

# Productive Use of Grammar: Effects of Three Types of Exercises\*

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## Abstract

This study investigated the effectiveness of three types of grammar exercises. Students were asked to complete multiple reading, fill-in-the-blank and sentence writing exercises, all of which either contained or solicited the correct usage of target grammar functions. Target grammar items included the usage of “*see/hear/make*,” causative “*have*,” and “*want/let*.” Seventy-four low-intermediate students were taught these rules through one of the three types of exercises. English translation tests were administered immediately after each exercise, followed by delayed tests one week later. Overall results for the fill-in exercise proved significantly higher than for the reading and writing exercises in the immediate test. There was a perceived difference in the degree of rule difficulty. The immediate scores for the causative “*have*” in reading and writing were significantly lower than the other target rules, suggesting its being the most difficult rule. In contrast, the fill-in exercise did not show any significant differences, suggesting that this exercise might be effective even for difficult linguistic forms. However, the effect of the fill-in exercise was not maintained in the delayed test. Students reported that the writing exercise was the most difficult and the least enjoyable of all, but nevertheless as useful as the other exercises.

## 1. Introduction

As with vocabulary learning, learners encounter many basic grammar rules in junior and senior high school and seem to have enough knowledge for reading and listening purposes. However, when it comes to speaking and writing by making use of these rules, students have great difficulty and end up producing incomplete and limited sentences. Thus, it seems true that just like vocabulary knowledge,

there is a distinction between receptive and productive grammar knowledge.

In terms of grammar instruction, recent findings strongly support the integration of form-focused exercises with meaning-focused experiences. Doughty and Williams (1998) state that the “fundamental assumption of focus-on-form instruction is that meaning and use are already evident to the learner at the time that attention is drawn to the linguistic forms (p. 4).” Thus, “attention” seems to be a key to this approach.

Savignon (2001) points out that in order to draw attention to form, “even traditional activities such as translation, dictation, rote memorization, and pattern repetition of structural features can be helpful (p. 20).” Similarly, Willis (1996) also emphasizes these activities in her well-known “task cycle” consisting of pre-task, task cycle, and language focus. Language focus is to help learners develop awareness of how language works, and this can be achieved through the use of various language-based exercises such as choral repetition, sentence completion, dictionary work, and so on. In the role of grammar teaching, Ellis (1993) calls these types of activity “practice tasks” which require a learner to produce sentences using a target grammatical form.

So how can these tasks be implemented? Vocabulary learning studies give some hints. Nation (2001) states that knowing a word involves various aspects of word knowledge, both receptive and productive. In fact, one aspect of productive knowledge is “being able to use the word correctly in an original sentence (p. 28).” Thus, knowing a word means knowing not only lexical meaning but also grammatical functions when producing a sentence.

In recent L2 vocabulary research, the effects of the following three types of vocabulary exercises have been examined. The first type of exercise is writing original sentences with target words. Hulstijn and Laufer (2001) showed that target vocabulary was effectively learned by writing original sentences with target words.

The second type of exercise is multiple reading of input embedded with target words. Webb (2005) found that repeated reading of a sentence with a target word showed better results than writing one original sentence, when the same amount

of time was used. In addition, Gass and Torres (2005) indicated that input through reading would be more beneficial than interaction with native speakers when learning complex grammatical forms in Spanish.

The third type of exercise is sentence completion by filling in blanks with target words. Folse (2006) demonstrated that completing three fill-in-the-blank questions was more effective than writing a single original sentence. Kawauchi (2010) also supported the effects of the fill-in exercise, particularly on productive use of vocabulary.

The present study examined the effectiveness of three types of grammar exercises: reading sentences embedded with target forms (Reading), writing original sentences with target forms (Writing), and filling in blanks with target forms (Filling). Since the degree of success partly depends on learners' preferences, the study also looked at how they would perceive these types of exercises.

Thus, the present study addressed the following three research questions (RQ).  
RQ1: Are there any differences in immediate and delayed effects of Reading, Writing, and Filling exercises on the productive use of linguistic forms?  
RQ2: How do these exercises relate to the learning of difficult linguistic forms?  
RQ3: How do learners perceive these types of grammar exercises?

## **2. Method**

### **2.1 Participants**

A total of 74 low-intermediate Japanese college students participated. They were non-English majors from three intact classes and all placed in the mid-level course as a result of our placement test.

