in bolds by phrasal verbs with *out* or *in*.

(*barge in, duck out, fill in, get in, give out, opt out, pass out, turn in*)

1. Please, **add your personal information in** the fields below to register. --------

2. What time did you **arrive at your home** last night? ----------

3. I think I will **go to bed** now because I am getting sleepy. ----------

4. You cannot **enter the room without knocking** when we were in the middle of a meeting. ---------

5. You cannot **avoid doing something you have promised to do**. -----------

6. These candles **produce** lots of light. ------------

7. The players can **decide not to join** at any time in this game. ----------

8. Susan and her sister always **lose consciousness** at the sight of blood. ---------

APPENDIX J: POSTTEST 2

First Name:
Initial of Last Name:
Native Language:

Please match the phrasal verbs in column A with the suitable definitions in column B. Then write the corresponding letter in the space provided. There are extra definitions in each grid in column B that you do not need to use.

A	B
1. barge in --------	**a.** to rudely enter a building or room without being asked especially when it is a private place and other people are in there.
2. duck out --------	**b.** to succeed in doing something that is very difficult.
3. pencil in --------	**c.** to cause someone to receive money as income or profit.
4. give out ---------	**d.** to make an arrangement for someone to do something which is not definite, and which might be changed later.
	e. to avoid doing something that you do not want to do, but have to do or have promised to do.
	f. to produce something such as a smell, heat, light, energy, gas or a sound.

5. lock out --------	**a.** to reduce something or stop it increasing especially the amount of money spent by government or company.
6.turn in ----------	**b**. to leave your keys inside a building, room, car, etc. by mistake.
7.branch out -------	**c.** to get an agreement with another person, country, or organization, after a lot of argument.
8. fill in ----------	**d.** to start doing something different from what you usually do in your business, job, etc.
	e. to go to bed.
	f. to write all the necessary information in the empty spaces on an official document or test.

9. pop in -------- 10. dive in --------- 11. opt out --------- 12. figure out -------	**a.** to help somebody in a disagreement or difficult situation **b.** to go into a friend's house, an office, a shop, etc. for a short time, usually without having arranged your visit. **c.** to start doing something very eagerly, especially without stopping to think before you do it. **d.** to understand something or someone, or find the answer to a question, problem, etc., after thinking about them carefully. **e.** to decide not to join a group or take part in a system. **f.** to leave school, college, or university before you have finished your course.

13. pass out --------- 14. get in -------- 15. tune out --------- 16. sink in ---------	**a.** to give or teach something to people who are younger than you or live after you. **b.** to gradually understand information, ideas and facts and realize their full meaning. **c.** to become unconscious, usually for a short time. **d.** to ignore something or stop listening to it. **e.** to make an official agreement to do something or to pay someone else to do something. **f.** to arrive at your home or at work.

APPENDIX K: POSTTEST 3

First Name:
Initial of Last Name:
Native Language:

Please match the phrasal verbs in column A with the suitable definitions in column B. Then write the corresponding letter in the space provided. There are extra definitions in each grid in column B that you do not need to use.

A	B
1. lock out --------- 2. turn in ---------- 3. branch out ------- 4. fill in -----------	**a.** to write all the necessary information in the empty spaces on an official document or test. **b.** to start doing something different from what you usually do in your business, job, etc. **c.** to get an agreement with another person, country, or organization, after a lot of argument. **d.** to leave your keys inside a building, room, car, etc. by mistake. **e.** to go to bed. **f.** to reduce something or stop it increasing especially the amount of money spent by government or company.

5. pass out --------- 6. sink in ---------- 7. tune out -------- 8.get in -----------	**a.** to arrive at your home or at work. **b.** to make an official agreement to do something or to pay someone else to do something. **c.** to give or teach something to people who are younger than you or live after you. **d.** to ignore something or stop listening to it. **e.** to become unconscious, usually for a short time. **f.** to gradually understand information, ideas and facts and realize their full meaning.

9. figure out --------	**a.** to leave school, college, or university before you have finished your course.
10. dive in --------	**b.** to understand something or someone, or find the answer to a question, problem, etc., after thinking about them carefully.
11. opt out --------	
12. pop in---------	**c.** to start doing something very eagerly, especially without stopping to think before you do it.
	d. to go into a friend's house, an office, a shop, etc. for a short time, usually without having arranged your visit.
	e. to decide not to join a group or take part in a system.
	f. to help somebody in a disagreement or difficult situation.

