The Effect of Focus on Form and Focus on Forms Instruction on the Acquisition of Phrasal Verbs by Chinese Students

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Bio data

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Abstract

This study compared the effectiveness of two instructional approaches—focus on forms (FonFs) and focus on form (FonF)—on the acquisition of phrasal verbs by 90 Chinese tertiary-level students of limited English proficiency. This study first defined FonFs and FonF and presented the theoretical rationale for applying both types of instruction when teaching and learning phrasal verbs. Additionally, FonFs instruction (operationalized through present-practice-produce phases), and FonF instruction (operationalized through reading tasks), were evaluated as to how each type improve learners’ acquisition of phrasal verbs. Learning outcomes were measured through three tests administered immediately after treatment. These tests included word form recall, meaning recall, and word usage. Results revealed significantly higher scores for students in the FonFs group. In addition, word usage was the least acquired vocabulary knowledge while word meaning recall was the most acquired knowledge for learners in each group. Findings indicated that form-focused instruction, particularly FonFs, is beneficial and indispensable for learning phrasal verbs.

Key words: Form-focused instruction; focus on form; focus on forms; phrasal verbs

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Introduction

Acquisition of new words in a foreign language depends on how well the learners process these words (Laufer & Hulstijn, 2001; Teng & Zhang, 2015). Word processing can be induced through form-focused instruction (FFI). The pedagogical approach of FFI to foreign language education can be regarded as a reaction to communicative language teaching, for which proponents have believed that comprehensible input and meaning-oriented tasks were essential for language acquisition. When it became evident that students who learn English as a foreign language (EFL) are unlikely to attain sufficient levels of language competence from mere meaning-centered instruction, FFI gained researchers’ attention because incorporation of FFI into communicative language teaching can accelerate the development of the target language system and thereby facilitate language acquisition (Laufer & Girsai, 2008). The term ‘form’ denotes a function that a particular structure performs. For instance, the form ‘-ed’ indicates an action that occurred in the past and which does not extend into the present.

FFI, an approach in helping learners to acquire features of a target language through communicative or content-based instruction, includes two types of instruction: Focus on Form (FoF) and Focus on Forms (FoFs) (Ellis, 2001). FoF had been defined as drawing learners’ attention to linguistic elements as they incidentally occur during authentic communicative tasks with a paramount focus on meaning or communication (de La Fuente, 2002; Ellis & He, 1999; Long, 1991). Learners’ overriding focus remains on processing the message they want to communicate, or the message in the input they are receiving, even though there is an occasional shift of learners’ attention from meaning to linguistic structures. This shift may happen when learners attempt to solve a comprehension or production problem. Commonly, FoF can be initiated by the teacher or the learners themselves. Form-function mapping is the core feature of FoF instruction. That is, through exposure to examples of language use concentrating on meaning, learners notice the cues in the language and subsequently discern how to use the cues for specific functions. For example, awareness of the form ‘-s’ subsumes the realization that ‘-s’ designates more than one of the items specified.

FoFs instruction is concerned solely with the explicit focus on linguistic forms. This involves teaching discreet elements (i.e., grammar structures) through non-communicative and mainly decontextualized practice (Long, 1996). Traditionally, this can be accomplished during separate lessons in a sequence determined by syllabus writers, or a series of corresponding procedures.
specifically designed for intentionally acquiring some target linguistic forms. In this type of instruction, learners’ paramount concentration is oriented toward linguistic forms, though meaning is not excluded.

Theoretically, FonF can be connected to certain hypotheses: noticing (Schmidt, 1990), limited processing capacity (VanPatten, 1990), and pushed output (Swain, 1985). First, learners need to consciously notice forms and the meanings associated with the forms to convert the input into effective acquisition. Furthermore, for those learners who have a limited capacity for simultaneously processing form and meaning, they may concentrate on meanings rather than the form within an authentic communicative task. Pushed output is then essential to draw learners’ attention to the form or a more syntactic processing mode than mere comprehension. Put simply, they need to be pushed to notice structures in the foreign language and modify their output. FonF also draws on a theory that emphasizes on interaction, which includes two constructs: negotiation of form and negotiation of meaning. These two constructs serve to draw learners’ attention to form and meaning while they are communicating. Negotiation of form takes place when learners are attempting to communicate and their erroneous production has been corrected. Negotiation of meaning takes place when learners employ strategies for communication until successful comprehension is achieved. In an early study (Ellis, Tanaka, & Yamazaki, 1994), findings revealed that in terms of vocabulary acquisition, learners who were able to negotiate meaning of the input performed better than those who received unmodified input or simplified input and were unable to negotiate meaning. It could be concluded that when learners received an opportunity to negotiate meaning, they performed better in acquiring new words, because learners’ cognitive processes of noticing and also noticing the gap between input observations and their own output were induced.

Realization of FonF requires a task-based approach. Tasks can be input-based or output-based. In input-based tasks, learners are required to comprehend input in an attempt to achieve the task outcome. In this regard, some kind of nonverbal response may be involved. Input-based tasks can be designed in such a way that learners are only able to achieve the outcome if they have both noticed and comprehended the specific linguistic forms needed to achieve the outcome. Learners receive feedback on their nonverbal responses, which helps them to determine whether they have processed the input correctly.

The theoretical foundation of FonFs, on the other hand, can be identified as skill acquisition theory, which entails three stages. The first stage is acquiring declarative knowledge, which is to
understand particular linguistic features. The second stage is acquiring proceduralized knowledge, which is to know what to do with language data and put it into practice. The third stage is automatization of procedural knowledge, which is the ability to use language according to specific rules without thinking about them (DeKeyser, 1998). The transformation from stages one to three can be achieved through present-practice-produce (PPP; Ur, 1996), or practice of specific linguistic forms systematically and deliberately (Dekeyser, 2007).

