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ABSTRACT

This study measured the effectiveness of three tasks (cloze, editing and writing) on the learning of phrasal verbs for students learning English as a foreign language (EFL). A total of 72 low-to-intermediate EFL learners were recruited. This study employed pre- and post-test designs. The performance of the learners who completed the three tasks individually was compared with that of the learners who completed the same tasks in pairs or in groups. The results indicated that the learners who participated in group work achieved a larger gain of the knowledge of the phrasal verbs than doing the tasks in a pair; however, tasks completed in pairs led to better performances than individual work. The writing task yielded the best learning scores, followed by the editing task and finally, the cloze task. In addition, the writing task resulted in the greatest number of instances of metalinguistic or form-focused feedback. Implications for teaching and learning phrasal verbs are discussed.

I. Introduction

In an attempt to enhance responsiveness to form and communicative interaction in English learning, a considerable number of studies have suggested a need for classroom tasks (Ellis 2003; Fernández Dobao 2014; Wigglesworth and Storch 2009). Earlier studies have focused on pedagogical tasks in the form of fostering negotiation of meaning while simultaneously allowing learners to pay particular attention to form and peer feedback (Ellis 2008; Long 1996). However, learners continue to display numerous grammatical and syntactic deviations from native-like accuracy, despite being exposed to 'acquisition-rich input' for six or seven years. Put succinctly, mere exposure to input-based communication is insufficient to acquire target-like language accuracy (Swain 2000). Thus, providing more opportunities for learners to produce language output is indispensable for the development of accuracy.

The output hypothesis was developed from the extensive growth of French immersion programmes in Canada. This hypothesis states that it is the action of producing language, i.e. speaking or writing, which constitutes a part of the process of second language learning (Swain 2000). The learners first identify positive evidence embedded in the input. This leads them to detect the gap in their knowledge when they realise that they cannot say what they want to say. Acquisition then occurs when they observe negative evidence and modify their output as a result of corrective feedback that follows their erroneous production (Long 1996). The evidence supporting the role of output showed that efficient learning increases once a learner notices a gap in his or her linguistic knowledge. This leads to the awareness of mental processes, which are linked to the language production

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(Swain 2005). In this connection, Swain and Lapkin (1995) defined three basic functions of output: the noticing/triggering function; the hypothesis-testing function; and the metalinguistic (reflective) function.

The noticing/triggering function refers to the awareness students find when they cannot communicate their desired statement in the target language. With this function, learners realise there are linguistic problems they need to manage. This triggers their cognitive process to search for the adequate knowledge they require for completing the newly discovered gap.

The hypothesis-testing function allows learners to employ 'trial and error' techniques while testing the correctness of their statements in the target language. For example, the learners may evaluate their existing linguistic knowledge, ask for help from others or pay closer attention to the subsequent input, in order to express the intended meaning of their statements. In other words, the learners may utter sentences to test their existing linguistic knowledge and receive feedback from peers. This enables them to rephrase and improvise their production.

The metalinguistic (reflective) function allows learners to reflect consciously upon the language learned. This allows them to identify their problems in learning and using the target language. At this stage, the output developed through problem-solving processes and corrective feedback in the first two functions facilitates the learners in internalising their linguistic knowledge.

Swain (2005) also refined her hypothesis and specified the fluency function, which explains that output provides opportunities for developing automaticity in language use. In an attempt to develop speedy access to extant L2 knowledge for fluent productive performance, learners need opportunities to apply their knowledge in meaningful contexts, which naturally requires output.

A sociocultural perspective suggests that social interaction and collaboration are indispensable to learning, and individual cognitive development is realised through these social interactions and collaborations rather than by isolated learning (Vygotsky 1986). The Zone of Proximal Development is a concept that is central to the sociocultural perspective. This idea focuses on the significance of collaboratively solving problems that cannot be solved independently. Learners apply their existing knowledge towards solving problems collaboratively within their zones of proximal development (Chaiklin 2003). The communication platform established by learners allows for feedback, wherein the language expert responds to the output of a novice, thereby enabling the novice to perform better, improve upon his/her existing knowledge levels and internalise his/her existing knowledge.

The sociocultural framework lays a strong foundation for applying pedagogical tasks that encourage learners to work collaboratively in attaining shared goals. Studies have determined that no two learners are the same as regards their individual weaknesses and strengths (Ohta 2001). Thus, learners can respond as either a novice or an expert while completing collaborative tasks. It has been suggested that classroom tasks that encourage learners to co-operate and produce output are beneficial for scaffolding (Lapkin and Swain 2000; Swain and Lapkin 2002; Zeng and Takatsuka 2009). In this context, scaffolding is defined as the graduated support given during the collaborative learning process to elevate the learners' existing linguistic knowledge to a higher level of proficiency (Sawyer 2006). It has also been reported that a higher level of performance, beyond one's existing knowledge, can be achieved by sharing knowledge and building consensus (Donato 1994; Fernández Dabo 2014; Swain 2000; Swain and Lapkin 2001). In this situation, learners play the role of scaffolders, wherein they support each other in acquiring knowledge. This may help them to internalise and consolidate their L2 knowledge, which is essential to solve language problems and negotiate meanings in a task.

