The Role of Language-enhancement Tasks in an EFL Reading Comprehension Course

Yoshimasa Ogawa

Abstract

This is a pseudo-experimental study to evaluate the effects of form-focused language-enhancement tasks on Japanese EFL students' acquisition of lexical phrases. Participants were 81 non-major students at a private Japanese university. Oral cloze and sentence-level composition tasks were administered alternately before and after reading comprehension tasks. The results of two-way repeated-measures ANOVAs indicated that the tasks facilitated the participants' acquisition of lexical phrases over the semester, but the timing for administering the form-focused tasks (i.e., at the beginning, or at the end, of a class session) did not have any impact on their acquisition of target forms.

Introduction

This is an action research study on an introductory EFL course for Japanese university students. The major target skill area was reading comprehension, and participants read English-language essays of journalistic style. The course was basically meaning-focused, and students strove to understand written English and enrich their vocabulary through reading comprehension activities. However, the teacher, who was the researcher himself, arranged to integrate some form-focused tasks into the task cycle because opportunities to produce output are believed to facilitate L2 acquisition (Swain, 1985, 1993, 1995). The participants engaged in oral cloze and sentence-level writing tasks, which can be regarded as an intermediary between focus-on-form and focus-on-formS treatments. These form-focused tasks were chosen, instead of a communicative speaking task, for the reason that the participants had chosen the beginning-level reading course, not a communicative speaking course.

The language-enhancement tasks were administered alternatively at the beginning and at the end of a class session. Target linguistic forms were *lexical phrases*: i.e., multi-word units that are remembered and retrieved as unanalyzed wholes (Nattinger, 1980; Nattinger & DeCarrico, 1992; Lewis, 1993, 1997). They are also known as *formulaic sequences* (Wray, 2000, 2002: Schmitt & Carter, 2004) or *multiple-word items* (Moon, 1997). Native speakers of a language have a large stock of lexical phrases that facilitate their fluent and accurate delivery of speech (Ellis, 2005; Wray, 2002), and the acquisition of such formulaic phrases and sentence structures is likely to facilitate L2 learners' speech or writing, as well as their

understanding of oral or written messages, in the target language. Participants in this study were guided to learn several lexical phrases from each textbook unit. The major research goals are to determine: (a) whether or not the language-enhancement tasks might facilitate the participants' acquisition of lexical phrases and (b) where in the task cycle form-focused tasks can be best administered, i.e., before or after meaning-focused reading activities.

The participants were enrolled in a prestigious Japanese university, but their English proficiencies were classified as the beginning level (not by the national standards but by the university's standards) based on the placement test results. The reading materials in the main textbook covered social, economic, religious, military, and political issues, and each unit contained a number of words that earlier groups of students had found unfamiliar. Consequently, the acquisition of some of the lexical items—particularly lexical phrases—was likely to pose a challenge to the participants in this study. On the other hand, whereas they may not be strongly motivated to learn English as a foreign language, majoring in different academic subjects, their general academic proficiencies are very high, and they may employ their own learning strategies that are different, for example, from ESL learners who have environmental support and have been involved in various communicative activities. Uncovering the exact process by which Japanese university students acquire words and lexical phrases is beyond the reach and scope of this study, but the study aims to determine: (a) the degree to which form-focused language-enhancement tasks facilitate this particular student group's acquisition of lexical phrases and (b) the best timing for administering the language-enhancement tasks during a class session.

Backgrounds

Form-focused Treatment

Form-focused instruction has been differentiated from meaning-focused instruction in which learners are not guided to attend to any grammatical rule or linguistic item. The target units for form-focused learning can either be the grammatical system (e.g., syntactic rules) or exemplars (e.g., pronunciations, vocabulary items, morphology endings, and lexical phrases). The major assumption is that they are problematic items that present a challenge to language learners.

Form-focused instruction tends to be dichotomously divided into focus-on-form and focus-on-formS (Long, 1991; Doughty & Williams, 1998), but Ellis (2001) categorized form-focused instruction into three types: focus-on-formS, planned focus-on-form, and incidental focus-on-form. Moreover, there is a continuum between focus-on-form and focus-on-formS because an explicit and direct presentation of a phonological, lexical, or syntactic form can be integrated into a communicative or interactional language activity or designed to involve some level of cognitive processing.