Overall, FonF involves incidental learning while FonFs involves intentional learning (Ellis, Basturkmen, & Loewen, 2002; Sheen, 2002). Intentional word learning is a way in which learners consciously make word forms to memorize the words along with their meanings. Incidental vocabulary learning, on the other hand, encourages vocabulary growth among students by avoiding direct focus on word learning activities, in such a way that the vocabulary growth becomes a positive by-product in the process of accomplishing other goals (Hulstijn, 2013; Teng, 2016a). The difference between the two modes of learning is the lack of deliberate attempts by the learners to learn or use a specific linguistic feature.

Ellis (2001) delineated a distinction between the two types of instruction. Students receiving FonFs instruction perceived themselves as learners of a language and the language as the object of study. On the other hand, students receiving FonF instruction considered themselves as language users and language was deemed as a tool or a means for communication. The distinction between FonF and FonFs has often been linked to the teaching and learning of grammar, and many previous empirical studies have been conducted mainly in the context of acquisition of grammar (e.g., Loewen, Erlam, & Ellis, 2009; Shintani, 2015). However, these two instructional approaches can be adapted easily to the teaching and learning of vocabulary. For example, FonF can be regarded as an occasional shift of learners’ awareness from meaning to lexical items and the meaning that the items convey within a communicative task environment. This shift can be triggered when these lexical items are important for the comprehension or the completion of an authentic task. FonFs can be considered as teaching discreet lexical items in a linear, additive fashion, e.g., through a linear syllabus, a set of instructional materials, and relevant corresponding procedures designed to present and practice a series of lexical words. Similar to Ellis’s (2001) view of grammar, the main feature of the FonF approach to vocabulary is the form-function mapping because the words are the tools for task completion while the FonFs approach treats the lexical items as the objects of study. FonF and FonFs have recently been clearly linked to the acquisition of vocabulary (e.g.,
Laufer & Rozovski-Roitblat, 2011, 2014; Shintani, 2013). It has been suggested that, similar to grammar, vocabulary teaching and learning benefit from FFI (Laufer & Girsai, 2008).

However, extensive research on the effects that FFI has on vocabulary learning has not received much intensified attention. One main reason is that many researchers have insisted that vocabulary can be sufficiently acquired through meaning-centered instruction, or that words can be acquired with very little focus on form (DeKeyser, 1998). However, many research findings have shown that learners have not necessarily noticed new words when merely being exposed to language input. Even though some have, guessing them was still difficult for the learners, let alone comprehending and memorizing the words (Laufer, 2005; Teng & He, 2015). Therefore, a realistic condition for sufficient vocabulary acquisition is massive exposure to the target language. This, however, is unlikely in a foreign-language learning environment. In addition, many empirical studies have revealed that the words that learners could acquire from exposure to texts without subsequent vocabulary practices was very limited (Pellicer-Sánchez, 2015; Teng, 2014; Webb & Chang, 2014). In this regard, the teaching and learning of vocabulary should incorporate vocabulary instruction through a method of FFI, rather than mere meaning-focused instruction. This lends value to exploration of vocabulary acquisition as a function of types of form-focused instruction: FonF and FonFs. In reviewing the relevant literature that follows, the focus is on previous empirical studies related to connecting the effects of different form-focused instruction approaches to different degrees of vocabulary acquisition.

Laufer (2006) measured the effectiveness of FonF and FonFs approaches in learning new L2 words by 158 high-school English learners in Israel. During FonF instruction, learners participated in a reading task and were required to answer comprehension questions for which comprehension of target words was necessary. During FonFs instruction, learners first received a list of target words with their translations and examples of usage and then completed two word-focused exercises. An unexpected test was conducted for which learners were required to provide the meanings for the target words in English or in their L1. The results showed significantly higher scores for learners in the FonFs group than those in the FonF group. She argued that form-focused instruction, particularly using the FonFs approach, is essential to help learners who are deprived of an input condition in developing depth of vocabulary knowledge. Similar results were also confirmed in Laufer and Rozovski-Roitblat’s (2014) study.
However, different results were found in a study by de la Fuente (2006), wherein university students who had learned basic Spanish were divided into two groups. For the FonFs group, the learners received 50 minutes of instruction consisting of explanations of the new words (presentation), controlled oral and written production exercises (practice), and a role-play performed in pairs (free production). Learners in the FonF group worked on a restaurant task and were able to negotiate the meaning of the target words for successful completion of the task. A discrete item oral production test was used to measure vocabulary acquisition. The results revealed that, although the two conditions were equally effective in the immediate posttest, the FonF group outperformed the FonFs group in terms of the delayed test results.

Shintani (2011) compared the effects of input-based instruction (FonF) and production-based instruction (FonFs) on the acquisition of a set of English concrete nouns by 36 Japanese children. Four vocabulary tests were conducted for measuring vocabulary acquisition, which included a multiple-choice listening test, category task test, discrete item production test, and “same or different” task test. Results from three tests showed that the learners in both the FonF and FonFs group developed a similar vocabulary knowledge rate. However, the FonF group outperformed the FonFs group in terms of the category task test.

Shintani (2013) expanded research in this field. A total of 45 Japanese children were recruited randomly and equally divided into three groups: two experimental groups (i.e., the FonF and FonFs groups) and one control group. The FonF group received a set of listen-and-do tasks that required the learners to comprehend the target words. The FonFs group received activities in line with present-practice-produce (PPP). The acquisition of productive knowledge of the target words (adjectives and nouns) was measured by a discrete-point test and a task-based test. The results demonstrated that learners in the FonF group outperformed their counterparts in the FonFs group in both tests. However, an advantage of the FonF approach in learning nouns was not detected.