Previous studies have provided insight into the effectiveness of collaborative output tasks in learning English (García Mayo 2002; Leeser 2004; Storch 2008; Swain and Lapkin 2001, 2002). One prominent feature is the relationship between classroom tasks and language-related episodes (LREs). According to Swain and Lapkin (1998), LREs refer to any part of a dialogue where the student talks about the language they are producing, including questioning their language use or modifying the language used by themselves or others. This construct has been used in classroom research to identify the degree to which language learners address recently learned or problematic features of the target language (Jackson 2001). For example, in Leeser's (2004) study, the learners were

grouped according to their relative proficiency, e.g. high–high pairs, high–low pairs and low–low pairs. The number, type and outcome of LREs produced during a writing task were measured. Their results revealed that this task provided opportunities for focusing on form and scaffolding, and the learners with higher English proficiency levels performed better in LREs than those with lower levels. Similar results were also found in previous studies focusing on intermediate and advanced learners through a similar output task called dictogloss (Nabei 1996). The findings revealed that while learners are encouraged to co-produce language through this task, they identify gaps in their language knowledge through feedback from their peers. This helps them comprehend the link between form and meaning.

In addition, several studies have tapped into the potential of different output tasks. For example, García Mayo (2002) involved seven pairs of students in two tasks: a dictogloss and a text writing task. The results indicated that the text writing task is more effective than dictogloss in stimulating learners to learn the word forms and generate more LREs. In another study (Nassaji and Tian 2010), the learners benefitted more from an editing task than a cloze task in relation to facilitating negotiation and learning of phrasal verbs.

Previous studies have also compared tasks completed in pairs with those completed individually (Kim 2008; Storch 2005; Wigglesworth and Storch 2009). One common finding in those studies is that work done in pairs is more likely to produce linguistically accurate sentences than individual work. For example, Storch (2007) showed that the learners who worked in pairs increasingly used target words during interaction and reflected on the word forms. However, regarding the aspect of the accuracy of the task, no significant difference was noticed between the learners who completed the tasks in pairs and those who worked individually. The use of articles and word forms in the task might have contributed to task accuracy in both groups. Learners might not be able to solve such problems in work done in pairs. In another study (Nassaji and Tian 2010), the focus was on the learning of phrasal verbs through both a cloze task and an editing task. A within-subject design was applied, thus all 26 students performed the tasks both collaboratively and individually. The data collected from the pre-tests and post-tests showed that phrasal verb knowledge improved for all the learners. Although statistically significant differences were not found, the learners achieved more vocabulary gains when participating in collaborative work than in individual work. The difficulty in learning phrasal verbs might be the reason why lower vocabulary gains were detected among the learners who completed tasks individually. In addition, the learners who worked individually only produced brief LREs, which was not sufficient to facilitate the acquisition of phrasal verbs.

The reviewed studies on collaborative output tasks contained several drawbacks. First, although it has been pointed out that collaborative pair work may not yield better learning results than individual work, there are limited studies to support this conclusion. Second, most of the studies exclusively focused on dyads and failed to emphasise interaction involving more than two learners, with one or two notable exceptions. For example, Fernández Dabo (2014) compared students who worked in groups of four with those working in pairs for a writing task. The results showed that interactions in groups of four yielded more lexical LREs and better learning results in target words than those in pair interactions. However, there have not been any studies aimed at comparing the effectiveness of group, pair and individual tasks in learning phrasal verbs. Therefore, the effects of individual, pair and group work, along with the possible effects of task types on learning phrasal verbs, still need to be evaluated.

Several factors were attributed to the research design in the present study. First, although a potential in improving the learning results by applying cloze (García Mayo 2002) and editing tasks (Storch 2007) has been shown, further studies are suggested to examine the effectiveness of the cloze and editing tasks (Nassaji and Tian 2010). Second, the present study is original and innovative due to adding writing tasks. In addition, it is focused on the learning of phrasal verbs, which are widely acknowledged as the most challenging subgroup of English vocabulary for English as a foreign

language (EFL) students (Teng in press). Armed with the above knowledge, the following research questions were explored:

(1) To what extent is the learning of phrasal verbs affected by the three output tasks (cloze, editing and writing) in each condition of group work, pair work and individual work?
(2) To what extent is the learning of phrasal verbs influenced by group work, dyad work and individual work for each task?
(3) How do task-type effects interact with grouping effects?

II. Method

2.1. Participants

A total of 72 participants, whose native language was Chinese, including 40 males and 32 females, 20–22 years old, were included from three intact EFL classrooms. At the time of this study, they were attending an intensive course in preparation for an English B-level examination at a university in mainland China. Each class contained 24 students, and they attended this programme for four hours per week. The English courses in this programme were designed for the university students with an English proficiency level lower than that required for the B-level English proficiency test. This test measures the basic comprehension ability for tertiary-level EFL students and the students were required to pass the examination to receive their graduation diploma. Following an internal four-skill language placement test, the students were placed at the low-intermediate level and were not significantly different in terms of proficiency levels ($p = .75$).

An EFL teacher with 10 years of English teaching experience at the college level provided instruction for all three classes in this programme. Having instruction delivery by the same teacher ensured consistency in instructional goals across the three classes. An informed consent document was distributed to the students. They were informed that they were going to participate in a research study and would receive exercises and that they would also receive extra credits following the study. The students were free to withdraw from the study at any time. However, the participants were not informed of the true purpose of the tests as this might have compromised the findings. None of the students withdrew as this programme was related to graduation.

2.2. Target words

The target words comprised 18 phrasal verbs. Similar to idiomatic expressions, phrasal verbs refer to the verbs that consist of two or more words. McCarthy and O'Dell (2007) identify three types of phrasal verb constructions: prepositional phrasal verbs, particle phrasal verbs and preposition–particle phrasal verbs. Examples of the three types are given below.

- take after→She takes after her mother (Prepositional phrasal verb);
- follow up→I decided to follow up these complaints (Particle phrasal verb) and
- look forward to→I look forward to going back to my hometown (Prepositional–particle phrasal verb).