### **2.2 Target grammar items**

The target forms to be examined here were (1) *see/hear/make*, (2) causative *have*, and (3) *want/let*, all of which were included in the textbook (Suzuki, 2005) required to be used in the unified syllabus of our school. In fact, these forms had

already been taught in junior and senior high school. However, as shown in the pre-test to be discussed later, students have difficulty producing them.

The first target form, *see* and *hear*, can take a bare infinitive or present participle after the object, such as “I *saw* him *enter/entering* the room,” but *make* takes only a bare infinitive like “My mother *made* me *eat* spinach everyday.” The second form, causative *have*, requires either a bare infinitive or past participle based on the type of object, such as “I’ll *have* Tom *call* you back” and “I’d like to *have* my room *cleaned*.” The last form, *want*, requires a to-infinitive like “I *want* her to *come*,” but *let* requires a bare infinitive after the object like “I *let* her *go*.”

### 2.3 Three types of exercises

After a brief explanation of the target form within the textbook, students were provided a handout tailored for each target form and exercise. For all the exercises, the number of sentences and the amount of time for the exercise were controlled. That is to say, eight practice sentences were used for each target form, and 25 minutes were spent on each exercise.

For the Reading exercise, students were given a handout in which eight sentences were written with each target form embedded (See example 1 below). Students were told to translate them into Japanese within 20 minutes, focusing on the target forms. The remaining five minutes were spent checking their translations in pairs and in class, as well as repeated reading by the students themselves.

E.g. 1. Reading exercise for *make*

1~8	日本語訳	My mother <b>made</b> me <b>eat</b> spinach everyday.
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For the Filling exercise, students were provided a handout which included eight Japanese translations and corresponding English sentences with blanks to be filled with each target form (See example 2 below). They were told to fill in the blanks within 20 minutes. Then, for the remaining five minutes their answers were

checked in pairs and in class.

E.g. 2. Filling exercise for *make*

1~8	母親は（嫌がる）私に毎日 ほうれん草を食べさせた。	My mother ( ) ( ) ( ) spinach everyday.
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For the Writing exercise, the following handout was given (See example 3 below), in which five Japanese translations and corresponding English sentences were provided, with three totally blank boxes added. Students were told to read the sample sentences carefully and then write three sentences of their own, using the target form. They were allowed to use a dictionary if they needed to. A total of 20 minutes were assigned for this, and the remaining five minutes were used for pair work by exchanging their original sentences following the “read and look up” method.

E.g. 3. Writing exercise for *make*

1~5	母親は（嫌がる）私に毎日 ほうれん草を食べさせた。	My mother made me eat spinach everyday.
6~8		

## 2.4 Pre-test

The pre-test was conducted to examine how correctly students could produce the target grammar items before the investigation. The test format was an adapted version of Nation’s Productive Levels Test attached with Japanese translations (Nation, 2001, p. 425). Sample questions are shown in the Appendix.

The results indicated that the average scores were 0.37 ( $SD=0.65$ ) of the maximum 12, which means that students could not produce even one correct target form. This was also true across all three intact classes ( $F=1.829, p=.167$ ), showing no significant differences between these classes. Therefore, it is fair to say that these target forms were difficult to produce correctly before the exercises were begun.

## **2.5 Immediate and delayed tests**

The immediate test was provided after each exercise, and the delayed test was given one week later without prior announcement. The tests included 10 questions for the relevant target items and five distracters. The test format was the same as the pre-test.

## **2.6 Questionnaire**

Two types of questions were asked at the end of the semester. The first type was concerned with each exercise, asking whether or not it was easy, enjoyable, and useful for learning. The second type consisted of general questions concerning the self-evaluation of the students' grammar knowledge, preferred learning method for grammar rules, and so on. The present study focused only on the first type of questions. Students were asked their perceptions, using a Likert scale of 1 (I don't agree at all) to 5 (I agree totally).

## **2.7 Data collection**

Table 1 shows how the target forms and exercises were assigned to each class. All the students experienced each type of exercise during four weeks under carefully controlled conditions for this study. However, they were also taught the other grammar rules in the textbook with these types of exercises throughout the semester.