The reviewed studies have produced mixed results, which was not surprising. This may be explained by the fact that the studies operationalized FonF and FonFs instruction in different manners. For example, when learners could engage in interaction in which they could negotiate target words in the FonF approach, a more significant effect was observed than through the FonFs approach. In addition, the difference in the effects of these two kinds of approaches was partly due to the learning difficulty of parts of speech (nouns, adjectives, verbs, etc.). Therefore, the variances observed in applying FFI in vocabulary learning has called for more research.
A thorough search of relevant literature did not reveal any studies that have been conducted to specifically examine the FonF and FonFs approaches in learning phrasal verbs. This research was designed to explore acquisition of phrasal verbs using two different instructional approaches: FonF and FonFs. Such a comparison evaluates the process features of each kind of instruction and the learning products. Specifically, it examines whether EFL students benefit from attention to form occurring within an authentic task environment (FonF), or whether they benefit equally from mere exposure to decontextualized items (FonFs). The control group which received a set of traditional teaching activities without being exposed to any target words was also involved. This study addresses the following research questions:

1. Which instructional approach (FonFs vs. FonF) results in more newly acquired phrasal verbs?
2. What degree of difference exists between results from the three tests (word form recall, word meaning recall and usage) conducted for each condition?
3. How are the differences between FonFs and FonF expressed through the process features of the two types of instruction?

Methodology

Participants

This study involved 90 Chinese tertiary-level EFL students, from 20-22 years old. This study was conducted in three intact classes, in a college English course, at a university in Mainland China. Students taking this course followed the same curriculum requirements set by the department of College English Teaching. Participants did not receive any other English lessons other than attending two 50-minute lessons per week. They had each studied English for approximately seven years, and were all native speakers of Chinese. The participants were randomly and equally divided into three groups: two experimental groups (i.e., the FonF and FonFs conditions) and one control group. Following an internal four-skill language placement test, students were placed at a low proficiency level. Statistical analysis of the test results also showed that participants were similar in overall English proficiency at the time of the experiment ($p=0.69$). Therefore, it was assumed that no differences in learning ability between the three groups were expected.

A college English teacher with over 10 years of English teaching experience at college level was invited to instruct all three groups in this program. The instructor was familiarized with the
requirements of each group prior to the study. The author also observed four lessons in each group to ensure consistency with the respective instructional method. Instruction delivery by the same teacher ensured consistency in instructional goals among the three groups. There were no student dropouts during this program although they were told that they could withdraw any time.

Target Words
The target words in the present study comprised 20 phrasal verbs. A phrasal verb is a verb formed from two (or sometimes three) parts: a verb and an adverb or preposition. There are three main types of phrasal verb constructions, which depend upon whether the verb combines with a preposition, a particle, or both (McCarthy & O’dell, 2007). For example:

- take after → She takes after her mother
- think over → She should think it over
- look forward to → I look forward to meeting you

There are two reasons for focusing on phrasal verbs. First, phrasal verbs are an essential component of English and often express a wide range of ideas. Unfortunately, phrasal verbs are often ignored in EFL learning, and most students tend to focus only on the verbs. Moreover, learning phrasal verbs is quite challenging and confusing for EFL students due to their idiomatic nature (Nassaji & Tian, 2010; Teng, 2017). One of the difficulties is that phrasal verbs can be literal or figurative in meaning, which implies that phrasal verbs cannot be understood based upon the meanings of the individual parts that stand isolated in a sentence (White, 2012). The phrasal verbs selected for this study were unknown to the participants (Appendix I). This unfamiliarity was confirmed in a pilot test in which 40 students of similar English proficiency who did not participate in the program were required to read these words and provide their meaning. Study participants were not asked to do this so as to avoid highlighting the target texts and words which would likely compromise the findings.

Measures
Many researchers defined lexical knowledge as the sum of interrelated sub-knowledges, which includes a word’s pronunciation and spelling, morphological knowledge, knowledge of word meaning, collocational and grammatical knowledge, connotative and associational knowledge, and the knowledge of social or other constraints to be observed in the use of the word (e.g., Ringbom,
Although a perfect test in measuring vocabulary knowledge should include evaluation of all of the mentioned sub-knowledges, administering such a test including all various aspects of lexical knowledge is impractical. In addition, students cannot be expected to develop a complete knowledge of a word after one or a few exposures to a word in an experiment. Therefore, researchers have tended to agree on the three basic facets of lexical knowledge: form, meaning, and usage (Nation, 2013). In light of this, acquisition of phrasal verbs was measured using three tests: form, meaning, and usage of phrasal verbs. All three tests were decontextualized tests. Although it could be argued that a more authentic way of measuring vocabulary is in context (Read, 2000), this was judged as unfeasible for the current study because students were expected to study and manipulate words in isolation after the five-week learning.

a). Word form recall test
This test was adapted from the Computer Adaptive Test of Size and Strength (CATSS) developed by Laufer et al. (2004). This test measured the participants’ productive word form recall. In this test, participants were required to write down the target phrasal verb according to the given Chinese meaning. One example of a target phrasal verb is:

推遲 (postpone) ________

All 90 participants completed this test in one classroom in the form of paper-and-pencil. The time for finishing this test, as suggested in a pilot study, was set as 15 minutes. The author administered and rated the test. Any misspelled words were rated incorrect and were given zero points. Only correct spellings of target phrasal verbs were given one point. The instructions were provided in Chinese to ensure participants’ understanding of what they needed to do for this test.