There are two reasons for focusing on phrasal verbs. First, phrasal verbs often convey a wide range of ideas and native speakers use them often in English. However, EFL learners frequently avoid the use of phrasal verbs, and most students tend to focus only on verbs. Moreover, learning phrasal verbs is one of the most challenging dimensions of learning English (McCarthy and O'Dell 2007). One of the difficulties is that some phrasal verbs can be either literal or figurative in meaning, implying that it is difficult to determine the meaning of phrasal verbs simply by looking upon the meaning of the individual parts that stand isolated in a sentence (White 2012). Second, the effective use of phrasal verbs is critical for passing the English B-level examination, as the teacher in the programme observed.

2.3. Data collection procedures

The data were collected during regular class hours, from week 8 to week 11, in a 16-week semester. The reason for conducting the study in the middle of the semester was to increase the students' familiarity with the teacher's teaching styles and provide opportunities for students to get used to working together. This study involved three sessions. The participants first received a pre-test, then a treatment and finally a six-day delayed post-test. This study included three types of output tasks: cloze, editing and writing.[1] Students were randomly assigned to work in pairs or groups of three. In order to compare the effects of collaborative and individual work, each task was completed through three conditions: group work, pair work and individual work. This study used a within-participant design, wherein all learners in each of the classes conducted all the tasks. This may have eliminated the effects of individual differences. The order of the task condition (individual, pair, group work) as well as the order of the task type (cloze, editing, writing) was counterbalanced. For example, in class 1, those learners who had completed the cloze task in groups in the first week completed the writing task in pairs in the second week, then completed the editing task individually in the third week (Table 1).

On the first day of this study (Wednesday in week 8), a pre-test was administered to assess the learners' prior knowledge about the first set of six target words. The learners received a pre-task treatment the next day. They completed the assigned tasks following the treatment. Six days later, a post-test and a second pre-test measuring another set of six target words was also administered. This cycle was repeated in weeks 9 and 10.

During the pre-task treatment, the learners initially received input-based instruction related to the target words as well as some difficult words that appeared in the passage. This instruction aimed at familiarising them with previous knowledge of the target phrasal verbs. This step was deemed necessary based on the teacher's experiences in this programme. Moreover, previous studies have shown the importance of acquainting learners with basic language knowledge before asking them to use those words in conducting output tasks (Swain 2005; Swain and Lapkin 2007).

Following the instruction, the students completed three tasks, which were based on separate texts, thereby including a total of nine texts. The texts used for teaching and practicing each task were adapted from materials used for the English B-level examination (Xing and Cheng 2014). At the beginning of each task, the teacher read the text aloud three times. The first reading was done at a normal pace with the learners just listening. For the second reading, the learners were told to jot down keywords, and the teacher paused for 10 seconds after each sentence to allow them time to do this. The third reading was again done at normal pace, and provided learners with the opportunity to check their understanding and to add to their keywords. Support for the

Table 1. A depiction of the research design.

		Class 1	Class 2	Class 3
Week 8	Wednesday	Pre-test on six target phrasal verbs		
Week 8	Thursday	Pre-task treatment		
		2 groups (cloze task)	3 pairs (editing task)	6 individuals (writing task)
		3 pairs (editing task)	6 individuals (writing task)	2 groups (cloze task)
		12 individuals (writing task)	4 groups (cloze task)	6 pairs (editing task)
Week 9	Wednesday	Post-test (six words) Pre-test on another set of six target phrasal verbs		
Week 9	Thursday	Pre-task treatment		
		3 pairs (writing task)	6 individuals (cloze task)	2 groups (editing task)
		6 individuals (cloze task)	2 groups (editing task)	3 pairs (writing task)
		4 groups (editing task)	6 pairs (writing task)	12 individuals (cloze task)
Week 10	Wednesday	Post-test (six words) Pre-test on the final set of six target phrasal verbs		
Week 10	Thursday	Pre-task treatment		
		6 individuals (editing task)	2 groups (writing task)	3 pairs (cloze task) 6 individuals
		2 groups (writing task)	3 pairs (cloze task)	(editing task) 4 groups (writing task)
		6 pairs (cloze task)	12 individuals (editing task)	
Week 11	Wednesday	Post-test (six words)		

teacher's feeling that three readings were necessary comes from previous studies that have shown that acquisition of word form and meaning from simply listening tends to be ineffective and increased exposure to the target materials is necessary (Chen and Teng 2017).

Following this, the students read the cloze version of the text and performed the cloze task by restoring the missing parts and attempting to align the cloze version as closely and correctly as possible to the original text. There were 10 missing parts in each cloze task. Two were from the target phrasal verb group, but the remaining eight were not from the target phrasal verb group. In the editing task, the students read an edited version of the text and attempted to locate and correct any erroneous parts. There were 10 errors in each task, and two of them were related to the target phrasal verb group. For the writing task, 10 phrasal verbs (only two of which were target words) were given separately on a sheet of paper. The students were required to summarise the passage that they had heard and write their comments using phrasal verbs. The created version was subjected to closer analysis and comparison by the learners who worked in groups or pairs.

The teacher allotted 30 minutes for completing each task. The time allocation for each task was suggested by the teacher in the programme, which was based on the teacher's prior experience in assigning similar tasks. The teacher promoted consolidation through corrective feedback to the exercises. A voice recorder was used to record verbal interactions that took place between the students while they were performing the tasks in groups or in pairs. The author observed two lessons in each of the three classes at the beginning, middle and end of the experiment to ensure that the procedure was executed as planned.

2.4. Pre- and post-tests

The learners were tested first for their initial knowledge and then for their acquired knowledge of the target words using a vocabulary knowledge scale (VKS) (Paribakht and Wesche 1996). VKS, a five-level scoring scale, can effectively test word knowledge within a particular range, from complete unfamiliarity to the ability to produce a syntactically and semantically correct sentence using the target word. This test appears to have adequate reliability (.89) (Wesche and Paribakht 1996). It can be used for measuring all sets of words. For the purpose of this test, each target word appeared at the top, followed by a five-category elicitation scale (Table 2). Although this test was criticised for having some limitations (Read 2000), it has been successfully and widely used in previous studies due to its effectiveness in measuring lexical developments (Read and Chapelle 2001).