The oral cloze and sentence-level composition tasks administered in this study can be regarded as an intermediary between (planned) focus-on-form and focus-on-formS. They were intended to draw learners' attention to target forms in the reconstructive processes, and the language-focused tasks were connected to the meaning-focused reading comprehensive activities in each class session. However, the forms were prescribed and somewhat intensively enhanced－not spontaneously provided, noticed, or responded to during interactions－and participants strove to achieve formal accuracy by repeating target lexical phrases several times or recycling the phrases that they had just been exposed to, which entailed a characteristic of focus-on-formS instruction. Therefore, these tasks are referred to as *form-focused* treatments in this paper.

Timing for Administering Form-focused Tasks

Nattinger and DeCarrico (1992), who advocated instruction of lexical phrases, suggested that even the focus-on-formS instruction, which is often considered to be ineffective because of its failure to activate cognitive processing, can facilitate language acquisition by kinesthetically familiarizing learners with new grammatical forms. They observed that:

> There is nothing wrong with memorizing some essential chunks, especially at the beginning stages of language learning [...] The challenge for the teacher would be to use such drills to allow confidence and fluency, yet not overdo them to the point that they become mindless exercise. (p. 116)

In their perspective, form-focused instruction (even if it is focus-on-formS-oriented) can be effectively utilized to prepare learners for more difficult communicative or meaning-focused tasks involving the target forms.

On the other hand, Nunan (2004) and Willis and Willis (2007) argued that form-focused tasks might contribute to language acquisition when learners have already been exposed to target forms through meaning-focused activities. My position leans toward Nunan's and Willis and Willis' observation, which supports the idea of polishing the forms that have been at least partially learned through meaning-focused or communicative activities. However, either approach can be more effective depending on particular learning contexts or individual learners' backgrounds, characteristics, or preferences. The present study focuses on a group of non-major EFL students at a Japanese university, whose general academic proficiencies are very high but their English proficiencies are comparatively lower by the pertinent university's standards.

Example Cases of Form-focused Tasks Before or After Communicative Activities

The present study involves form-focused language-enhancement tasks that are not genuinely communicative. However, the effects of form-focused tasks administered either

before or after more meaning-focused (or communicative) tasks can be illustrated by the following three studies.

Jones and Haywood's study (2004) exemplifies the procedure that engages learners in the meaning-focused activities first and then in form-focused activities afterward. They explored an effective way to teach formulaic sequences to undergraduate and graduate students enrolled in an English-for-academic-purposes course at the University of Nottingham (treatment group, $n=10$; control group, $n=11$). Participants first enrolled in meaning-focused reading activities. Then, after being familiarized with the text through meaning-focused reading, the treatment group received a focus-on-form instruction: the original text was presented again with formulaic sequences typographically enhanced in bold italics, and the participants engaged in gap-filling exercises and essay writing. The results showed that their awareness of formulaic sequences improved, but no evidence was produced that their ability to retrieve and use the target phrases had improved.

As an example of a program that introduced form-focused activities first, Hager and Lyman-Hager (2004) reported on a two-week in situ internship program that The Pennsylvania State University and the University of Artois had jointly set up for American engineering students preparing to engage in bi-national business projects. In this special program in France, the participants were presented with useful expressions first (focus-on-formS) and then engaged in outside-of-class tasks to practice using them (i.e., meaning-focused communicative tasks) next. (I acknowledge that the program in France differs from the present study in that form-focused tasks were followed by communicative speaking activities, not reading comprehension activities. Nonetheless, the major point is that each training session began with form-focused tasks.) First, the participants learned and rehearsed using survival expressions in the classroom: two instructors predicted the expressions that they would have to use (e.g., finding out about transportation, purchasing food or toiletries) and tailored the lessons to their needs. Then, the participants moved in a van to different locations and practiced using useful expressions in various real-life communicative situations. It must be noticed, however, that, back in the van, the participants debriefed the expressions they had used or the communicative purposes they had failed to accomplish, and the instructors or other students offered feedback, which was a form-focused activity. In this sense, the task cycle can also be regarded as alternation between form-focused and meaning-focused activities.