**Table 1***Data Collection of Target Grammar Items and Three Types of Exercises*

	Week 1	Week 2 see/hear/make	Week 3 causative have	Week 4 want/let	Week 5 ~ Week 14	Week 15
Class1 n=21	Pre-test	Reading & R1	Filling & F1 R2	Writing & W1 F2	W2 Continued	Question -naire
Class2 n=27	Pre-test	Filling & F1	Writing & W1 F2	Reading & R1 W2	R2 Continued	Question -naire
Class3 n=26	Pre-test	Writing & W1	Reading & R1 W2	Filling & F1 R2	F2 Continued	Question -naire

\*R: Reading, F: Filling, W: Writing. 1: Immediate test; 2: Delayed test.

### 3. Results & Discussion

#### 3.1. RQ1: Are there any differences in immediate and delayed effects of Reading,

Writing, and Filling exercises on the productive use of linguistic forms?

Table 2 shows the results of those who completed all the exercises and both immediate and delayed tests. Due to student absences and dropouts, the total number ended up being 60. The maximum scores were 10. Figure 1 illustrates the overall differences in exercise and test type.

**Table 2***Results for Immediate and Delayed Effects of Reading, Filling, and Writing*

	Reading	Filling	Writing	<i>F</i>
Immediate	5.25	6.58	5.17	12.28**
<i>SD</i>	2.54	2.38	2.53	$p < .01$
Delayed	3.21	3.07	2.99	0.137
<i>SD</i>	2.52	2.77	2.91	$p = .872$

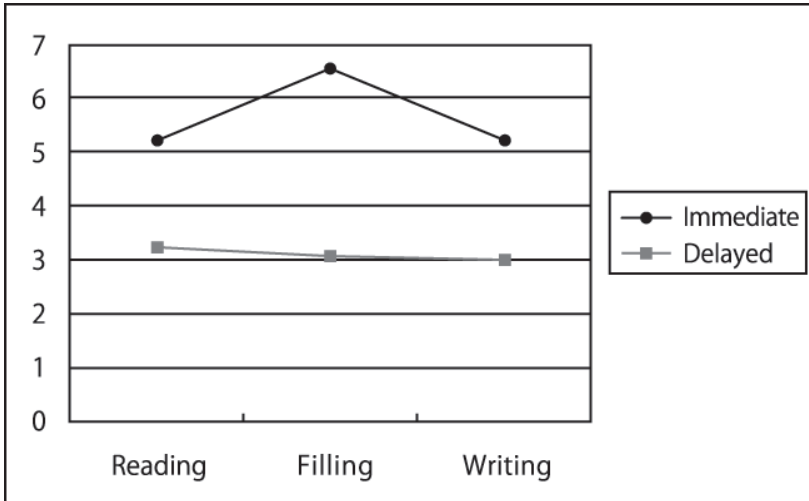


Figure 1. Immediate and delayed effects of Reading, Filling, and Writing.

One-way repeated ANOVA was conducted for the immediate and delayed tests, separately. The results for the immediate test indicated a significant difference in the three types of exercise ( $F(2, 57)=12.28, p<.01, \text{partial } \eta^2=0.172$ ). The post-hoc tests revealed that the Filling exercise scored significantly higher than Reading and Writing, but no significant difference was found between Reading and Writing (Filling>Reading=Writing). Thus, it can be said that students showed the highest scores when they did the Filling exercise, suggesting that the Filling exercise would be the most effective for learning the productive use of these forms. The delayed test, however, showed no significant differences between the three exercises ( $F(2, 57)=0.137, p=0.872, \text{partial } \eta^2=.004$ ). It seems that the effects of the Filling exercise were not maintained one week later.

### 3.2 RQ2: How do these exercises relate to the learning of difficult linguistic forms?

The results were further analyzed based on each target rule. Since no significant difference was found in the delayed test, the pre-test was focused on here. Table 3 indicates the results of the average scores and standard deviations

