Is Form-Focused Vocabulary Instruction Worth While?

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Abstract

Hearing stories can result in considerable incidental vocabulary development, for both first and second language acquisition (e.g. Elley, 1992; Robbins and Ehri, 1994; Senechal, LeFevre, Hudson and Lawon, 1996). It has also been claimed, however, that direct instruction is more effective than incidental vocabulary acquisition and that combining both approaches will be more effective than incidental acquisition alone (Coady, 1997). In this study, we compare vocabulary growth in English as a foreign language through hearing a story with a combination of a story and supplementary activities designed to focus students specifically on learning the new words in the story. Subjects were first year Japanese female students at a junior college in Osaka. One class was the "story-only" group and the other was the "story-plus-study" group. The story-only group spent only 15 minutes hearing a story. The story-plus-study group spent nearly the entire class hour (85 minutes) hearing the story and doing supplementary activities. Calculations of words learned per minute revealed that the story-only group learned words more efficiently. The results suggest that additional focus on form in the form of traditional vocabulary exercises is not as efficient as hearing words in the context of stories.

It has been demonstrated that hearing stories can result in considerable incidental vocabulary development, for both first and second language acquisition (for evidence from readalouds, see e.g. Elley, 1992; Robbins and Ehri, 1994; Senechal, LeFevre, Hudson and Lawon, 1996). It has also been claimed, however, that direct instruction is more effective than incidental vocabulary acquisition and that combining both approaches will be more effective than incidental acquisition alone (Coady, 1997).

In this study, we examine this claim. We compare vocabulary growth in English as a foreign language through hearing a story with a combination of a story and supplementary activities designed to focus students specifically on learning the new words in the story. We report not only the gains in vocabulary with each method, but also the efficiency, that is, the number of words gained per minute of exposure: We expect students who have had supplementary vocabulary exercises to gain more vocabulary, simply because they have had more exposure to the words. The crucial issue is whether the time was wisely spent.

Method

Subjects were 58 first year Japanese female students at a junior college in Osaka. The students had had very little previous exposure to aural input in English. Their average score on the listening section of the TOEIC was 150 out of 495 and 125 out of 495 on the reading section, which is approximately equal to a TOEFL score of between 350 and 400. One class (n=27) was the "story-only" group and the other class (n=31) was the "story-plus-study" group.

Procedure. The story-only group experienced the following method:
(1) Twenty target words from a story were written on the board in front of the class.
(2) The subjects took a translation test (pretest) on the target words (5 minutes). They were asked to write a Japanese definition for each English word on the list.
(3) The students put down the paper and pencil and listened to a story (The Three Little Pigs), which contained the target words. The teacher told the story in English (15 minutes).
(4) The students took the posttest on the same list of the words (5 minutes).
The story-plus-study group experienced the following method:

1. Twenty target words from a story were written on the board in front of the class.
2. The subjects took a translation test (pretest) on these 20 words (5 minutes). They were asked to write a Japanese definition for each English word on the list.
3. The students put down the paper and pencil and listened to a story (The Three Little Pigs), which contained the target words. The teacher told the story in English (15 minutes).
4. Comprehension questions (both yes/no and wh-questions) were presented orally. The target words were used in questions and the questions required the use of the target words in the answers (10 minutes).
5. The students took the same translation test again (5 minutes).
6. After taking the test, students exchanged their test papers with a partner and checked their answers with the teacher who gave the correct answers in Japanese (10 minutes).
7. The students read a written version of the story (10 minutes). They were asked to underline the words they wanted to learn.
8. The students told the same story to their study partner. They were encouraged not to refer to the text, but to use the target words on the board (20 minutes).
9. The students retook the translation test (5 minutes).
10. The teacher gave the correct answers to the test (5 minutes).

The story-only group thus spent only 15 minutes hearing a story. The story-plus-study group spent nearly the entire class hour (85 minutes) hearing the story and doing the supplementary activities.

For both groups, during the actual telling of the story, there was little interaction between the teacher and the subjects. Before hearing the story, students saw the words on the board and took the pre-test, which may have primed them to pay attention to the words during the storytelling. When the students looked uncertain about the meaning of a word during the story telling, the teacher briefly explained the meanings of the unknown words in English, sometimes using pictures or actions as well. Students were aware that the purpose of the lesson was not only to understand the story but also to increase their vocabulary. There was no corrective feedback and there were no output activities for the story-only group.

Measure. Both groups took a translation test on the 20 target words as a pretest and posttest. The story-only group took the posttest after hearing the story, and the story plus study group took it after the comprehension questions. The story-plus-study group also took the test after the study session. The test was presented again to both groups as an unexpected follow-up test five weeks later.