b). Discrete item word meaning recall test
This test was adapted from Shintani (2011). In this test, the author prepared a set of flashcards, presenting one target phrasal verb on each flashcard. This test required individual participants to orally provide the meaning of the target phrasal verb on each flash card. Six teachers who were not teaching the three classes were invited to rate this test. The author held a discussion with the six teachers about the procedures and requirements of this test prior to the study, and some possible correct answers. For example, ‘postpone’, ‘delay’ and ‘defer’ were all regarded as correct answers for the phrasal verb ‘put off’. Two teachers were responsible for each group of students. One
teacher presented the flashcard and asked the students to provide the meaning for the phrasal verbs, which were displayed one by one. Another teacher acted as an assistant to record audio and take notes. The two teachers co-rated students’ performances after the test. The participants obtained one point for each item correctly provided orally, irrespective of whether they provided answers in Chinese or English. Participants’ answers were considered to be correct when they provided a similar meaning to the target words. Any incorrect answers were given zero points. Both teachers in each group reached a consensus as to the scoring for this test. Each student was given a maximum of 10 minutes to answer the 20 phrasal verbs questions. The total time spent completing this test by students in the FonFs condition was approximately 120 minutes. The total time spent by students in the FonF condition and the control group was approximately 150 and 90 minutes, respectively.

c). Usage of phrasal verbs
This test measured participants’ knowledge and usage of phrasal verbs. In this test, participants were required to write down a sentence in English according to the given phrasal verb. For example: Put off ___________________

All participants completed this test in one classroom in the form of paper-and-pencil. The time for finishing this test, as suggested by a pilot study, was set as 30 minutes. Two teachers who were not teaching these classes were invited to rate the test. A sentence free of grammatical and spelling errors was given one point (e.g., “The manager decided to put off the meeting due to the unexpected storm”). If learners supplied a sentence with correct usage of the phrasal verb, but grammatical or spelling errors existed, they were given a half-point (e.g., “The school decide to put off the sports meeting.”). Incorrect usage of the phrasal verb in a sentence was given zero points (e.g., “It is difficult to put off the clothes.”). When differences arose between the two teachers, a third rater would be called upon. Final scores were determined based on majority opinion. As only 40 discrepancies out of 1800 responses were detected, inter-rater agreement in this test was found to be high (98%).

Research design
This study was conducted in regular class hours. Participants attended two lessons a week, for a total of five weeks. Each lesson lasted approximately 50 minutes. This study involved three groups receiving three different types of treatment:
a). Focus on Form condition

Participants in the FonF condition were exposed to the target phrasal verbs during reading tasks. Two target phrasal verbs appeared in a text of approximately 200 words that was written for and used in the current study. At least 96% of words included in each text were familiar to most learners (target phrasal verbs were among the 4% of unfamiliar words from texts), as verified in a pilot test in which 40 students of similar English proficiency who did not participate in the program were invited to underline any words that they did not know the meaning of. Study participants were not asked to do this so as to avoid highlighting the target texts and words to them which would likely affect study results. As suggested in Nation (2013), learners need at least a density of 95% familiar vocabulary to reach a reasonable comprehension of a text. The participants were required to answer five comprehension questions following the reading of each text. They were given options to answer the questions in their native language or in English. Answering these questions, to some extent, required comprehension of target words. Appendix II presents a text and the comprehension questions. Two comprehension questions required understanding of two target phrasal verbs: *run into* and *back off*. The other three comprehension questions, which focused on other words, were designed to divert learners’ sole attention from the target words. Learners were encouraged to use a dictionary whenever they felt the need for it. On completion of the task, students and teachers checked the answers. Teachers also provided brief instructions for any questions posed by the students.

The reading task was designed in accordance with Ellis’s (2003) definition of task: (a) included a gap, (b) learners oriented to focus primarily on meaning and to make use of their own linguistic resources, and (c) had a clearly defined outcome. The task in the present study was designed in such a way that the desired outcome could only be gained when learners were successful in comprehending the language input. For each lesson, the goal and the task procedures were provided in Chinese. However, the instruction was primarily in English, including some difficult explanations in Chinese.

Each lesson was set for completing a reading task. Overall, they completed two reading tasks in one week and 10 in five weeks. One text was used in each task, for a total of 10 different texts.

b). Focus on Forms condition

Before the commencement of each FonFs lesson, the instructor explained to the students the goal of the activities, which was to explicitly and intentionally learn some words. Six activities, which
represented three phases of FonFs—present-practice-produce—were designed for each lesson. The first and second activity served as the present phase. In the first activity, the teacher presented each phrasal verb with a synonym or definition. This may have provided students with a basic understanding of how each one is used. In the second activity, the teacher introduced the phrasal verbs in a specific context. For example, to present the phrasal verb “run into”, the teacher would state, “Can you guess what happened to me yesterday? I ran into an old friend that I have not met for more than 10 years.” The teacher then confirmed by asking students for the meaning of “run into”. The third and fourth activities served as the practice phase. The third activity was associated with a worksheet listing some phrasal verbs. Students were required to match the phrasal verbs with their meanings given in a list. The fourth activity involved playing a word game. The teacher provided students with a synonym, for example, “postpone” and asked students to come up with the right phrasal verb, which in this case, would be “put off”. The fifth and sixth activities served as the produce (i.e., free production) phase. In the fifth activity, each pair of students was given phrasal verbs that they must use in a conversation. Some students came up with a dialogue, wrote it on paper, and acted it out in front of the class. In the sixth activity, the teacher asked some students to prepare a presentation that included some examples of the phrasal verbs. Students were allowed to check relevant resources when preparing for this. The teacher provided feedback after each activity.

All six activities were conducted in each lesson. Five phrasal verbs were taught in each lesson, two of which were target phrasal verbs. The reason for including five phrasal verbs (two of which were target phrasal verbs) was because the treatment focused on a set of six activities, for which class time was limited for explaining more words, and focusing only on target words would make the words salient to participants. The teacher mainly used English for the activity instructions, while explaining some difficult terms in Chinese whenever necessary.

c). Control group (CG)

Students in the control group participated in a series of traditional teaching activities. For example, teacher asked students to read a text and complete some questions, as well as some exercises. Following this, students received feedback from teachers. However, the materials that the students used did not include any target phrasal verbs. Care was also taken to avoid using the target words in the classroom.
Procedures
The participants were randomly and equally divided into three groups: FonF group, FonFs group, and a control group. Classroom instruction began after obtaining consent from students, teachers and the dean of the department. After the treatment, all participants immediately took three tests without being allowed to have any materials at their disposal. The participants were not informed that they would receive tests after treatment. This was to avoid students attempting to commit the target words to memory in order to do well on the tests. The tests were taken in the order of word form recall test, word meaning recall test, and finally the usage test. This order was to prevent the former test from providing any possible hints to the latter test.