Macias (2004) reported on a Spanish-for-academic-purposes program at Hartnell College in Salinas, California, which was more clearly intended as a cyclic process. The participants were involved in form-focused and meaning-focused tasks alternately and repeatedly. They started with a simple communicative task (not form-focused) using expressions of their own choice. Then, they were provided with basic sentences and syntactic rules and practiced using the forms. At the following class session, learners reviewed the learned forms, for example,

by introducing themselves by using basic sentence structures, read basic reading materials for children, and discussed the issues covered in reading activities. They finished the lesson with communicative activities, and, at the following session, the vocabulary items and grammatical rules were reviewed before a new concept or theme was introduced. The instructional cycle began with communicative, meaning-focused tasks, but, subsequently, form-focused and meaning-focused tasks were administered alternately.

Research Questions

The following two research questions guided the present study.

Research Question 1: Do form-focused language-enhancement tasks facilitate participants' acquisition of useful lexical phrases in the context of reading comprehension lessons?

Research Question 2: Do participants learn more lexical phrases from the language-enhancement tasks administered before meaning-focused reading comprehension activities, or do they benefit more from the same tasks administered after reading activities?

Method

Participants

Participants were enrolled in one of the most prestigious private universities in Japan, and their general academic proficiencies were very high as evidenced by the fact that they had won admission to the school. On the other hand, the pertinent EFL course was classified as an introductory (or beginning-level) EFL course based on the placement test that the department administered prior to course registration. The placement test scores they attained were equivalent to 365-555 TOEIC scores. The EFL course that they took, labeled as *Basic-Level English: News Reading*, was offered to two different groups of students, scheduled for two different class periods on the same day of week. One class had 39 students, and the other 42; the total number of participants was 81. The research study was conducted on these two intact classes. The entire participant group included 53 first-year students, 8 second-year students, 10 third-year students, and 10 fourth-year students. Sixty-nine of them were male, and 12 were female.

The participants had studied English at Japanese junior high schools and high schools for a total of six years; some had spent one or two additional years taking high-school-level English courses at preparatory schools for entrance examinations. Their EFL learning in middle schools (and preparatory schools) had been heavily oriented toward the Grammar-Translation Method, designed mainly to improve their reading comprehension and grammar-analysis skills and to expand their vocabulary of literary English. Very few had received trainings to speak or write English for communicative purposes. All participants were non-English-majors, majoring, instead, in Japanese literature, pedagogical sciences, social

sciences, cultural sciences, biology, mathematics, or history and geography.

Materials

The main textbook used in the spring was *New Issues for Global Change and Challenges* (Hirota & Balsamo, 2006). The essays in the textbook, journalistic in style, were carefully edited for EFL learners' use and included a balanced combination of topics. On the other hand, the essays were based on news reports in the past and tended to be outdated. Therefore, additional newspaper articles on recent social events were distributed in the form of Xeroxed materials. However, the analysis of lexical-phrase acquisition was based only on their reading of the textbook units that were regulated in terms of length, style, and difficulty. Participants were instructed to read the textbook before coming to the class, but the teacher's observation in the past years indicated that few read the textbook units very carefully before coming to class. Consequently, when form-focused instruction was conducted at the beginning of a class, for many participants, it was their first occasion to pay close attention to the target lexical phrases.

Instructional Treatments

The major portion of class time was spent on meaning-focused reading comprehension activities. The teacher provided the same instruction to the two groups of students using exactly the same materials. The meaning-focused reading comprehension practice involved skimming over the assigned essay, or news article, for the day and answering comprehension questions. The teacher called on some participants to interpret the semantic and pragmatic meanings of certain parts of an assigned reading and, whenever necessary, explained the lexical items or syntactic structures that the participants had trouble understanding. Word-by-word translation of individual sentences or paragraphs was avoided as much as possible.

In addition to the reading comprehension activities, the participants engaged in two types of form-focused language-enhancement tasks, which were intended to draw their attention to useful lexical phrases and guide them to remember and use some of them. The first language-enhancement task was an oral cloze using PowerPoint, modeled on *blackboard reproduction* (Nation, 1974) or *progressive deletion* (Willis & Willis, 2007). A set of PowerPoint slides were prepared. The first slide presented a sentence that conveyed a major point in the textbook unit that they read and was embedded with lexical phrases. The target lexical phrases were highlighted in bold, and difficult syntactic or lexical items were explained if necessary. On the second and third slides, parts of the target lexical phrases were deleted, and, on the fourth slide, the entire lexical phrases—and sometimes a few additional content words in the same sentence—were deleted. The participants endeavored to reconstruct the original sentence. The following is an example of a set of slides used for this task.