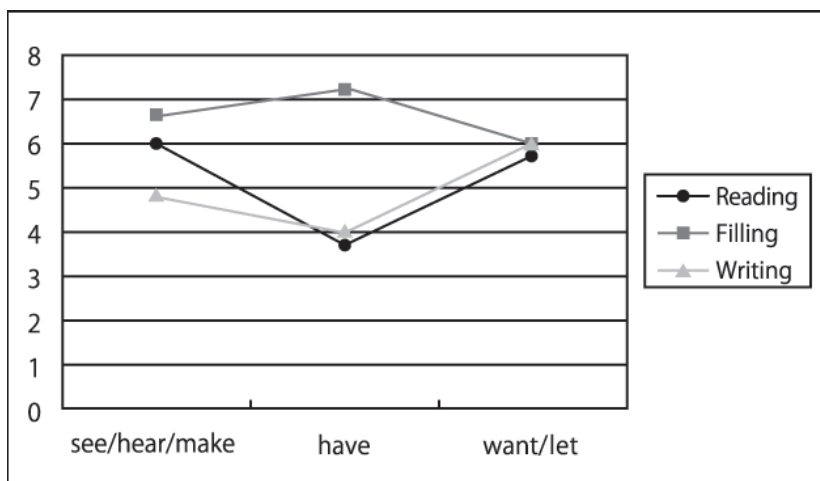


for each target form. The number of students who took the immediate tests ranged from 71 to 74. A one-way ANOVA was conducted to see if there is a significant difference in scores between these grammar rules. Figure 2 also describes how each target rule scored immediately after each exercise was provided.

**Table 3**

*Immediate Results for Reading, Filling, and Writing Based on Each Target Form*

	<i>See/hear/make</i>	<i>have</i>	<i>want/let</i>	<i>F</i>
Reading(SD)	6.04 (2.44)	3.66 (2.57)	5.69 (2.42)	6.55 $p < .01$
Filling (SD)	6.58 (2.69)	7.15 (1.66)	5.96 (2.22)	1.61 $p = .21$
Writing (SD)	4.79 (2.76)	3.96 (2.39)	5.95 (2.38)	3.66 $p < .03$



*Figure 2. Three target items based on each exercise in the immediate test.*

As illustrated above, causative *have* shows interesting results. In Reading and Writing, this form indicates the lowest scores, implying that causative *have* might be more difficult to learn than the other forms. This was confirmed by the results of ANOVA that showed significant differences for both Reading ( $F(2, 69)=6.55$ ,  $p < .01$ ) and Writing ( $F(2,71)=3.66$ ,  $p < .01$ ). The post-hoc test for Reading revealed that the scores for causative *have* were significantly

lower than those for the other two forms (*have* < *see/hear/make* = *want/let*). For Writing, scores for causative *have* and *see/hear/make* were significantly higher than those for *want/let*, but no significant difference was found in the former two forms (*have* = *see/hear/make* < *want/let*).

On the other hand, the Filling exercise did not yield any significant difference ( $F(2, 68)=1.61, p = 0.21$ ) between the three target forms (*have* = *see/hear/make* = *want/let*). This finding implies that causative *have* was effectively learned in the Filling exercise, compared to the other two types of exercises, at least in the immediate test. In other words, the Filling exercise might be effective even for difficult grammar rules.

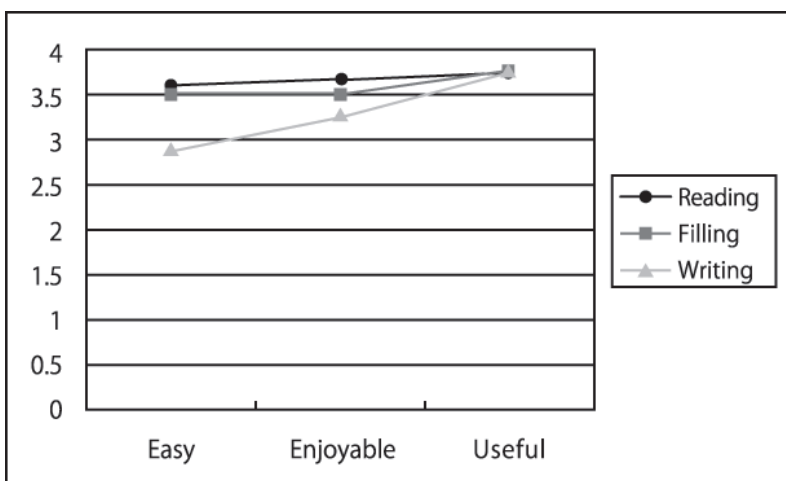
Several reasons for this are considered. One may be due to the fact that the Filling exercise helps learners attend to the form as a pure source of information, compared to Reading and Writing. On the other hand, reading various sentences or writing their own original sentences require learners to attend to not only the target form but also other parts of a sentence, thus lowering their attention to the target form itself. Another reason may relate to the test format being similar to the Filling exercise, although the blank space in the test was not divided according to number of words.