13. barge in --------	**a.** to avoid doing something that you do not want to do but have to do or have promised to do.
14. duck out -------	**b.** to succeed in doing something that is very difficult.
15. give out --------	**c.** to make an arrangement for someone to do something which is not definite, and which might be changed later.
16. pencil in --------	**d.** to rudely enter a building or room without being asked especially when it is a private place and other people are in there.
	e. to cause someone to receive money as income or profit.
	f. to produce something such as a smell, heat, light, energy, gas or a sound.

17. drop out -------- 18. kick in -------- 19. hand out -------	**a.** to break a door, window etc. by hitting it with the foot very hard especially in order to enter a building. **b.** to completely get rid of something that is dangerous such as crime or disease. **c.** to go to a meeting, do a job etc. instead of the person who usually does it. **d.** when a word, expression, or grammar rule disappears from the language. **e.** to give something such as a book, a piece of paper, etc. to each of the people in a group or to people who are passing.

20. bring out -------- 21. step in -------- 22. join in --------	**a.** to start doing or becoming involved in something with other people. **b.** to make a decision without careful thought. **c.** to help somebody in a disagreement or difficult situation. **d.** to cause someone to receive money as income or profit. **e.** to make a particular quality or taste more noticeable.

REFERENCES

Aldahesh, A. (2008). *Translating idiomatic English phrasal verbs into Arabic* (Doctoral

dissertation). Retrieved from

https://researchdirect.westernsydney.edu.au/islandora/object/

uws%3A3667/datastream/PDF/view

Alejo, R. (2012). Variability in L2 acquisition of formulaic sequences: A study of linguistic

factors in the use and learning of phrasal verbs by non-native speakers. *Language Value*,

4(1), 33-62.

Ansari, M. J. (2016). The acquisition of phrasal verbs through cognitive linguistic approach: The

case of Iranian EFL learners. *Advances in Language and Literary Studies*, *7*(1), 185-194.

Assessment Capacities Project (ACAPS). (2012). *Qualitative and quantitative research*

techniques for humanitarian needs assessment. Retrieved from

https://reliefweb.int/sites/reliefweb.int/files/resources/qualitative_and_quantitative_resear

ch_techniques.pdf

Baharian, E., & Rezai, M. J. (2014). The effect of proverbs on learning vocabulary through

visual organizers. *International Journal of English Language Teaching*, *2*(4), 16-32.

Baker, M. (2011). *In other words: A coursebook on translation*. London, UK, and New York,

NY: Routledge.

Biber, D., Johannson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of*

spoken and written English. Essex, UK: Pearson Education Limited.

Boers, F. (2000). Metaphor awareness and vocabulary retention. *Applied Linguistics*, *21*(4), 553-

571.

Boers, F. (2004). Expanding learners' vocabulary through metaphor awareness: What expansion, what learners, what vocabulary. *Cognitive Linguistics, Second Language Acquisition, and Foreign Language Teaching*, *36*(2), 211-232.

Bolinger, D. (1971). *The phrasal verb in English.* Cambridge, MA: Harvard University Press.

Celce-Murcia, M., & Larsen-Freeman, D. (1999). *The grammar book: An ESL/EFL teacher's course*. Independence, KY: Heinle MyELT.

Cheng, H. F., & Dörnyei, Z. (2007). The use of motivational strategies in language instruction: The case of EFL teaching in Taiwan. *Innovation in Language Learning and Teaching, 1*(1), pp. 153-174.

Cohen, J. A. (1988). *Statistical power analysis for the behavioral sciences*. Mahwah, NJ: Lawrence Erhlbaum.

Condon, N. (2008). How cognitive linguistic motivations influence the learning of phrasal verbs. In F. Boers & S. Lindstromberg (Eds.), *Cognitive linguistic approaches to teaching vocabulary and phraseology* (pp. 133–158). Berlin, Germany: Mouton de Gruyter.

Condon, N., & Kelly, P. (2002). Does cognitive linguistics have anything to offer English language learners in their efforts to master phrasal verbs*? ITL-International Journal of Applied Linguistics, 137*(1), 205-231.

Criado, R. (2013). A critical review of the presentation-practice-production model (PPP) in foreign language teaching. In R. Monroe (Ed.), *Homenaje a Francisco Gutiérrez Díez* (pp. 97-115). Murcia: Edit.um, 2013.

Crutchley, A. (2007). Comprehension of idiomatic verb+ particle constructions in 6-to 11-year-old children. *First Language*, *27*(3), 203-226.

Dagut, M., & Laufer, B. (1985). Avoidance of phrasal verbs—A case for contrastive analysis. *Studies in Second Language Acquisition*, *7*(1), 73-79.