Slide 1: English is now the lingua franca of the world. It has become the language of business and travel and **the key to** job advancement and security.

Slide 2: English is now the lingua franca of the world. It has become the language of business and travel and **the ( ) ( )** job advancement and security.

Slide 3: English is now the lingua ( ) of the world. It has become the language of business and travel and **the ( ) ( )** job advancement and security.

Slide 4: English is now the ( ) ( ) of the world. It has become the language of business and travel and ( ) ( ) ( ) job ( ) and security.

In this sentence, *the key to* was the major target lexical phrase, underlined and highlighted in bold. *Lingua franca* and *job advancement* were additional phrases, parts of which were also deleted on the third and fourth slides for a remember-and-retrieve task. Many of the sentences displayed on the PowerPoint screen contained one lexical phrase whereas some contained two or more.

The second form-focused task was to translate a Japanese sentence into English. It was a partial-translation task: i.e., parts of each target English sentence were provided as hints. Participants needed to use one of the lexical phrases they had learned, or would learn, during the day's lesson to complete this translation task, and they were asked to write it on a supplied sheet of paper and submit it to the teacher. The composition task guided participants to map a target form on its semantic function.

The procedure for the partial-translation task was as follows. The teacher displayed, on the big screen, a Japanese sentence and an equivalent English sentence missing the target lexical phrase and several other words. The participants filled in the blanks and reproduced the English sentence on a supplied answer sheet. Then, they exchanged their answer sheets with their neighbors and corrected each other's mistakes referring to the feedback that the teacher subsequently displayed on the screen. It was announced at the beginning of the semester that this in-class writing was part of their practice to learn lexical phrases, and the scores on this task would not affect their final grades. However, the submission of the on-the-spot composition was believed to pressure them to take on the task seriously.

The first group engaged in the form-focused tasks at the end of odd-numbered class sessions and at the beginning of even-numbered sessions. The second group engaged in the same form-focused tasks at the beginning of odd-numbered sessions and at the end of even-numbered sessions. The contents of the lessons were thus counterbalanced. When form-focused tasks were administered at the beginning, the participants (i.e., except for the few diligent ones who had carefully read the textbook at home) had not been exposed to the target lexical phrases. At the class sessions in which the form-focused tasks were administered at the end, all participants had been exposed to the phrases through reading activities.

Assessment

A pretest, three mid-term quizzes, and a final test were conducted to measure participants' knowledge of lexical phrases. The pretest measured the participants' base knowledge of lexical phrases before receiving any instruction. The three mid-term quizzes assessed their learning of different lexical phrases at different time periods during the semester; the means of these tests were believed to reflect their short-term retention of target lexical phrases. The final test was administered two weeks after the last mid-term quiz, and the results might reflect their long-term retention of phrases, although the lapse of time after the last class session was not very long. The pretest and the final test included the same question items, and the mid-term quizzes were small parts of the pretest or final test. However, the order of questions was changed for each test, and the final test contained a few non-target items to prevent any testing effect. Each of the three tests included two sections: (a) a multiple-choice section that required participants to choose one out of the three alternatives as part of the target lexical phrase and (b) a sentence completion section that required participants to fill in the blanks with an appropriate lexical phrase based on an equivalent Japanese phrase provided as a hint. The second section was intended to be more difficult.

Again, the two intact classes (enrolled in two courses administered during consecutive class periods) studied the same textbook and materials and were exposed to the same lexical items, but they engaged in the form-focused language-enhancement task at the beginning or at the end of a class alternately. The effectiveness of the two treatments was evaluated by administering a two-way repeated-measures ANOVA. Within-subjects comparison was conducted, instead of between-subjects comparison, in order to adjust the English abilities of the two intact classes and also to treat all students fairly from an educational and ethical point of view.

Additionally, the participants were asked to indicate their personal preference for either treatment in the form of an informal survey at the end of the semester. Their answers were counted, and a chi-square test was conducted to measure the degree of statistical significance.

The level of significance for all statistical tests was set at $\alpha = 0.05$.