### 3.3 RQ 3: How do learners perceive these types of grammar exercises?

At the end of the semester, students were asked how they perceived each exercise. Table 4 shows the average scores and rank order for the three types of exercise. The larger the rank order is, the higher students perceived it. The Friedman test was carried out to examine whether or not the rank order was significantly different. Figure 3 also illustrates students' overall preferences for each exercise.

**Table 4***Learners' Preferences for Reading, Filling, and Writing*

	Easy	Enjoyable	Useful
Reading Mean (rank order)	3.59 (2.25)	3.68 (2.18)	3.74 (1.99)
Filling Mean (rank order)	3.50 (2.18)	3.51 (2.03)	3.75 (2.00)
Writing Mean (rank order)	2.90 (1.57)	3.28 (1.79)	3.76 (2.01)
<i>Friedman</i>	30.7** $p < .01$	10.5** $p < .01$	0.07ns

*Figure 3. Learners' preferences for Reading, Filling, and Writing.*

The Friedman test showed statistical significances in the students' ratings for easiness ( $\chi^2 = 30.7, p < .01$ ) and enjoyment ( $\chi^2 = 10.50, p < .01$ ). That is to say, easiness and enjoyment of the three types of exercise were not equally perceived. By and large, the Writing exercise was perceived lower than the other two types. Interestingly, however, no significant difference was found in usefulness, suggesting that students found all the exercises equally useful. In other words, when students were asked to produce an original sentence using the target rule, they felt it to be more difficult and less enjoyable, but at the same time as useful as

the other two types of exercise.

#### 4. Conclusion

The present study concentrated on developing productive use of linguistic forms through three types of grammar exercise. The findings clearly showed the immediate effects of the Filling exercise, supporting Folse (2004) and Kawauchi (2010). However, the effectiveness of Filling was not maintained one week later. Both writing original sentences and reading many sentences embedded with target words were found to be less effective, disconfirming Hulstijn and Laufer (2001) and Webb (2005), respectively.

When the results were analyzed based on target forms, there appeared a different degree of difficulty for learning. As far as the immediate effect is concerned, causative *have* was found to be the most difficult in Reading and Writing. In contrast, the Filling exercise did not show any difference concerning difficulty, implying that this exercise could be effective even for difficult linguistic forms. One reason might be that the Filling exercise would make it easier to focus learners' attention on the target form than the other two exercises.

Students perceived the three types of exercise differently in terms of easiness and enjoyment, indicating that the Writing exercise was less easy and less enjoyable. In terms of usefulness, however, the students answered that all these exercises were equally useful for learning.

There are several limitations of this study. First, the number of students who participated decreased due to their absences and dropouts. This is one of the difficult problems in classroom-based longitudinal research. Second, the present study followed the textbook which was required for use, so there was neither sufficient time nor space to arrange and/or include any further additional input. Finally, this study examined only a limited number of grammar rules, so future studies will need to investigate many other rules, and also explore more communication-oriented exercises for consolidating linguistic forms.

Admitting these drawbacks, the present study confirms that some activities

such as the ones used here can be considered necessary to increase learners' productive and automatic use of linguistic forms beyond the lexical level. There has been an increasing demand for communication ability, such as speaking and writing, from learners themselves as well as society. In order to be able to speak or write, learners should realize the importance not only of what a word means but also of its use in an appropriate context, and teachers should develop various tasks and activities suitable for EFL classrooms where real-life needs for the target language rarely exist.

### Note

\*This is an enlarged version of a paper read at the 10th Asia TEFL International Conference held in India, October, 2012.

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## Appendix

### Sample items from the pre-test

1. ヒデ君が外国人女性2人と食事をしているところを見た。  
I saw ( ) with two foreign woman.
2. 母は（嫌がる）私に毎日ほうれん草を食べさせた。  
My mother ( ) spinach every day.
3. （フロントで）両替をしていただきたいんですけど。  
I'd like to ( ).
4. 手伝ってほしいんですけど。  
I ( ) help me.
5. できるだけ早く知らせてください。  
Please ( ) as soon as possible.