Deignan, A., Gabrys, D., & Solska, A. (1997). Teaching English metaphors using cross-linguistic awareness-raising activities. *ELT Journal, 51*(4), 352-360.

Dirven, R. (2001). The metaphoric in recent cognitive approaches to English phrasal verbs. *Metaphorik, 1,* 39-54.

Dixon, R. M. (2005). *A semantic approach to English grammar.* Oxford, UK: Oxford University Press.

Flower, J. (1993). *Phrasal verbs organizer.* Hove, UK: Language Teaching Publications.

Folse, K. S. (2004). *Vocabulary myths: Applying second language research to classroom teaching*. Ann Arbor, MI: University of Michigan Press.

Folse, K. S. (2016). *Keys to teaching grammar to English language learners: A practical handbook*. Ann Arbor, MI: University of Michigan Press.

Folse, K. S. (2018). *The grammar answer key: Short explanations to 100 ESL questions*. Ann Arbor, MI: University of Michigan Press.

Fraser, B. (1976). *The verb-particle combination in English.* New York, NY: Academic Press.

Gairns, R., & Redman, S. (1986). *Working with words: A guide to teaching and learning vocabulary*. Cambridge, UK: Cambridge University Press.

Ganji, M. (2011). The best way to teach phrasal verbs: Translation, sentential contextualization or metaphorical conceptualization? *Theory and Practice in Language Studies*, *1*(11), 1497-1506.

Gardner, D., & Davies, M. (2007). Pointing out frequent phrasal verbs: A corpus-based analysis. *TESOL Quarterly*, *41*(2), 339-359.

Garnier, M., & Schmitt, N. (2015). The PHaVE List: A pedagogical list of phrasal verbs and

       their most frequent meaning senses. *Language Teaching Research*, *19*(6), 645-666.

Gibbs, R. W. (1990). Psycholinguistic studies on the conceptual basis of idiomaticity. *Cognitive*

       Linguistics, *1*(4), 417-452.

Goodale, M. (1998). *Collins cobuild phrasal verb workbook.* London, UK: Harper Collins

       Publishers.

Gries, S. (2002). *The influence of processing on syntactic variation: Particle placement in*

       English. In N. Dehe, R. Jackendoff, A. McIntyre, & S. Urban (Eds.), *Verb-particle*

       explorations. Berlin, Germany, and New York, NY: Mourton de Gruyter.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least*

       squares structural equation modeling (PLS-SEM). Los Angeles, CA: Sage.

Hill, M., & Laufer, B. (2003). Type of task, time-on-task and electronic dictionaries in incidental

       vocabulary acquisition. *International Review of Applied Linguistics*, *41*(2), 87-106.

Holme, R. (2012). Cognitive linguistics and the second language classroom. *TESOL Quarterly,*

       46(1), 6-29.

Hulstijn, J. H., & Laufer, B. (2001). Some empirical evidence for the involvement load

       hypothesis in vocabulary acquisition. *Language Learning*, *51*(3), 539-558.

Hulstijn, J. H., & Marchena, E. (1989). Avoidance: Grammatical or semantic causes? *Studies in*

       Second Language Acquisition, 11(3), 241-255.

Irujo, S. (1986). Don't put your leg in your mouth: Transfer in the acquisition of idioms in a

       second language. *TESOL Quarterly, 20*(2), 287-304.

Jackendoff, R. (2002). *English particle constructions, the lexicon, and the autonomy of syntax.*

       Verb-particle explorations. Berlin, Germany, and New York, NY: Mourton de Gruyter.

Johnson, M. (1987). *The body in the mind: The bodily basis of meaning, imagination and reason.* Chicago, IL: The University of Chicago Press.

Johnson, M. (2013). *The body in the mind: The bodily basis of meaning, imagination, and reason*. Chicago, IL: University of Chicago Press.

Kartal, G., & Uner, S. (2017). The effects of conceptual metaphors on the acquisition of phrasal verbs by Turkish EFL learners. *European Journal of Foreign Language Teaching, 2*(2), 34-51.

Knight, S. (1994). Dictionary use while reading: The effects on comprehension and vocabulary acquisition for students of different verbal abilities. *The Modern Language Journal*, *78*(3), 285-299.

Koprowski, M. (2005). Investigating the usefulness of lexical phrases in contemporary coursebooks. *ELT Journal*, *59*(4), 322-332.

Kovacs, E. (2007). Reflections on English phrasal verbs. *Publicationes Universitatis Miskolcinensis*, 5-18.