The scoring system, as shown in Table 3, was slightly different from the scoring system suggested by Paribakht and Wesche (1997). According to this scoring system, a score of zero was allotted to the learners who were unfamiliar with the words. The learners' familiarity or awareness of words earned them a score of one in this study, which was irrespective of their chances of providing a correct meaning. A score of two was awarded to the learners who could provide a correct synonym, English definition, or L1 translation. A score of three was given to the learners who could use the target phrasal verbs with semantic appropriateness in a sentence. However, the scoring was not conditional upon the grammatical correctness of the sentence. A score of four was awarded to the learners who could use the phrasal verb in a sentence with semantic appropriateness and grammatical accuracy.

Table 2. An example of the VKS for testing phrasal verbs.

Mess up
I. I don't remember having seen this word before.
II. I have seen this word before, but I don't know what it means.
III. I have seen this word before, and I think it means _____ (synonym or translation).
IV. I know this word. It means _____ (synonym or translation).
V. I can use this word in a sentence (write a sentence): _____. (If you do this section, please also do Section IV.)

Table 3. A five-level scoring scale: meaning of scores.

Self-report categories	Possible scores	Meaning of scores
I	0	The meaning is not familiar at all
II	1	The word is familiar but its meaning is not known
III	2	A correct synonym or translation is given
IV	3	The word is used with semantic appropriateness in a sentence
V	4	The word is used with semantic appropriateness and grammatical accuracy in a sentence

The pre- and post-tests employed in this study involved paper–pencil testing. Reliability was ensured by having two trained English teachers score the pre- and post-tests independently while being blinded to which were the pre- or post-tests. In terms of inter-rater reliability, a 96% inter-rater agreement was found whereas the first two raters had different opinions on 102 responses out of a total of 2592 responses. A trained third independent rater was invited to resolve the discrepancies emerging due to different rater opinions. In this case, the scores for the controversial items were determined by the majority opinion.

2.5. Data analysis

The results are presented in two parts. The first part addresses the quantitative analysis and the second part addresses the qualitative one. For the quantitative analysis, the scores of all 72 participants were collected and mean scores were calculated to reveal their performance in the three tasks (cloze, editing and writing), three conditions (group work, pair work and individual implementation), and the pre-tests and delayed post-tests. The analysis of variance (ANOVA) was then applied for comparison wherein the significance level was set at 0.05.

For the qualitative analysis, the learners' verbal interactions were audio-recorded with the help of the teacher. Later, the author and the teacher co-transcribed the participants' verbal interactions and double-checked the transcripts. The focus of the transcript analysis was on whether there were any differences in the learners' attention to target word forms among the three tasks.

III. Results

3.1. Quantitative analysis

This analysis focused on the students' gain in learning the target phrasal verbs. In this case, the learners' scores for the pre-test and post-test in different conditions (individual, pair and group) and task types (cloze, editing and writing) were calculated. The means and standard deviations are listed in Table 4.

ANOVA results for the pre-test scores showed that there was no significant difference when comparing conditions (individual, pair and group) for the cloze task ($F(2, 19) = 2.94$, $p > .05$), the editing task ($F(2, 19) = 1.71$, $p > .05$) and the writing task ($F(2, 19) = 3.15$, $p > .05$). Furthermore, the results from the pre-test scores did not reveal significant differences when comparing tasks (cloze, editing and writing) for the individual work condition ($F(2, 28) = 3.15$, $p > .05$), the pair work condition ($F(2, 28) = 3.11$, $p > .05$) or the group work condition ($F(2, 28) = 2.89$, $p > .05$). In addition, ANOVA showed a significant effect determined by the time of testing (pre-test vs. post-test) ($F(2, 29) = 9.75$, $p < .05$). This provided evidence that learners had gained significant knowledge of target phrasal verbs from the time of the pre-test to the post-test.

Repeated ANOVA results for the post-test scores revealed a significant effect when comparing conditions (individual, pair and group) for the cloze task ($F(2, 28) = 8.94$, $p < .05$), and a significant

Table 4. Descriptive statistics for conditions and task types in the pre-test and post-test (*n* = 72).

	Minimum	Maximum	*M*	S.D.
Pre-test: individual				
Cloze task	4	11	8.59	1.81
Editing task	4	10	8.50	1.58
Writing task	5	11	8.69	1.56
Post-test: individual				
Cloze task	8	15	11.36	1.70
Editing task	8	18	14.16	2.17
Writing task	9	24	18.36	2.25
Pre-test: in pair				
Cloze task	4	11	8.53	1.83
Editing task	4	11	8.52	1.60
Writing task	5	11	8.75	1.62
Post-test: in pair				
Cloze task	8	18	14.75	1.91
Editing task	9	24	18.26	2.16
Writing task	10	29	21.88	1.40
Pre-test: in group				
Cloze task	4	10	8.51	1.80
Editing task	5	11	8.54	1.54
Writing task	6	11	8.81	1.52
Post-test: in group				
Cloze task	11	25	18.20	1.56
Editing task	12	28	22.65	1.51
Writing task	14	36	25.20	2.15

