The Role Of Language Coproduction In Learning English Vocabulary

Hossein Nassaji a *, Jun Tian b

aUniversity of Victoria, 3800 Finnerty Road, Victoria, V8P 5C2, Canada
bUniversity of Victoria, 3800 Finnerty Road, Victoria, V8P 5C2, Canada

Abstract

This pretest-posttest study examined the role of coproduction of language forms (i.e., collaborative output) in the acquisition of second language (L2) vocabulary. Thirty-nine low-intermediate ESL students from three intact classes were assigned to two experimental groups and one comparison group. The comparison group only received input-based instruction with no opportunities for subsequent output. The experimental groups first received input-based instruction and then performed output-based tasks either collaboratively or individually. Results indicated that learners who had opportunities for output showed greater gains of knowledge than those who were not. Learners also produced significantly more correct target English words when working collaboratively than individually. Overall, the findings provide evidence in support of the facilitative role of collaborative output in L2 vocabulary learning.

© 2014 The Authors. Published by Elsevier Ltd.

Keywords: Language coproduction, vocabulary, English phrasal verbs, collaborative and individual output;

1. Introduction

Learning a second language (L2) involves both exposure to input and opportunities for output. There is an agreement on the crucial role of input in second language acquisition (SLA). However, there is no such agreement on the role of output in the L2 learning process (R. Ellis, 1995; Krashen, 1981, 1985; VanPatten, 1990, 1996, 2002). Krashen (1981; 1985), for example, argued that SLA is mainly driven by comprehensible input, and that output only provides additional opportunities for comprehensible input. Others have argued that not only does output contribute to SLA, but that its contribution is independent of the contribution made by input (e.g., Swain, 1985, 1993).

In recent years it has been argued that activities that encourage learners to produce output collaboratively provide learners with opportunities to reflect on language consciously, thus raising learners’ attention to problematic

*Corresponding Author: Hossein Nassaji. Tel.: +1-250-721-7432
E-mail address: nassaji@uvic.ca
forms (Kowal & Swain, 1994; Swain & Lapkin, 2002; Swain, 2005). Swain and Lapkin (2002) noted that joint activities, along with the act of language production, mediate language learning because when learners produce the target language through collaboration, the language is used not only to convey meaning, but also to develop meaning, thereby helping learners to internalize language forms. Kowal and Swain (1994) found that students noticed gaps between their existing language knowledge and the target language, were attentive to connecting form and meaning, and received feedback from their peers as they worked together to reconstruct the text. Swain and Lapkin (2001) compared the effects of two collaborative output tasks: a dictogloss (Wajnryb, 1990), in which students constructed a text that they had heard, and a jigsaw task, in which pairs of students created a written story based on a series of pictures. Although the researchers did not find any significant differences between the two types of tasks in terms of the overall degree of form-focusedness, they found that the dictogloss task led to more accurate reproduction of the target forms than the jigsaw task.

However, although several studies investigated the role of language output including collaborative output, most of these studies have focused on L2 grammatical forms. Fewer studies have examined the role of output in the development of other aspects of language, such as the acquisition of L2 vocabulary. Moreover, most of the studies on collaborative output have been mainly descriptive, focusing on the nature of learner-learner interactions without examining in any direct way the effects of collaborative output on language learning.

The purpose of the present study is to examine, through a pretest-posttest classroom-based study, the role that production of language forms plays in learning L2 vocabulary and English phrasal verbs in particular, which are generally considered challenging for English L2 learners (Dagut & Laufer, 1985; Yan & Yoshinori, 2004). The following two research questions were formulated for the purpose of the study:

1. Do learners who are exposed to input and are engaged in output demonstrate a greater increase in their knowledge of the target phrasal verbs than those who are exposed to input only?
2. Are learners more successful in producing and learning the target verbs when they perform the tasks collaboratively as compared to when they perform them individually?