Results

Multiple-choice Test Results

Prior to the administration of a two-way repeated-measures ANOVA, the participants' multiple-choice scores on the pretest, mid-term quizzes, and final test were transformed into Rasch digits, using the dichotomous Rasch model (Bond & Fox, 2007). Rasch measures are more useful for accurate statistical measurement than raw scores because they are equal-interval measures that are derived from the probabilistic relationships between person abilities and item difficulties.

The Rasch analyses indicated that the person separation was 0.77, and the person reliability was 0.37; both were rather low, which may be attributable to the fact that the participants, enrolled in the beginning-level EFL course at the same university, were similar in English proficiency. The item separation was 4.28, which was much higher than the criterion point of 2.0, and the item reliability was 0.95, also above the criterion point of 0.90.

The Rasch person measures were converted to response probability units (CHIPS). This linear transformation meant that the average person measure was set at 50, and the highest and lowest possible scores were respectively 80 and 20. The final N-size for statistical analyses was 65. Table 1 displays the descriptive statistics for the multiple-choice tests.

Table 1. *Descriptive Statistics for Multiple-choice Tests*

			Beginning	End
Pretest	*M*		49.54	49.98
	95%CI	Lower Bound	48.55	48.97
		Upper Bound	50.53	50.98
	SD		3.99	4.06
	Skewness		−0.21	−0.45
	SES		0.30	0.30
	Kurtosis		−0.28	0.37
	SEK		0.59	0.59
Mid-term Quizzes	*M*		54.22	54.73
	95%CI	Lower Bound	53.19	53.40
		Upper Bound	55.25	56.06
	SD		4.15	5.38
	Skewness		0.84	0.39
	SES		0.30	0.30
	Kurtosis		1.39	−0.47
	SEK		0.59	0.59
Final Test	*M*		60.88	61.38
	95%CI	Lower Bound	59.42	60.03
		Upper Bound	62.33	62.73
	SD		5.86	5.46
	Skewness		−0.36	−0.44
	SES		0.30	0.30
	Kurtosis		−0.98	−0.89
	SEK		0.59	0.59

Note. $N=65$.

Then, a two-way within-subjects ANOVA was conducted using these converted scores to evaluate the effects of *treatment* and *test* on the participants' acquisition of target lexical phrases. The within-subjects factors were *treatment* with two levels (language-enhancement at the beginning or at the end) and *test* with three levels (pretest, mid-term quizzes, and final test). The dependent variables were the participants' scores on the three tests after

each treatment.

Mauchly's Sphericity Test indicated that the assumption of sphericity was not met either for the *test* factor, $W=0.87$, $p=0.01$, or for the *treatment* x *test* interaction, $W=0.90$, $p=0.04$. Consequently, the Greenhouse-Geisser statistics was referred to in the interpretation of ANOVA results. The sphericity assumption did not apply to the *treatment* factor that had only two levels.

The *time* main effect and the *time* x *treatment* interaction effect were tested using the multivariate criterion of Wilks's lambda (Λ). The *test* main effect was significant, $\Lambda=0.20$, $F(2, 63)=127.54$, $p=0.001$, $\eta^2=0.80$, but the *test* x *treatment* interaction effect was not significant, $\Lambda=1.00$, $F(2, 63)=0.01$, $p=0.99$, $\eta^2=0.00$.

Likewise, the results of the univariate test (see Table 2) showed that the *test* main effect was significant, $F(1.76, 112.91)=172.02$, $p=0.001$, $\eta^2=0.73$, but the *treatment* main effect was not significant, $F(1, 64)=1.57$, $p=0.22$, $\eta^2=0.02$, suggesting that the timing for the administration of language-enhancement tasks (i.e., either at the beginning or at the end of a lesson) did not have any significant influence on learners' acquisition of lexical phrases. The *treatment* x *time* interaction effect was not significant, $F(1.82, 116.31)=0.01$, $p=0.99$, $\eta^2=0.00$.

Table 2. *Univariate Test Results of the Two-way Repeated-measures ANOVA (Multiple-choice Tests)*

Effect	df	SS	MS	F	p	η^2
Treatment	1	22.75	22.75	1.57	0.22	0.02
Residual	64	928.94	14.51			
Test	1.76	8483.96	4809.10	172.02	0.001	0.73
Residual	112.91	3156.46	27.96			
Treatment x Test	1.82	0.11	0.06	0.01	0.99	0.00
Residual	116.31	1528.47	13.14			

Note. $\alpha=0.05$.