interaction effect between the time and condition ($F(2, 28) = 9.05$, $p < .05$). The significant main effect of the three conditions was also observed for the editing task ($F(2, 28) = 9.71$, $p < .05$). Likewise, the analysis showed a significant difference in interaction effect between the time and condition ($F(2, 28) = 8.95$, $p < .05$). The significant main effect of the three conditions also occurred when completing the writing task ($F(2, 29) = 14.51$, $p < .05$). Likewise, a significant difference in interaction effect occurred between the time and condition ($F(2, 28) = 7.54$, $p < .05$). This provided evidence that the three conditions did lead to significant comparable degrees of word learning for the three tasks. Overall, the *post hoc* Bonferroni analysis showed that the learners who undertook the three tasks in a group tended to produce significantly higher mean scores than those who worked in pairs ($p < .05$). Similarly, the learners in pairs tended to yield a significantly higher mean score than the individual learners ($p < .05$). Further analysis also indicated a significant main effect for the task types ($F(2, 29) = 10.45$, $p < .05$), and a significant interaction effect for time and task ($F(2, 29) = 8.89$, $p < .05$). Similarly, the *post hoc* Bonferroni analysis provided evidence that from pre-test to post-test, the writing task led to a greater number of significant gains of target phrasal verbs than the editing task ($p < .05$). Likewise, the editing task produced more significant gains of target phrasal verbs than the cloze task ($p < .05$).

3.2. Qualitative analysis

The qualitative analysis focused on two kinds of discussions. The first kind involved form-focused feedback, such as metalinguistic and corrective feedback. The second kind was concerned with repeating and confirming other learners' feedback. Data analysis revealed that the writing task resulted in the most instances of metalinguistic or form-focused feedback about the target phrasal verbs, followed by the editing task and the cloze task.

As shown in Table 5, only 10.7% of the students' turns in the cloze task focused on metalinguistic and form-focused feedback. This increased to 30.4% in the editing task and 67.1% in the writing task. In contrast, 89.2% of the students' turns in the cloze task focused on confirming and repeating each other's contributions. This accounted for 69.5% and 32.8% in the editing task and writing task, respectively. Although there seems to be at least one learner who basically knows the phrasal

Table 5. Students' turns in the three tasks (cloze, editing, and writing).

	Cloze	Editing	Writing	Total
Metalinguistic, form-focused feedback	9 (10.7%)	21 (30.4%)	51 (67.1%)	81 (35.3%)
Confirmation and repetition	75 (89.2%)	48 (69.5%)	25 (32.8%)	148 (64.6%)
Total	84 (36.95)	69 (30.1%)	76 (33.1%)	229 (100%)

verbs and confidently explains these to his peers, which is different from the whole group co-discovering, this does not negate the findings on learning gains.

The following excerpts are taken from the transcriptions, which show examples of the learners' pair and group interactions during the three tasks. Examples 1 and 2 are from a cloze task, examples 3 and 4 are from an editing task, and examples 5 and 6 are from a writing task.

Example 1

Cloze task:

'After filing a report with them, I finally went home thinking how my day was _____.'

S1:   I finally went home thinking how my day was messed up?
S2:   mess up?
S1:   I think so.
S2:   OK

Example 2

Cloze task:

'Unfortunately, I spilled my boss's coffee and he _____ for about 15 minutes. It was terrible.'

S1:   I spilled my boss's coffee and he messed up for …
S2:   Um?
S3:   I don't agree with the word 'mess up'.
S1:   Um?
S2:   Chew up?
S3:   Um.

In example 1, the learners were required to supply the missing phrasal verb 'mess up' in the cloze sentence 'After filing a report with them, I finally went home thinking how my day was _____ (messed up).' As shown below, two learners conducted a few interactions and their responses were mainly focused on confirming and repeating each other's feedback. In example 2, the learners were required to supply the missing phrasal verb 'chew out' in the cloze utterance, 'Unfortunately, I spilled my boss's coffee and he _____ (chewed me out) for about 15 minutes. It was terrible.' The examples show interactions among three students. However, the interaction mainly involved pausing and acknowledging peers' responses.

Example 3

Editing task: 'He felt sick, dizzy, and then passed away. After 10 minutes, the man stood on his own feet and went to the store owner … '

S1:   Well, he felt sick, dizzy, and then passed away.
S2:   Pass away?
S1:   I also think something is wrong with 'pass away'. How can a person stand up when he has passed away?
S2:   May be.
S1:   Um.
S2:   Pass out?
S1:   I think so.
S2:   OK

Example 4

Editing task: 'He felt sick, dizzy, and then passed away. After 10 minutes, the man stood on his own feet and went to the store owner … '

S1:   So he felt sick, dizzy, and then passed away. After 10 minutes, the man stood on his own feet and went to the store owner and said … pass away?

S2:   Pass away? Yes, this is the erroneous word in this sentence. When someone passes away, it means that he or she died.

S3:   So pass down?

S1:   How do we use pass down in a sentence?

S2:   I think it does not mean someone is down. Maybe it is used for keeping something. For example, this art has been passed down for centuries.

S3:   Great. So how about pass out?

S1:   Yeah. It means someone is down, but he can stand up after a while.

S2:   Um.

S3:   Then we replace the word pass out with the word 'pass away'.

In examples 3 and 4, the learners both in a pair and a group were trying to modify the erroneous phrasal verb 'pass away' (the correct form is 'pass out'). The students went back and forth in terms of confirming and providing form-focused feedback. The group interaction showed additional corrective feedback (example 4). In line 2 of example 3, student 2 suggested the phrasal verb 'pass away', but he was not sure about the correct form and asked for clarification. In line 3, student 1 suggested reasons behind the incorrect usage of 'pass away'. As a response to this statement, student 2 modified the phrasal verb in line 6 and suggested 'pass out' instead of 'pass away'. In example 4, three students interacted and exchanged information. Apart from the form-focused negotiations related to the phrasal verb, the learners also provided a metalinguistic reason by suggesting that the usage of 'pass away' (line 2) and 'pass down' (line 5) makes the sentence grammatically incorrect. A metalinguistic reason behind using the phrasal verb 'pass out' was also provided (line 7). Through several instances of negotiation, the three students finally arrived at a correct decision (line 9).