2. Methods

Participants were 39 adult English-as-a-second language (ESL) learners from three intact low-intermediate classes taught by the same teacher in an intensive adult ESL program in a university context. The three classes were randomly assigned to two experimental output groups (two classes, n=26) and a comparison input group (one class, n=13). The experimental groups (+output groups) received input-based instruction on the 16 target English phrasal verbs and performed two output-based tasks collaboratively, and two individually. The comparison group (–output group) received the same input-based instruction, but did not have opportunities for subsequent output tasks. The effects of the treatments on learning the target words were measured by means of the Vocabulary Knowledge Scale (VKS), a five-point scale self-report test (Paribakht & Wesche, 1993; Wesche & Paribakht, 1996), which was administered before and after the treatments.

The treatments took place over a period of two weeks in a 13-week semester. For the Input-based treatment, all learners received instruction on eight of the 16 target phrasal verbs every week through input-based presentation and input-based practice activities. First, learners received a written dialogue with 168 or 183 words. Each dialogue contained half of the phrasal verbs. The teacher read the dialogue at a normal pace twice and briefly explained the meanings of the target phrasal verbs. The learners then completed an input-based word matching activity on a handout including two columns. The left column listed the target phrasal verbs, and the right column contained their definitions in a random order. Working in pairs, the learners matched the phrasal verbs with their appropriate definitions. During this activity, no production activity was required. For the Output-based treatment, the +output groups produced the phrasal verbs by completing two output tasks a week and four in total. The tasks were two reconstruction cloze tasks and two reconstruction editing tasks. Two of the tasks were completed collaboratively and two individually.

The procedure for the output activity followed the dictogloss procedure. The learners listened to a dialogue read by the teacher twice and jotted down notes. No explanation of the text was provided. Then the learners received the same dialogue in the form of a cloze task or an editing task. In the case of the cloze task, the dialogue contained ten missing sections, four of which were the target phrasal verbs, and six were distracters. The learners were asked to
reproduce the missing sections as closely as possible to the original dialogue. For the editing task, the learners received the same dialogue but this time with ten erroneous sections to be edited. Four of the sections were related to the target phrasal verbs, and the other six were unrelated. The learners were asked to identify and correct the errors. While learners were performing the output tasks collaboratively, the interaction of each pair was audio-recorded. The recordings were then transcribed and analyzed. When the +output groups were performing the output tasks, the –output group was engaged in their routine classroom activities.

3. Results

To address our research questions, we first calculated the frequencies and percentages of the five VKS levels for each target word in the pre- and post-tests and two combined categories of ‘known’ and ‘unknown’ with levels 1 and 2 representing ‘unknown’ and levels 3, 4 and 5 representing ‘known’ phrasal verbs (Paribakht & Wesche, 1993; Wesche & Paribakht, 1996). We then analyzed the learners’ performance on the pretests for both the +output and –output groups. The results showed that the majority of the learners’ responses to the VKS in both groups represented levels 1 and 2 altogether, 73.9% and 78.4% of the words were unknown to the +output groups and the –output group, respectively, before the treatment. Chi-square analyses revealed no statistically significant difference between the two groups, suggesting that the two groups were similar in terms of their prior lexical knowledge of the target phrasal verbs. We then analyzed the two groups’ performance in the posttests after the treatment. The +output groups exhibited higher percentages of the knowledge levels 3, 4, and 5 and lower percentages of levels 1 and 2 than the –output group. The results suggest that the +output groups outperformed the –output group after the treatment. We calculated the standardized residual for each of the frequencies of the five VKS levels to see what knowledge level(s) contributed significantly to the difference between the two groups. The +output groups showed significantly lower percentages of levels 1 and 2 and a significantly higher percentage of level 5 than those in the –output group. The combined data confirmed these findings with a higher percentage of unknown phrasal verbs for the –output group than the +output groups (68.8% versus 51.4%) and the difference was statistically significant $[\chi^2 (1, N = 576) = 16.46, p. < .001]$. In order to examine whether the learners in the +output groups benefited more from the output opportunities when they performed the output tasks collaboratively than individually, we compared the learners’ success in task completion, and also their actual gains of knowledge of the target phrasal verbs in the two conditions. The learners’ production of each target phrasal verb during the output tasks in both conditions was coded as either successful or unsuccessful. It was found that learners produced more instances of accurate target phrasal verbs when completing the tasks collaboratively (75.5%) than individually (51.1%). A two way Chi-square analysis revealed a statistically significant difference between the two conditions in the frequencies of successful and unsuccessful output $[\chi^2 (1, N = 368) = 23.69, p. < .0001]$, suggesting that the learners produced significantly more correct instances of the phrasal verbs when they worked collaboratively than when they performed the tasks individually.