In order to follow up the significant *test* main effect, the means for the three tests were computed, and three paired-samples *t*-tests were conducted. Holm's sequential Bonferroni approach was used to control for familywise error rate across these tests. The mean for Test 3 ($M=61.13$, $SD=0.64$) was significantly higher than that for Test 1 ($M=49.76$, $SD=0.40$), $t(64)=16.07$, $p=0.001$, $d=22.18$, the mean for Test 2 ($M=54.48$, $SD=0.48$) was significantly higher than that for Test 1, $t(64)=9.25$, $p=0.001$, $d=9.18$, and the mean for Test 3 was significantly higher than that for Test 2, $t(64)=10.82$, $p=0.001$, $d=13.54$. The *d*-values indicated that the effect sizes were very large. That is, the scores, for either treatment, improved progressively from the pretest to the mid-term quizzes to the final test.

Sentence Completion Test Results

The participants' sentence completion test scores for the pre-test, mid-term quizzes, and the final test were first transformed into Rasch digits, using the partial-credit Rasch model (Bond & Fox, 2007). The person separation was 1.41, and the person reliability was 0.67; neither reached the desirable level of 2.00 or 0.90. The item separation was 9.89, and the item reliability was 0.99, which were both very high. As in the analysis of multiple-choice test scores, the Rasch digits were converted to response probability units. The final N-size for statistical analyses was 66. Table 3 displays the descriptive statistics for the sentence completion tests.

Table 3. *Descriptive Statistics for Sentence Completion Tests*

			Beginning	End
Pretest	M		43.08	43.08
	95%CI	Lower Bound	41.46	41.51
		Upper Bound	44.70	44.65
	SD		6.59	6.39
	Skewness		-0.22	-0.70
	SES		0.29	0.29
	Kurtosis		-0.05	0.98
	SEK		0.58	0.58
Mid-Term	M		50.24	51.24
	95%CI	Lower Bound	48.30	49.51
		Upper Bound	52.18	52.98
	SD		7.88	7.06
	Skewness		-0.84	-0.15
	SES		0.29	0.29
	Kurtosis		1.39	0.84
	SEK		0.58	0.58
Final Test	M		62.94	62.84
	95%CI	Lower Bound	61.31	61.28
		Upper Bound	64.56	64.40
	SD		6.62	6.35
	Skewness		-0.10	0.18
	SES		0.29	0.29
	Kurtosis		-0.66	-1.17
	SEK		0.58	0.58

Note. $N=66$.

The means for the two treatments (i.e., language-enhancement either at the beginning or at the end of a lesson) were very similar at each of the three tests. On the other hand, the mean for each treatment increased from the pretest to the mid-term quizzes to the final test to a noticeable degree.

Then, a two-way within-subjects ANOVA was conducted to evaluate the effects of

treatment and *test* on the participants' acquisition of target lexical phrases. The within-subjects factors were *treatment* with two levels (language-enhancement at the beginning or at the end) and *test* with three levels (pretest, mid-term quizzes, and final test). The dependent variables were the participants' scores on the three tests for each treatment.

Mauchly's Sphericity Test results showed that the assumption of sphericity was met for both the *test* factor ($W=0.99$, $p=0.79$) and the *text* x *treatment* interaction ($W=0.93$, $p=0.11$).

The multivariate test results showed that the *test* main effect was significant, $\Lambda=0.09$, $F(2, 64)=310.49$, $p=0.001$, $\eta^2=0.91$. On the other hand, the *treatment* x *test* interaction was not significant, $\Lambda=0.98$, $F(2, 64)=0.56$, $p=0.57$, $\eta^2=0.02$.

The univariate test results (see Table 4) also showed that the *test* main effect was significant, $F(2, 130)=296.28$, $p=0.001$, $\eta^2=0.82$. The *treatment* main effect was not significant, $F(1, 65)=0.34$, $p=0.56$, $\eta^2=0.01$, and the *treatment* x *test* interaction was not significant, $F(2, 130)=0.49$, $p=0.62$, $\eta^2=0.01$, either.