The fifth FonFs and FonF lessons, which were in the middle of the program, were audio-recorded and video-recorded. The reason for collecting data during these lessons and not at the very beginning of the program was to ensure that the teacher was acquainted with the teaching styles and that the students adjusted to the classroom atmosphere and routines. The author transcribed the lessons and conducted a number of analyses of the lessons’ process features according to the following criteria:

1. The total number of utterances produced by students and teacher during the lessons was calculated.
2. The quality of the student utterances was examined. In this regard, the students’ utterances were examined whether they were teacher- or student-initiated. Teacher-initiated student utterances occurred typically when students responded to teacher elicitations in initiate-respond-follow-up exchanges. Student-initiated utterances occurred when students were engaged in private speech.
3. The number of phrasal verbs produced by the teacher in the FonFs and FonF lessons was calculated.
4. The nature of the comprehension and production errors that students made and of the teacher’s corrective feedback on these errors was examined.

Data Analysis
The differences in the mean scores between the three groups (research question 1) and between the three tests (research question 2) were analyzed in a series of one-way analyses of variance (ANOVA) with post-hoc Bonferroni adjustments for multiple comparisons (alpha level = .05). The
effect-size analysis served as a means to locate where these differences were situated among the three tests and groups.

Results

Research question 1: Which instructional approach (FonFs vs. FonF) results in more newly acquired phrasal verbs?

Table 1 presents the descriptive data for the scores from the three vocabulary tests achieved by learners in each condition. The maximum obtainable score for each test was 20.

Table 1
Descriptive statistics for the three groups in each test

<table>
<thead>
<tr>
<th>Test</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>S. D.</th>
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<tbody>
<tr>
<td>Word form recall test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FonFs (n=30)</td>
<td>12</td>
<td>18</td>
<td>15.51</td>
<td>1.45</td>
</tr>
<tr>
<td>FonF (n=30)</td>
<td>10</td>
<td>16</td>
<td>13.52</td>
<td>1.42</td>
</tr>
<tr>
<td>CG (n=30)</td>
<td>0</td>
<td>2</td>
<td>1.12</td>
<td>0.81</td>
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<tr>
<td>Word meaning recall test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FonFs (n=30)</td>
<td>10</td>
<td>15</td>
<td>12.52</td>
<td>1.44</td>
</tr>
<tr>
<td>FonF (n=30)</td>
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<td>12</td>
<td>10.13</td>
<td>1.41</td>
</tr>
<tr>
<td>CG (n=30)</td>
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<td>2</td>
<td>0.91</td>
<td>0.61</td>
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<tr>
<td>Usage of phrasal verbs</td>
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<td></td>
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<tr>
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<td>10</td>
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<td>5.46</td>
<td>1.29</td>
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<tr>
<td>CG (n=30)</td>
<td>0</td>
<td>1</td>
<td>0.71</td>
<td>0.31</td>
</tr>
</tbody>
</table>

Note. Maximum = 20

As described in Table 1, means for the word form recall test were 15.51, 13.52 and 1.12 for FonFs, FonF and CG, respectively (SD = 1.45, 1.42, 0.81). Means for the word meaning recall test were 12.52, 10.13 and 0.91 for FonFs, FonF and CG, respectively (SD = 1.44, 1.41, 0.61). Means for the usage test were 8.55, 5.46 and 0.71 for FonFs, FonF and CG, respectively (SD = 1.38, 1.29, 0.31). FonFs learners managed to maintain the highest score in all three tests. The mean score of CG was lower in comparison to the mean score for the FonF condition in all three tests.

In order to answer the first research question, the scores obtained by the three groups for each test were analyzed using a series of repeated-measures ANOVAs with post-hoc Bonferroni
adjustment for multiple comparisons. For the word form recall test, ANOVA results indicated significant differences between the groups (FonFs, FonF and CG) in post-treatment test \( F(2, 65) = 7.91, p < .05, \eta^2 = 0.35 \). Effect-size analysis indicated that the FonFs learners significantly outperformed both the FonF learners (Cohen’s d = 0.62) and the CG learners (Cohen’s d = 0.85). Likewise, the FonF learners outperformed the CG learners (Cohen’s d = 0.81). For the word meaning recall test, ANOVA results revealed significant differences between the three groups \( F(2, 65) = 8.21, p < .05, \eta^2 = 0.36 \). The FonFs learners significantly outperformed both the FonF learners (Cohen’s d = 0.60) and the CG learners (Cohen’s d = 0.82). In a similar vein, the FonF learners outperformed the CG learners (Cohen’s d = 0.79). For the usage test, ANOVA results also revealed significant differences between the three groups \( F(2, 65) = 7.56, p < .05, \eta^2 = 0.41 \). The FonFs learners significantly outperformed both the FonF learners (Cohen’s d = 0.58) and the CG learners (Cohen’s d = 0.78). Likewise, the FonF learners outperformed the CG learners (Cohen’s d = 0.75).