We also analyzed and compared the learners’ performance on the pretests in both individual and collaborative conditions. The majority of the learners’ responses to the VKS in both conditions represented levels 1 and 2, suggesting that most learners were not familiar with the target phrasal verbs in both conditions before the treatment. The Chi-square analyses revealed no statistically significant difference between the two groups, suggesting that the learners’ prior lexical knowledge of the target phrasal verbs was similar in both conditions. The distribution of the five knowledge levels in learners’ posttest performance was very similar in both collaborative and individual conditions. The highest percentage of the knowledge level in the collaborative and individual conditions was level 2 (47.3% versus 50.5%), followed by level 5 (21.7% versus 23.4%), then followed by levels 3 and 4, with the lowest level as level 1. However, when we examined improvements in the learners’ knowledge of the target phrasal verbs, we saw more improvement in the collaborative condition than the individual condition in each VKS level. Overall, then, collaborative output led to higher increases of levels 3, 4 and 5 of the VKS (representing known knowledge) and higher decreases in levels 1 and 2 (representing no knowledge) from the pretest to the posttest than the individual output. But the Chi-square tests showed that the differences were not statistically significant.
4. Discussion and Conclusion

The purpose of this study was to examine the role of output in learning English phrasal verbs. The study also examined whether producing output collaboratively following input had any differential effects on learning the target words in comparison to producing output individually.

The results clearly showed that learners who received input and then performed output tasks developed significantly more knowledge of the target phrasal verbs than those who received the same input but did not have opportunities for output. A closer examination of the significant difference in the knowledge levels between the two groups revealed that the output opportunity not only familiarized more learners with the target phrasal verbs, but also facilitated the learning of the words to an extent that more learners could produce semantically and syntactically correct sentences using the target words. These findings suggest a facilitative role for output in learning L2 vocabulary, particularly L2 phrasal verbs, by providing learning opportunities beyond those offered by input. Although the improved performance in the posttests of the +output groups might be due to extended time spent studying the target forms, this finding, on the other hand, also suggests that comprehensible input alone may not lead to desirable learning outcomes.

As for the role of collaborative versus individual output, our results showed that learners were not only more successful in completing the tasks and producing accurate instances of the target phrasal verbs, but also improved their knowledge of the target forms when they performed the tasks collaboratively as opposed to individually. These findings provide support for the idea that engagement in collaborative tasks that involve co-production of language may improve task performance in terms of accurate production of output (Kowal & Swain, 1994; Lapkin & Swain, 2000). Furthermore, these findings are consistent with Lapkin et al.’s (2002) study, which found evidence for L2 learners’ progress in their accurate use of the target forms when they worked on output tasks collaboratively.

It should be noted that our study has limitations that need to be considered when interpreting its findings and their implications. Finally, there is a need for research to examine the different factors that may have an impact on the effectiveness of collaborative output, including the composition of the group, the type of the task used, the participants’ shared goals and assumptions (Storch, 2004), the types and nature of strategies learners use, and their cognitive and developmental readiness (Nassaji & Swain, 2000). Although previous research has investigated these factors in other areas of language learning, little research has examined the impact of these factors on collaborative output. This suggests that future research is needed in this area.

References