Table 4. *Univariate Test Results of the Two-way Repeated-measures ANOVA (Sentence Completion Tests)*

Effect	df	SS	MS	F	p	η^2
Test	2	26329.62	13164.81	296.28	0.001	0.82
Residual	130	5776.31	44.43			
Treatment	1	9.03	9.03	0.34	0.56	0.01
Residual	65	1748.91	26.91			
Test x Treatment	2	24.49	12.25	0.49	0.62	0.01
Residual	130	3270.07	25.15			

Note. $\alpha=0.05$.

In order to follow up the main *test* effect, the means for the three tests were computed, and three paired-samples *t*-tests were conducted. Holm's sequential Bonferroni approach was used to control for familywise error rate across these tests. The mean for Test 3 ($M=62.89$, $SD=0.72$) was significantly higher than the mean for Test 1 ($M=43.03$, $SD=0.60$), $t(65)=25.04$, $p=0.001$, $d=29.88$, the mean for Test 2 ($M=50.74$, $SD=0.82$) was significantly higher than the mean for Test 1, $t(65)=9.36$, $p=0.001$, $d=10.66$, and the mean for Test 3 was significantly higher than the mean for Test 2, $t(65)=14.27$, $p=0.001$, $d=15.73$. The participants' scores on the sentence completion test improved significantly from the pretest to the mid-term quizzes to the final test.

Chi-square Test Results

A question item in the questionnaire survey conducted at the end of the semester asked the participants whether they preferred to engage in the form-focused language-enhancement tasks at the beginning of a class session (i.e., before reading comprehension activities) or at

the end. Out of the 81 students, 30 indicated that they preferred to have language-enhancement at the beginning, and 33 preferred the treatment at the end; interestingly, their preferences were almost evenly divided. Seventeen gave no answer, either having no preference or simply being oblivious to the question, whereas one participant expressly indicated that he/she preferred to have it alternately at the beginning and at the end of a session.

A one-way chi-square test was conducted to assess the degree of statistical significance. The result of the test was significant, $\chi^2(3, N=81)=31.54$, $p=0.001$. In order to follow up the significant effect, six pairwise comparisons were conducted; the results are shown in Table 5. It was not surprising that there were significant differences between *alternation* (the observed frequency of which was only one), on the one hand and *before* (30), *after* (33), and *no response* (17) on the other. However, there was no significant difference between the portions of people who preferred the treatment at the beginning and those preferred the treatment at the end, $\chi^2(1, N=63)=0.14$, $p=0.71$.

Table 5. *Results of the Follow-up Chi-square Tests*

	χ^2	p
Before vs. After	0.14	0.71
Before vs. No Response	3.6	0.06
No Response vs. After	5.12	0.2
Before vs. Alternation	27.13	0.001
No Response vs. Alternation	14.22	0.001
After vs. Alternation	30.12	0.001

Note. $df=1$; $\alpha=0.05$.

Discussion

The first research question was: Do form-focused language-enhancement tasks facilitate participants' acquisition of useful lexical phrases in the context of reading comprehension lessons? The statistical results indicated that there was a significant progress from the pretest to the mid-term quizzes and to the final test. Thus, it is safe to assume that the oral cloze and simple composition tasks contributed to the participants' acquisition of target lexical phrases. As acknowledged at the beginning of this paper, these tasks are not of a communicative type, although designed to induce some cognitive processing. The tasks are simply designed to help participants remember and retrieve useful lexical chunks, but it must be noted again that a large stock of useful lexical phrases helps EFL/ESL learners carry out communicative interactions (Ellis, 2005; Wray, 2002).

In the pertinent research context, the final-test results should be interpreted as the accumulation of lexical knowledge due to their repeated exposure to the target forms over time, not a carry-over effect of the treatment after the instructional treatment ended. As part of the statistical measurement, an arrangement was made to prevent testing effects.

However, being exposed to the same forms through tasks and tests, the participants might have consolidated their memory of target phrases toward the end of the semester. Their mid-term quizzes were returned to the participants before the final test, and they had a chance to review the lexical phrases that they had learned during the semester. It might have not been an ideal condition for statistical assessment, but it is a necessary part of the educational treatment. The participants had the right to have the earlier quizzes or tests back as feedback, and they had been informed at the beginning of the semester that, whereas the quizzes were part of their learning procedure and would not affect their grades, their final test scores would do.