Kovacs, E. (2011a). *The traditional vs. cognitive approach to English phrasal verbs. Journal of Linguistics*, (1), 141-160. Retrieved from http://www.uni-miskolc.hu/~philos/2011_tom_XVI_1/141.pdf

Kovacs, E. (2011b). Polysemy in traditional vs. cognitive linguistics. *Eger Journal of English Studies, XI*, 3-19.

Kovecses, Z. (2010). *Metaphor: A practical introduction*. Oxford, UK: Oxford University Press.

Kovecses, Z., & Szabco, P. (1996). Idioms: A view from cognitive semantics. *Applied Linguistics, 17*(3), 326-355.

Kurtyka, A. (2001). Teaching English phrasal verbs: A cognitive approach. *Applied Cognitive Linguistics II: Language Pedagogy*, 29-54.

Lakoff, G. (1987). *Women, fire, and dangerous things*. Chicago, IL: University of Chicago Press.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by.* Chicago, IL: University of Chicago Press.

Lakoff, G., & Johnson, M. (2003). *Metaphors we live by.* Chicago, IL: University of Chicago Press.

Laufer, B. (2013). *Vocabulary and writing.* In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics* (pp. 1-5). John Wiley and Sons, Inc. doi:10.1002/9781405198431.wbeal1432

Laufer, B., & Eliasson, S. (1993). What causes avoidance in L2 learning: L1-L2 difference, L1-L2 similarity, or L2 complexity? *Studies in Second Language Acquisition*, *15*(1), 35-48.

Lee, H. W. (2012). Concept-based approach to second language teaching and learning: Cognitive linguistics-inspired instruction of English phrasal verbs (doctoral dissertation). Retrieved from https://etda.libraries.psu.edu/files/final_submissions/7097

Liao, Y., & Fukuya, Y. J. (2004). Avoidance of phrasal verbs: The case of Chinese learners of English. *Language Learning*, *54*(2), 193-226.

Lindner, S. J. (1982). *A lexico-semantic analysis of English verb particle constructions with out and up.* Bloomington, IN: Indiana University Linguistics Club.

Lipka, L. (1972). *Semantic structure and word formation: Verb-particle constructions in contemporary English.* Retrieved from https://epub.ub.uni-muenchen.de/5050/1/5050.pdf

Lipka, L. (1975). *Semantic structure and word formation: Verb-particle constructions in contemporary English.* Munich, Germany: Wilhelm Fink.

Live, A. H. (1965). The discontinuous verb in English. *Word*, *21*(3), 428-451.

Longman. (2000). *Longman phrasal verbs dictionary: Over 5,000 phrasal verbs.* Harlow, Essex, UK: Pearson Education Ltd.

Lu, Z., & Sun, J. (2017). Presenting English polysemous phrasal verbs with two metaphor-based cognitive methods to Chinese EFL learners. *System*, *69*, 153-161.

Mahpeykar, N., & Tyler, A. (2015). A principled cognitive linguistics account of English phrasal verbs with up and out. *Language and Cognition, 7*(1), 1-35.

Mart, C. T. (2012). How to teach phrasal verbs. *English Language Teaching*. *5*(6), 114.

Mayor, M. (Ed.). (2009). *Longman dictionary of contemporary English*. Delhi, India: Pearson Education India.

McArthur, T. (1975). *Using phrasal verbs (2nd ed.).* London and Glasgow, UK: Collins.

Moon, R. (2005). *Metaphor and phrasal verbs.* Retrieved from http://www.macmillandictionaries.com/wp-content/uploads/2011/03/verbs-Language-Study-Metaphor.pdf

Morgan, P. S. (1997). Figuring out figure out. Metaphor and the semantics of the English verb-particle construction. *Cognitive Linguistics*, *8*(4), 327-358.

Nassaji, H., & Fotos, S. (2011). *Teaching grammar in second language classrooms. Integrating form-focused instruction in communicative context.* New York, NY: Routledge.

Nassaji, H., & Tian, J. (2010). Collaborative and individual output tasks and their effects on learning English phrasal verbs. *Language Teaching Research*, *14*(4), 397-419.

Neagu, M. (2007). English verb particles and their acquisition: A cognitive approach. *Revista Española de Lingüística Aplicada*, *20*, 121-138.

Nhu, N., & Huyen, P. (2009). *Conceptual metaphor and its application in teaching phrasal verbs to English majors at Thuc Hanh High School, HCMC* (doctoral dissertation). Retrieved

from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.476.9381&rep=rep
1&type=pdf

Plass, J. L., Chun, D. M., Mayer, R. E., & Leutner, D. (1998). Supporting visual and verbal
learning preferences in a second-language multimedia learning environment. *Journal of
Educational Psychology*, *90*(1), 25.