**Research question 2: What degree of difference exists between results from the three tests (word form recall, word meaning recall and usage) conducted for each condition?**

In order to answer this question, the scores obtained from the three different tests in each condition were also analyzed using a series of repeated-measures ANOVAs with post-hoc Bonferroni adjustment for multiple comparisons. For the FonFs condition, ANOVA results indicated significant differences between the three tests administered immediately post intervention \( F(2, 95) = 9.11, p < .05, \eta^2 = 0.41 \). Effect-size analysis indicated that students in this condition achieved significantly higher scores in recalling the word meaning than the word form (Cohen’s d = 0.52) and the usage (Cohen’s d = 0.69). Likewise, learners performed significantly better in recalling word meaning than producing it in a context (Cohen’s d = 0.53). For the FonF condition, ANOVA results also revealed significant differences between the three tests \( F(2, 95) = 9.52, p < .05, \eta^2 = 0.49 \). Students with the FonF guidance achieved higher scores in recalling word meaning than both the word form (Cohen’s d = 0.50) and the usage (Cohen’s d = 0.70). In a similar vein, they achieved better scores in recalling word form than usage (Cohen’s d = 0.56). For the control group, ANOVA results did not reveal significant differences between the three tests \( F(2, 95) = 2.02, p > .05, \eta^2 = .08 \). This suggests that students in the control group acquired very limited knowledge of word
form, meaning, and usage in terms of target phrasal verbs, and the limited acquisition they achieved did not differ significantly.

Research question 3: How are the differences between FonFs and FonF expressed through the process features of the two types of instruction?

Qualitative analyses were conducted to answer this question. Table 2 shows the total number of utterances by students and teacher during the fifth lesson for the FonFs and FonF conditions.

Table 2
The number of student and teacher utterances in the fifth FonFs and FonF lesson

<table>
<thead>
<tr>
<th>Participant</th>
<th>Condition</th>
<th>FonFs</th>
<th>FonF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td></td>
<td>300</td>
<td>271</td>
</tr>
<tr>
<td>Teacher</td>
<td></td>
<td>912</td>
<td>682</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1,212</td>
<td>953</td>
</tr>
</tbody>
</table>

As shown in Table 2, there were a total of 1,212 utterances during the FonFs lesson and 953 during the FonF lesson. In terms of teacher utterances, there were 912 and 682 in the FonFs and FonF conditions, respectively. With regard to student utterances, there was only a minor difference (300 for FonFs and 271 for FonF).

Table 3 presents the number of student- and teacher-initiated learner utterances in the fifth lesson for the FonFs and FonF conditions.

Table 3
Number of student- and teacher-initiated learner utterances in the fifth FonFs and FonF lesson

<table>
<thead>
<tr>
<th>Utterance type</th>
<th>Condition</th>
<th>FonFs</th>
<th>FonF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student-initiated</td>
<td></td>
<td>34</td>
<td>116</td>
</tr>
<tr>
<td>Teacher-initiated</td>
<td></td>
<td>155</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>189</td>
<td>141</td>
</tr>
</tbody>
</table>

As described in Table 3, the difference was substantial as the vast majority of the student utterances in the FonFs lesson were teacher-initiated (155 utterances out of 189). This suggests the typical type of initiate-respond-follow-up exchanges during this lesson. On the other hand, the majority of
the utterances in the FonF condition were student-initiated (116 utterances out of 141). This shows the prevalence of social and private speech used by students during the instruction. The following two examples were typical exchanges from the FonFs group and FonF group, respectively.

FonFs lesson 5

Teacher: For this sentence “How does Susan manage to get ___ her fear?”, can you tell me the correct word?
Student: Get up.
Teacher: No, “get up” can be used to mean “rise to one’s feet.” Here, it should be “get over,” which means “recover from.”

FonF lesson 5

Teacher: What does it mean after you read this sentence “First, think about what you need and what you want from your new home. Perhaps you need to be close to your place of work because you don’t drive. Perhaps you don’t want to run into somebody you don’t like.”
Student 1: “Run into.”
Student 2: Well.
Student 3: “Run into” means “meet.”
Teacher: Yes.
Student 3: Yes, “meet.”
Teacher: Actually, it is more appropriate to define it as “meet by chance.”
Student 3: Yes, “meet by chance.”

In this example, Student 3’s first utterance is social in nature, as it constitutes an attempt to clarify the meaning required by the teacher. Students 3’s other two utterances, as well as student 1 and 2’s utterances, are private in nature. These utterances seem to be attempts to spontaneously rehearse the language associated with the performance of the task.

Phrasal verbs produced by the teacher in the two conditions were also calculated. Although a dramatic difference was not detected, the teacher produced more phrasal verbs for the FonFs condition than the FonF condition (72 versus 51).
Finally, all instances in which the students in the FonFs and the FonF conditions demonstrated comprehension errors in the input for the target phrasal verbs or production errors in obligatory contexts were examined. Table 4 illustrates the relevant data.

**Table 4**
The number of errors made by students on phrasal verbs by type

<table>
<thead>
<tr>
<th>Error type</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FonFs</td>
</tr>
<tr>
<td>Comprehension</td>
<td>0</td>
</tr>
<tr>
<td>Production</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
</tr>
</tbody>
</table>

As presented in Table 4, all 21 errors that students in the FonFs condition made were related to production. On the other hand, all 16 errors that students in the FonF condition made involved a failure to comprehend the phrasal verbs in the input. This demonstrates the nature of the different types of instruction, as the FonFs condition was related to production exercises and the FonF condition was focused on reading comprehension.

The teacher’s responses to these errors were then evaluated. In the FonFs group, the teacher corrected all of the students’ production errors in the form of recasts for 10 production errors out of 21. For the other 11 occasions, the teacher corrected them in the form of prompts. For the recasts, learners’ errors were corrected in such a way that communication was not obstructed. Within this context, the teacher repeated the error back to the learner in a corrected form. For the prompts, learners were requested to clarify or self-correct their errors in the process of communication, which provided them with opportunities to notice their errors. The teacher feedback in the FonF condition focused solely on students’ failure to comprehend target phrasal verbs. Students simply followed the teacher’s explanation and did not produce a phrasal verb in these corrective episodes.