The second research question was: Do participants learn more lexical phrases from the language-enhancement tasks administered before meaning-focused reading comprehension activities, or do they benefit more from the same tasks administered after reading activities? The statistical test results suggested that the timing for the administration of form-focused instruction did not influence their learning of lexical phrases. At each test, their performance was practically the same whether they engaged in the oral cloze and composition tasks before or after reading activities. Furthermore, practically the equal proportions of students indicated their preference to receive the language-enhancement treatment at the beginning or the end of a lesson. Neither task sequence appealed to the majority of students.

One interpretation is that the language-enhancement tasks were not substantial enough to influence participants' learning of lexical phrases or that these tasks, which did not involve interpersonal interactions, higher-level cognitive processing, or creative language use, were not adequate or appropriate. However, another possible interpretation is that both treatments (i.e., language-enhancement before reading or after reading) had their own positive effects and, when measured statistically, canceled out the gains and losses. The latter position can be, at least partially, supported by the fact that some participants gave positive comments on one treatment and others reacted positively to the other. For example, four of the participants who indicated their preference for the language-enhancement treatment at the beginning specifically stated that it was helpful to know what the major target linguistic points were before engaging in the meaning-focused activities. Three others voluntarily offered positive comments for the same treatment. On the other hand, four of the participants who preferred the treatment at the end observed that they could understand the meanings of the lexical phrases better after being exposed to them in context, and six indicated that they could memorize target lexical phrases more easily after finding them in context. Their observations resonate with Nunan's (2004) and Willis and Willis's (2007) position. Five others voluntarily offered positive comments for the latter treatment. Furthermore, as mentioned in the results section, one participant explicitly wrote that he/she preferred to have it alternately at the beginning and at the end of a session despite

the fact that such an answer had not been provided as a prescribed alternative in the questionnaire.

If the second interpretation (i.e., both treatments have positive effects) holds true, the safest pedagogical arrangement is to use the two treatments alternately or, as Hager and Lyman-Hager's (2004) and Macias's (2004) reports suggested, to integrate the form-focused and meaning-focused (or communicative) tasks cyclically within the same EFL course. However, there is no doubt that the same issue needs to be further probed through replication studies with different participants engaged in different language-enhancement or communicative form-focused activities.

Conclusion

The results of the present study suggested that formed-focused language-enhancement tasks would facilitate Japanese EFL university students' acquisition of lexical phrases in the context of reading comprehension lessons. However, the effectiveness of the language-enhancement tasks used in this study—oral cloze and sentence-level composition—did not differ depending on whether they were administered before or after the meaning-focused reading comprehension activities. No decisive evidence was found to indicate that these form-focused tasks, somewhat focus-on-formS-oriented, can better be utilized to prepare Japanese non-major EFL students for more meaning-focused activities or for fine-tuning the forms with which they have already been familiarized.

It is acknowledged that the form-focused tasks administered and evaluated were limited to the memorization and retrieval of phrases in sentence- or paragraph-level contexts. For future studies, it will be worthwhile to observe and analyze the performance of learners engaged in more communicative tasks in which they need to choose their own words and expressions to express their ideas or to deal with real-life linguistic situations. Analysis of their language use in interpersonal communication would be more difficult and complicated, but it is pedagogically more meaningful in that participants have chances to notice the gaps between their output and native-like target forms more clearly.

Regarding the materials for reading tasks, replication studies should be conducted on students' reading of up-to-date newspaper articles distributed in class, instead of essays in the textbook published several years before. If the news are up-to-date and more closely related to their daily concerns, their motivation to understand the readings is likely to be higher, which is an important condition for meaning-focused reading activities. They may be motivated to learn lexical phrases, or any other target linguistic forms, that are needed to describe the issues, ideas, or events of their concern.

Evaluating the relationships between learners' individual proficiencies or language-learning experiences and their acquisition of lexical phrases is yet another issue to be dealt with in future studies. This study only observed a case at one Japanese university, but

comparison between different student groups with clearly different proficiencies and characteristics might shed light on the process by which Japanese EFL learners may acquire lexical phrases or lexical items in general.

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（小川　喜正　　英語コミュニケーション学科）