Pütz, M. (2007). *Cognitive linguistics and applied linguistics.* In *The Oxford handbook of
cognitive linguistics*. New York, NY: Oxford Handbooks Online.

Quirk, R., Greenbaum, S., & Leech, G. (1985). *A contemporary grammar of the English
language.* London, UK: Longman.

Requejo, M. D. P., & Diaz, C. P. (2008). A cognitive approach to some phrasal verbs in English
for Specific Purposes. Ibérica: *Revista de la Asociación Europea de Lenguas para Fines
Específicos (AELFE), 16*, 109-128.

Richards, J. C., & Schmidt, R. (2002). *Longman dictionary of applied linguistics and language
teaching.* Harlow, UK: Longman.

Rosca, A., & de Altamirano, Y. B. (2016). Tracking down phrasal verbs: the case of up and
down. *Onomázein: Revista de lingüística, filología y traducción de la Pontificia
Universidad Católica de Chile*, *34*, 296-321.

Rudzka-Ostyn, B. (2003). *Word power: Phrasal verbs and compounds: A cognitive approach.*
Berlin, Germany: Mouton de Gruyter.

Sawyer, J. H. (1999). Verb adverb and verb particle constructions: Their syntax and acquisition.
(Unpublished doctoral dissertation). Boston University.

Side, R. (1990). Phrasal verbs: Sorting them out. *ELT Journal, 44*(2), 144-152.

Siyanova, A., & Schmitt, N. (2007). Native and nonnative use of multi-word vs. one-word verbs. *IRAL-International Review of Applied Linguistics in Language Teaching*, *45*(2), 119-139.

Spears, R. A. (2005). *McGraw-Hill's dictionary of American idioms and phrasal verbs*. New York: NY: McGraw-Hill.

Spitz, S. I. (2005). *The American heritage dictionary of phrasal verbs.* Boston, MA: Houghton Mifflin.

Stefanowitch, A., & Gries, S. T. (2005). Covarying collexemes. *Corpus Linguistics and Linguistic Theory, 1,* 1-43. doi:10.1515/cllt.2005.1.1.1

Talebinejad, M. R., & Sadri, E. (2013). Applying cognitive linguistics to teaching conceptual basis of *up* and *down* in phrasal verbs. *Journal of Basic and Applied Scientific Research, 3*(1), 333-340.

Talebinezhad, M. R., & Farhadian, N. (2014). A comparative study of two cognitive models in teaching idiomatic phrasal verbs: Tyler and Evan's vs. Lakoff and Johnson's approach. *Theory and Practice in Language Studies*, *4*(8), 1621-1627.

Taylor, J. (1989). *Linguistic categorization.* Oxford, UK: Clarendon Press.

Thom, D. (2017). A cognitive linguistic approach to phrasal verbs: A teacher's guide (Published thesis). Western Oregon University. Retrieved from https://digitalcommons.wou.edu/cgi/viewcontent.cgi?article=1139&context=honors_theses

Trask, R. L. (1993). *A dictionary of grammatical terms in linguistics.* London, UK: Routledge.

Turnbull, J., Lea, D., Parkinson, D., Phillips, P., Francis, B., Webb, S., & Ashby, M. (2010). *Oxford advanced learner's dictionary. International Student's Edition*. Oxford, UK: Oxford University Press.

Tyler, A., & Evans, V. (2003). *The semantics of English prepositions: Spatial scenes, embodied meaning, and cognition.* London, UK: Cambridge University Press.

Walkova, M. (2012). Helping students figure out the meaning of phrasal verbs. In *FORLANG: Foreign languages in the academic environment. Kosice: TUKE*, 169-178.

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

Wyss, R. (2002). *Teaching English multi-word verbs is not a lost cause after all*. *ELT Newsletter, 90*. Retrieved from

https://resource.mccneb.edu/eslx/Teacher%20Resources/teaching

%20phrasal%20verbs.doc

Yang, Y., & Hsih, C. (2010). Conceptual metaphor awareness on English phrasal verbs teaching and learning for adolescents in Taiwan. Retrieved October 20, 2010 from

ir.lib.ncku.edu.tw/handle/987654321/108255

Yasuda, S. (2010). Learning phrasal verbs through conceptual metaphors: A case of Japanese EFL learners. *TESOL Quarterly*, *44*(2), 250-273.