**Discussion and conclusion**
The first research question examined and compared the contributions of each of the two types of FFI (FonFs and FonF) to acquisition of phrasal verbs. The test results indicated that the FonFs group outperformed the FonF group for the three tests. Overall, the present study provided empirical support for the advantage of FonFs instruction which caters to intentional learning and
emphasizes production, over FonF instruction which concentrates learners’ attention on form while primarily focused on meaning. This finding is different from that of Shintani (2013), who proposed that FonF instruction was more effective than FonFs instruction in enabling learners to acquire the adjectives. Swan (2005) also argued that FonFs instruction lacked proactive syllabus design, and thus may be ineffective for the systematic teaching of new language, particularly when time is limited and out-of-class exposure is unavailable. However, one thing to bear in mind is that the effectiveness of FonFs and FonF instruction on vocabulary acquisition was affected by the types of words. For example, Shintani’s (2013) study also revealed that there was no significant difference in the effects of the two types of instruction for learning nouns.

In addition, some previous studies had lent support to the effectiveness of FonFs instruction. For example, Laufer’s (2006) study showed that the FonFS instruction yielded significantly higher results than FonF. In some recent studies (Laufer & Rozovski-Roitblat, 2014; Teng, 2015), reading plus word-focused exercises yielded better results than reading comprehension only, regardless of the type of word knowledge. Therefore, the nature of lexical competence makes FonFs instruction indispensable to teaching and learning vocabulary. As meanings of phrasal verbs differentiate by imperceptible degrees, FonFs approach is important for teaching and learning phrasal verbs, particularly in developing depth of knowledge, improving the use of sophisticated phrasal verbs, increasing the speed of access to words, and developing strategic competence. I do not argue that FonFs instruction should replace opportunities to acquire words from input. I do believe, however, that it has a strong value in any learning context that cannot create sufficient input conditions for target language acquisition. This result lends support to the claims of skill-based theory (VanPatten & Benati, 2010), which was based on models of skill acquisition in cognitive psychology. This theory proposes that second or foreign language acquisition is learned in the same way as any other skill, for which practice is the key ingredient of language acquisition. This shows the importance of clear presentation of linguistic items followed by controlled and free production practice in learning an ability to use the items for communication. This also suggests the value of ‘noticing’ and ‘pushed output’, as discussed in the introductory section of this study.

The second research question explored the potential effects of the independent variables on the relative acquisition of the three knowledge dimensions of phrasal verbs (form recall, meaning recall and usage). Our findings show that the aspect of knowledge that benefited the most was meaning recall, followed by form recall and usage. In agreement with previous research (Eckerth
(Tavakoli, 2012; Rott, 2007), active word form recall seems to be more difficult than passive recall of meaning. However, this finding contradicts Teng’s (2014) findings, which suggests that the acquisition order of vocabulary knowledge is form, meaning and usage. This inconsistency across studies may be partly due to the differences between test batteries employed. The form test was a recognition test in Teng’s (2014) study while the form test was a recall test in the present study. As suggested by Schmitt (2010), recalling word form is more difficult than recognizing word form. The finding that producing phrasal verbs in a sentence is the least acquired knowledge aspect coincides with previous studies (e.g., Laufer, 2005; Nation, 2013; Schmitt, 2008). This shows that receptive and productive knowledge are separable, albeit interrelated, issues. This dichotomy has great ecological validity, as some learners in the present study understood the meaning of phrasal verbs, but they were not able to produce those items in their sentence writing. It appears that acquiring productive mastery of vocabulary is more difficult than acquiring receptive mastery. This suggests the difficulties involved in language production, as production may involve converting one message into form or converting multiple messages at once, then selecting one. However, caution must be taken when interpreting the test results. First, given the fact that the test measuring usage of phrasal verbs constituted the last part of the test battery, fatigue and anxiety may have played a role (Nation, 2006). Second, it is generally difficult to control cross-test effects. Finally, students are generally not tested immediately after the learning session in authentic learning situations, therefore, forgetting would be likely to occur (Peters, 2014), and retention scores might be lower than the lexical gains in the present study.

To explain why the FonFs condition was more conducive than the FonF condition to the acquisition of phrasal verbs, it is necessary to examine the process features of the FonFs and FonF lessons. It is found out that there was a dramatic difference in the sheer quantity of utterances produced by the teacher and the learners in the FonFs and FonF lessons. Although only a slight difference in the number of student utterances was detected, a dramatic difference in the number of teacher utterances was observed. This reflected a methodological difference between the two instructional approaches. One explanation is that students at this level were less able to concentrate on the input and thus it was quite difficult to notice the target phrasal verb formation and its function during FonF lessons. The teacher did not provide enough feedback for this instruction’s guidance. On the other hand, the teacher provided more feedback for students in the FonFs condition, and
students were required to produce utterances in using target phrasal verbs frequently. However, their limited English proficiency may have strained their processing capacity.

There was also a dramatic difference between teacher- and student-initiated learner utterances detected in the FonFs and FonF lessons. A vast majority of the student utterances in the FonFs lessons were teacher-initiated, which implies a type of initiate-respond-follow-up exchanges in this condition. In contrast, the majority of learner utterances in the FonF lessons were student-initiated, which demonstrates the prevalence of students’ social or private speech in this condition. Shintani and Ellis (2010) argued that acquisition is more likely to occur when EFL students have the opportunity to exercise some degree of discourse control. Thus, the FonF students benefited from the relative freedom in initiating utterances in English and they should have developed more acquisition of phrasal verbs. However, this was not the case in the present study. This can be explained because although students produced more student-initiated utterances in the FonF condition, they were not large enough to direct learners’ attention to the function performed by phrasal verbs. In addition, most of the student-initiated utterances in the FonF condition were related to spontaneous repetition of teacher utterances. They might not have noticed the function of the target words, and even if they had noticed, ostensible noticing alone does not indicate that learners had automatically acquired the language (Venkatagiri & Levis, 2007). Students with a low proficiency level needed teachers to push them to notice the target words. This may explain the large amount of teacher-initiated utterances in the FonFs condition that promoted students to acquire the words.