Example 5 Writing task: 'run into'

S1:   So, we need to produce a sentence with the word 'run into'.

S2:   'run into'?

S1:   Um. Actually we need to understand what we heard just now.

S2:   First, 'run into' means 'meet by chance'.

S1:   What does the passage tell us?

S2:   Well. The passage tells us how to buy our first home, right? And we need to consider a place wherein we would not run into someone we don't like, right?

S1:   I think so.

S2:   Yeah.

Example 6 Writing task: 'run into'

S1:   So, we need to create a sentence with the word 'run into'.

S2:   Run into? Yeah, we often say 'run into someone', which means 'meet someone by chance'.

S3:   Um. For example, we can say 'I unexpectedly ran into an old friend on the street last week'.

S1:   That is a good example. We can also say 'The ship ran into a strong storm at sea'.

S2:   Then let us recall how the word 'run into' was used in the passage we had just heard.

S3:   Great. Let me see my notes. Well, this passage is about how to buy our first house. One of the points that the author had mentioned is that when we want to buy a house, we need to choose a place where, by chance, we would not meet somebody we hate.

S1:   Yeah. Um. One of the main issues in choosing a new house is that we need to find a place where we would not run into somebody we don't like.

S2:   Wow. That is a wonderful sentence.
S3:   It is indeed important for us to live in a place where we will not often run into somebody we don't like.

Examples 5 and 6 were from a writing task wherein the learners in a pair and a group were trying to produce a sentence with the phrasal verb 'run into'. As shown, overall, the groups of three were more likely than the pairs to arrive at an adequate solution to LREs. This is due to the assumption that a group of three learners tended to pool their prior individual knowledge to solve any possible linguistic problems. For instance, in example 5, student 1 is acquiring new knowledge of the word 'run into' by having interaction with student 2. Student 2 has provided metalinguistic information on how to use this phrasal verb (line 6). As a result of this interaction, student 1 may have learned to use the phrasal verb 'run into'. Student 2 may have consolidated his previous knowledge of this phrasal verb through the interactive session.

Example 6 is apparently a collaborative knowledge-building process. This is in line with Donato's (1994) 'collective scaffolding' (34), wherein three students pooled their incomplete linguistic knowledge to scaffold each other in creating a new sentence with the target phrasal verb 'run into'. This enabled them to produce a performance that is of a higher level than that of individual involved (Ohta 2001). For example, student 2 correctly proposed that the phrasal verb 'run into' can be associated with the meaning 'meet somebody by chance' (line 2). Student 3 provided an adequate example for using this word (line 3). This prompted student 1 to create another new sentence (line 4). Student 2 pointed out the importance of relating this word to the original context (line 5). Student 3 provided detailed background information (line 6). Student 1 correctly explained the manner in which the word 'run into' was used in the original context (line 7). Student 3 provided confirmation of this usage (line 9). However, this interaction was not restricted to pausing and acknowledging peers' responses.

IV. Discussion and conclusion

There are three main features to be discussed in the present study. The first feature is the effectiveness of collaborative group and pair work. The learners who performed the three tasks in a group were more likely to acquire more target words than learners who performed in pairs. Likewise, learners who worked in pairs performed better in the acquisition of target words than individual learners. The effective collaboration seems to be a key to the acquisition of target words because learners are equipped with more opportunities to pool ideas, provide feedback and solve language-related problems. In this context, collaborative work facilitates learners' cognitive readiness (Leeser 2004). The findings were not in line with some previous studies (e.g. Kuiken and Vedder 2002), which noted that collaboration was not effective for gaining target word knowledge successfully. However, when considering that the duration of treatment for their study was about 90 minutes, it can be argued that the limited time was not sufficient to help the learners notice, identify and acquire the language structure. In addition, an information gap might have occurred when learners with different proficiency levels interacted with each other. To remedy all of these drawbacks, the present study supported the commonly presumed assumption that collaborative work is more advantageous than individual work. Therefore, in future instruction and learning, teachers should consider these factors while designing, testing and applying collaborative tasks in EFL vocabulary learning. Within the purview of various problems embedded in the collaborative work, intensive training prior to collaborative learning may be necessary. For example, in a study by Swain and Lapkin (2001), the students were trained using video-tapes, which contained practices adopted by the learners to solve linguistic problems collaboratively. Teachers were free to join students' discussions and provide them the necessary guidance for a collaborative session. However, the effectiveness of providing training prior to the collaborative learning was not measured in the present study, which is an important direction for future studies.

The second main feature is that the writing task significantly enhanced gains in learning the target phrasal verbs. This is because the writing task focused the learner's attention on target words. As noted above, the interaction while completing the writing task showed that more instances of form-focused discussions were generated during writing tasks. This finding reveals that attention to form may significantly contribute towards the learning of a new word (Laufer 2006). The previous findings (e.g. Storch 2005), along with the findings of the present study, pinpoint the importance of collaborative writing. However, in a recent study (Hu and Nassaji 2016), it was proposed that the participants in the writing condition relinquished the construction of sentences. The difference might have emerged from the lack of pre-task treatment in their study. A pre-task treatment might have assisted the learners in developing familiarity with some basic language knowledge before performing this task, thereby leading to vocabulary gains (Swain 2005). In addition, potential practice-test congruency effects might have occurred. For example, the students needed to generate an accurate sentence to receive maximum scores on the post-test. This factor might have occupied the focus of learners in the writing task, but not in the other task conditions.