The nature of the errors made by students in the FonFs and FonF groups was markedly different. The nature of the feedback provided by the teacher in the FonFs and FonF lessons was also markedly different. It is possible, therefore, that teacher feedback plays an important role in acquisition and that feedback on production errors is more helpful than feedback on comprehension errors. This contradicts Shintani and Ellis’s (2010) finding that feedback on comprehension errors is more helpful than feedback on production errors. One possible explanation is that all but one of the students’ production errors in their study were corrected in the form of recasts, which failed to elicit student understanding. However, in the present study, the teacher corrected in the form of recasts for 10 out of 21 production errors. For the other 11 occasions, the teacher corrected in the form of prompts. As determined by Lyster (2004), form-focused instruction was particularly beneficial when the teacher used prompts, as opposed to recasts.
In summary, although both types of instruction resulted in some acquisition of phrasal verbs, overall, the FonFs instruction appeared to have been more effective in promoting acquisition of this facet among low-proficiency level students. The pedagogical implications of the findings in the present study are worthy of consideration. First, clear vocabulary instruction operationalized as PPP exercises, could indeed be an appropriate and effective way to establish initial form–meaning connections of phrasal verbs in a classroom-based course. The present study adds to the growing body of evidence supporting this claim. The use of PPP exercises prompted learners to concentrate on the target item to be acquired. This is important for teaching phrasal verbs since some phrasal verbs are semantically opaque and consequently easily overlooked during reading (White, 2012). Although it is clearly not possible to teach all phrasal verbs by means of PPP exercises, it is evident that a number of phrasal verbs can be taught and learned explicitly. Second, it cannot be assumed that productive mastery would automatically follow from receptive mastery of phrasal verbs. In other words, merely experiencing receptive exposure does not appear to be enough to reliably lead to productive mastery. Additional productive exercises, in this regard, are essential for improving students’ ability in using target words in sentence construction (Lee & Muncie, 2006). Finally, learning phrasal verbs is multifaceted. Solely introducing the meaning of new words is not enough to compel learners to notice the target lexical items, considering that the incremental nature of word learning and the various aspects of word knowledge that need to be mastered. As a solution, Nation and Gu (2007) suggested a four-strand approach: (1) meaning-focused input, (2) meaning-focused output, (3) language-focused learning, and (4) fluency development, with each strand being given equal emphasis. This approach provokes learning new information about target lexical items, and then provides for consolidation and enhancement of that knowledge, which teachers and material writers need to consider carefully.

Some limitations to the present study should be mentioned. First, phrasal verbs include at least two types: literal phrasal verbs—whose meaning is semantically transparent, as the meaning of the entire verb-particle combination can be derived from their semantic components; and figurative phrasal verbs—whose meaning is semantically obscure and has resulted from a metaphorical shift of meaning and the semantic fusion of the individual components. Idioms (an expression for which the meaning is different from the meaning of individual words in the expression) and phrasal verbs tend to overlap with other types of fixed phrases that exist in English. This may have effects on the acquisition outcome, but results due to distinction were not examined for the present study. Second,
as suggested by Teng (2016b), the assessment of vocabulary knowledge acquisition is difficult because a failure to notice grammatical functions might occur. A multi-dimensional approach, which measures more than various aspects of vocabulary knowledge, should be pursued to reveal even the smallest increment of acquisition of phrasal verbs. Third, the present study involved only Chinese EFL students with low levels of English proficiency. As suggested by Liao and Fukuya (2002), Chinese learners who had an advanced English proficiency level tended to use more phrasal verbs adeptly than learners with a low English level. This calls for more research involving learners of different English proficiency levels. Fourth, assessing receptive vs productive knowledge of vocabulary items were dealt together through artificial recall tests, not authentic, real-life tasks and this might not give an accurate picture of how EFL learners use phrasal verbs when speaking or reading a text with phrasal verbs in it. Finally, as participants were not required to take a pre-test as to avoid highlighting the target words to them. So, it may be impossible to ensure that all phrasal verbs were unknown to the participants. However, judging from the control group which did not show any significant improvement in the learning outcome, the results are convincible.
References


Appendices

Appendix I  The 18 phrasal verbs used in the present study
1. ruffle up
2. chew out
3. pass out
4. storm over
5. run into
6. back off
7. blow up
8. put up with
9. count on
10. get by
11. knock out
12. pull over
13. wear off
14. put off
15. get rid of
16. let down
17. lay off
18. run out of
19. get back into
20. get over
Appendix II  A sample reading text and comprehension questions.
Directions: Please read the following passage and give the best answer to each question in
Chinese or English.

When deciding to buy your first home, you’d likely be excited and full of enthusiasm.
However, you need to calm down and draw up a plan. You should take care to plan well and
understand the process to avoid any unexpected problems.

Here are some things you’ll need to consider to help you get started.
First, think about what you need and what you want from your new home. Perhaps you need
to be close to your place of work because you don’t drive. Perhaps you don’t want to run into
somebody you don’t like. It may be that you want a large garden to satisfy your gardening hobby.
Be sure to understand the differences between needs and wants as it’s likely you’ll need to give
up some of your wants. You also need to accept your girlfriend’s advice if you don’t want her to
break up with you.

Then, insist on using the internet. You’ll need to make some decisions down the line and it
will help you figure out the buying process.

If you do not intend to back off from your initial demands, you will normally need to contact
a mortgage advisor to see how much money you can borrow.

Of course, there are many costs related to buying a home which may not be immediately
clear to first-time buyers.

1. How do you understand the sentence ‘Perhaps you don’t want to run into somebody you
don’t like’?
2. What words can be used to replace ‘back off’?
3. Inferring from the text, how can you draw up a plan when deciding to buy a house?
4. Can you think of one word to replace ‘figure out’?
5. Can you think of a word opposite in meaning to ‘give up’?