In addition, the writing task equipped the learners with an adequate condition for working collaboratively to solve LREs. This factor contributed towards producing more significant gains in learning phrasal verbs through collaborative group work than collaborative pair work and individual work. Collaborative writing stimulated the learners to pay extra attention to lexis, discuss the use of target words and work towards solving their vocabulary-related problems (Storch 2005). As argued by Teng (2016a), learners involved in collaborative writing are more likely to share joint responsibility for the construction of the text, thereby they become more receptive to suggestions, comments and feedback from peers. Hence, the learners in a collaborative writing condition were provided with more opportunities to give and receive feedback, and pool prior knowledge and resources for solving each language-related problem. This facilitated the achievement of capabilities that were beyond the competence levels of individual learners in the group. This also explained the very high level of English in extracts 5 and 6 of the interview data.

The present study also showed that editing tasks produced better word learning in comparison to cloze tasks. This was due to the nature of editing and cloze tasks. Similar with Nassaji and Tian (2010), when the target phrasal verbs were presented in the editing task, the learners' focus may have been drawn to the related phrasal verb, which triggered more form-focused negotiation. In contrast, the target words were not provided in the cloze task, and hence it failed to draw learners' particular attention to the related words.

The final main feature was the analysis of written transcriptions, which demonstrated that the interaction involving a pause and confirming feedback was primarily detected in the cloze and editing tasks. This implies that the interactions were brief and limited. This may not be substantial enough to facilitate the learners' internalisation of the phrasal verb knowledge. On the other hand, collaborative writing afforded the learners more opportunities to exchange ideas and interact regarding information on various aspects of LREs related to target words. This suggests a positive relationship between LREs and vocabulary acquisition (Fernández Dobao 2014; Kim 2008; Storch and Wigglesworth 2010). Thus, the rich interaction on LREs in completing the writing task collaboratively facilitated the consolidation of previous knowledge and resulted in the acquisition of new word knowledge.

There are a few issues that must be considered for future studies. As previous studies showed the effectiveness of applying post-task exercises in orienting learners' attention to form, the research in this area would be rendered more inclusive by measuring post-task exercises (Pica, Kang and Sauro 2006; Swain and Lapkin 2007). Furthermore, previous studies showed that teacher–learner interaction provided the modified input, and it could promote the learners' language learning (e.g. Gurzynski-Weiss and Révész 2012). This type of input should be added. Finally, more instruments are needed to assess multiple dimensions of vocabulary knowledge (Teng 2016b, 2016c), which would help delineate even the smallest increment in vocabulary acquisition.

In conclusion, a significant effect from various task types was exhibited in the current study. The value of applying pedagogical tasks was reinforced when learning phrasal verbs. The writing task was revealed to be most facilitative for vocabulary acquisition, followed by the editing task and the cloze task. Additional form-focused interactions were also discovered during the writing task. In the light of these findings, the writing task could be determined to be well-suited for providing form-focused interaction and enhancing phrasal verb learning. However, further research is warranted to have a deeper understanding of the interwoven relationship of the three tasks (Pica et al. 2006), or other pedagogical tasks, for learning phrasal verbs.

Note

1. According to Ellis (2003), a task has four main characteristics: (1) A task involves a primary focus on (pragmatic) meaning. (2) A task has some kind of 'gap'. (3) The participants choose the linguistic resources needed to complete the task. (4) A task has a clearly defined, non-linguistic outcome. Therefore, one reviewer suggested that the three tasks in the present study should be called 'activities' or 'exercises'. However, Nassaji and Tian (2010) claimed similar exercises as tasks in their study.

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References

Chaiklin, S. 2003. The Zone of Proximal Development in Vygotsky's analysis of learning and instruction. In *Vygotsky's Educational Theory and Practice in Cultural Context*, ed. A. Kozulin, B. Gindis, V. Ageyev and S. Miller, 39–64. Cambridge: Cambridge University Press.

Chen, X.N. and F. Teng. 2017. Assessing the effects of word exposure frequency on incidental vocabulary acquisition from reading and listening. *Chinese Journal of Applied Linguistics* 40: 56–73.

Donato, R. 1994. Collective scaffolding in second language learning. In *Vygotskian Approaches to Second Language Research*, ed. J. P. Lantolf and G. Appel, 33–56. Norwood, NJ: Ablex.

Ellis, R. 2003. *Task-based Language Learning and Teaching*. Oxford: Oxford University Press.

Ellis, R. 2008. *The Study of Second Language Acquisition*. Oxford: Oxford University Press.

Fernández Dobao, A. 2014. Vocabulary learning in collaborative tasks: a comparison of pair and small group work. *Language Teaching Research* 18, no. 4: 497–520.

García Mayo, M.P. 2002. The effectiveness of two form-focused tasks in advanced EFL pedagogy. *International Journal of Applied Linguistics* 12: 156–75.

Gurzynski-Weiss, L. and A. Révész. 2012. Tasks, teacher feedback, and learner modified output in naturally occurring classroom interaction. *Language Learning* 62, no. 3: 851–79.

Hu, H.M. and H. Nassaji. 2016. Effective vocabulary learning tasks: involvement load hypothesis versus technique feature analysis. *System* 56: 28–39.

Jackson, D.O. 2001. Language-related episodes. *ELT Journal* 55, no. 3: 298–9.

Kim, Y. 2008. The contribution of collaborative and individual tasks to the acquisition of L2 vocabulary. *The Modern Language Journal* 92: 114–30.

Kuiken, F. and I. Vedder. 2002. The effect of interaction in acquiring the grammar of a second language. *International Journal of Educational Research* 37: 343–58.

Lapkin, S. and M. Swain. 2000. Task outcomes: a focus on immersion students' use of pronominal verbs in their writing. *Canadian Journal of Applied Linguistics* 3: 7–22.

Laufer, B. 2006. Comparing focus on form and focus on forms in second language vocabulary learning. *Canadian Modern Language Review* 63: 149–66.

Leeser, M. 2004. Learner proficiency and focus on form during collaborative dialogue. *Language Teaching Research* 8: 55–81.

Long, M.H. 1996. The role of the linguistic environment in second language acquisition. In *Handbook of Second Language Acquisition*, ed. W.C. Ritchie and T.K. Bhatia, 413–68. New York: Academic Press.

McCarthy, M. and F. O'del. 2007. *English Phrasal Verbs in Use*. Cambridge: Cambridge University Press.

Nabei, T. 1996. Dictogloss: is it an effective language learning task? *Working Papers in Educational Linguistics* 12: 59–74.

Nassaji H. and J. Tian. 2010. Collaborative and individual output tasks and their effects on learning English phrasal verbs. *Language Teaching Research* 14: 397–419.

Ohta, A.S. 2001. *Second Language Acquisition Processes in the Classroom: Learning Japanese*. Mahwah, NJ: Lawrence Erlbaum.

Paribakht, S. and M. Wesche. 1996. Enhancing vocabulary acquisition through reading: a hierarchy of text-related exercise types. *Canadian Modern Language Review* 52: 155–78.

Paribakht, S. and M. Wesche. 1997. Vocabulary enhancement activities and reading for meaning in second language vocabulary acquisition. In *Second Language Vocabulary Acquisition*, ed. J. Coady and T. Huckin, 174–200. Cambridge: Cambridge University Press.

Pica, T., H. Kang and S. Sauro. 2006. Information gap tasks: their multiple roles and contributions to interaction research methodology. *Studies in Second Language Acquisition* 28: 301–38.

Read, J. 2000. *Assessing Vocabulary*. Cambridge: Cambridge University Press.

Read, J. and C. Chapelle. 2001. A framework for second language assessment. *Language Testing* 18: 1–32.

Sawyer, R.K. 2006. *The Cambridge Handbook of the Learning Sciences*. New York: Cambridge University Press.

Storch, N. 2005. Collaborative writing: product, process, and students' reflections. *Journal of Second Language Writing* 14: 153–73.

Storch, N. 2007. Investigating the merits of pair work on a text editing task in ESL classes. *Language Teaching Research* 11: 143–59.

Storch, N. 2008. Metatalk in a pair work activity: level of engagement and implications for language development. *Language Awareness* 17: 95–114.

Storch, N. and G. Wigglesworth. 2010. Learners' processing, uptake, and retention of corrective feedback on writing. *Studies in Second Language Acquisition* 32: 303–34.

Swain, M. 2000. The output hypothesis and beyond: mediating acquisition through collaborative dialogue. In *Sociocultural Theory and Second Language Learning*, ed. J.P. Lantolf, 97–114. Oxford: Oxford University Press.

Swain, M. 2005. The output hypothesis: theory and research. In *Handbook on Research in Second Language Teaching and Learning*, ed. E. Hinkel, 471–83. Mahwah, NJ: Lawrence Erlbaum Associates.

Swain, M. and S. Lapkin. 1995. Problems in output and the cognitive processes they generate: a step towards second language learning. *Applied Linguistics* 16: 371–91.

Swain, M. and S. Lapkin. 1998. Interaction and second language learning: two adolescent French immersion students working together. *The Modern Language Journal* 82: 320–37.

Swain, M. and S. Lapkin. 2001. Focus on form through collaborative dialogue: exploring task effects. In *Researching Pedagogic Tasks: Second Language Learning, Teaching and Testing*, ed. M. Bygate, P. Skehan and M. Swain, 99–118. London: Longman.

Swain, M. and S. Lapkin. 2002. Talking it through: two French immersion learners' response to reformulation. *International Journal of Educational Research* 37: 285–304.

Swain, M. and S. Lapkin. 2007. 'Oh, I get it now!' From production to comprehension in second language learning. In *Heritage Language Acquisition: A New Field Emerging*, ed. D.M. Brinton and O. Kagan, 301–19. Mahwah, NJ: Lawrence Erlbaum.

Teng, F. 2016a. Immediate and delayed effects of embedded metacognitive instruction on Chinese EFL students' English writing and regulation of cognition. *Thinking Skills & Creativity* 22: 289–302.

Teng, F. 2016b. The effects of context and word exposure frequency on incidental vocabulary acquisition and retention through reading. *The Language Learning Journal*. DOI: 10.1080/09571736.2016.1244217.

Teng, F. 2016c. The effects of word exposure frequency on incidental learning of the depth of vocabulary knowledge. *GEMA Online Journal of Language Studies* 16, no. 3: 53–70.

Teng, F. in press. The effect of focus on form and focus on forms instruction on the acquisition of phrasal verbs by Chinese students. *Asian EFL Journal*.

Vygotsky, L.S. 1986. *Thought and Language*. Cambridge, MA: MIT Press.

Wesche, M. and T.S. Paribakht. 1996. Assessing L2 vocabulary knowledge: depth versus breadth. *Canadian Modern Language Review* 53: 13–40.

White, B.J. 2012. A conceptual approach to the instruction of phrasal verbs. *The Modern Language Journal* 96, no. 3: 419–38.

Wigglesworth, G. and N. Storch 2009. Pair versus individual writing: effects on fluency, complexity and accuracy. *Language Testing* 26: 445–66.

Xing, Y. and X.Y. Cheng. 2014. *Preparing for English B-Level Examination*. Beijing: Communication University of China.

Zeng, G. and S. Takatsuka. 2009. Text-based peer-peer collaborative dialogue in a computer mediated learning environment in the EFL context. *System* 37: 434–46.