The reliability of the pretest was unavoidably low (KR 21 = .08) because of the low scores and lack of variability (see below). Reliability of the posttest and delayed tests were satisfactory (.85 and .83).

Results

Mean scores on the pretest were nearly identical (table 1) and not significantly different (t = .09, df = 56, ns). The story-only group took the first posttest immediately after hearing the story and the story-plus-study group took it after hearing the story and answering comprehension questions. Nevertheless, the story-plus-study group did only slightly better, and the difference was not statistically significant (t = 1.5, df = 56, p = .13). After correcting the test in class, reading a written version of the story, and retelling the story, story-plus-study group performance was extremely high, with 74% achieving perfect scores.

On the delayed posttest, the story-plus-study group score declined somewhat but was far better than the story only group; the study-plus-story mean was nearly double that of the story-only group, and the difference was of course statistically significant (t = 10.17, df = 56, p < .001).
<table>
<thead>
<tr>
<th></th>
<th>pretest</th>
<th>1st posttest</th>
<th>2nd posttest</th>
<th>delayed posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>story-only</td>
<td>4.6 (2.3)</td>
<td>13.9 (3.4)</td>
<td>-</td>
<td>8.4 (3.5)</td>
</tr>
<tr>
<td>story plus study</td>
<td>4.7 (1.7)</td>
<td>15.1 (2.6)</td>
<td>19.7 (.6)</td>
<td>16.1 (2.2)</td>
</tr>
</tbody>
</table>

1st posttest: For story-only group, immediately after hearing the story. For story-plus-study, after hearing the story and answering comprehension questions.

**Efficiency**

Clearly, the form focused exercises helped subjects in the story-plus-study group learn more new words. In order to determine the efficiency of learning, the word-per-minute rate of acquisition was calculated.

<table>
<thead>
<tr>
<th></th>
<th>1st posttest</th>
<th>2nd posttest</th>
<th>delayed posttest</th>
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<tbody>
<tr>
<td>story-only</td>
<td>.62</td>
<td>-</td>
<td>.25</td>
</tr>
<tr>
<td>story plus study</td>
<td>.42</td>
<td>.23</td>
<td>.16</td>
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</tbody>
</table>

For the first posttest, the story-only group efficiency was .62 words per minute (gain of 9.3 words/15 minutes). On the delayed posttest, the story-only efficiency was .25 (3.8 words gained/15 minutes).

For the story-plus-study group, efficiency on the first posttest was .42 words per minute (gain of 10.4 words/25 minutes). On the second posttest, efficiency was .23 words per minute (gain of 15 words/65 minutes). On the delayed posttest, efficiency for the story-plus-study group was .16 (gain of 11.4 words/70 minutes).

**Discussion**

The story-plus-study grouped clearly learned more words than the story-only group, getting approximately double the score of the story-only group on the delayed posttest. But they also devoted a lot more time to vocabulary learning. Calculations of words learned per minute revealed that the story-only group learned words much more efficiently, at least double the rate of the story plus study group.

This study was not a comparison of "pure acquisition" with acquisition plus supplementary learning. The subjects in the story-only condition were told which words were target words and were clearly focused on form. The comparison was thus one of more versus less focus on form. It thus does not speak to the issue of whether comprehensible input alone is more or less efficient than conscious learning. Nor do we know whether gains were due to acquisition, learning, or both: The measure used allowed students to utilize both conscious and subconscious knowledge of language.

The results suggest that additional focus on form in the form of traditional vocabulary exercises is not as efficient as hearing words in the context of stories, but several considerations prevent us from embracing this conclusion firmly.

There is an apparent counterexample. Paribakht and Wesche (1997) compared the impact of reading on vocabulary development with and without supplementary vocabulary activities. Both conditions resulted
in substantial gains, but the gains in the "reading plus" condition were larger. Their "reading only" and "reading plus" treatments, however, utilized different texts and target words. In this study, story only and story plus study groups heard the same text and dealt with the same words. In addition, for both conditions in Paribakht and Wesche's study, the reading text was followed by comprehension exercises that were corrected in class. Even the "reading only" group may have spent more time on form-focused activities than in actual reading. Both groups in Paribakht and Wesche's study were thus heavily focused on form, far more than the subjects in the story-only condition in this study. Their study may have had very little to do with impact of reading on vocabulary development.

Also, it is not clear if time is better spent on rehearing the same story or moving on to a new story. Several studies show that there is continued growth in vocabulary knowledge with each rehearing of a storybook (Eller, Pappas, and Brown, 1988), but there is some evidence for a diminished effect after a second reading (Lueng and Pikulski, 1990); Leung and Pikulski suggest that some listeners "seemed bored by the third reading" (p. 238). Our claim that hearing stories is more efficient than skill-building exercises may hold only for the first or first two hearings, while the story is still interesting.

It should also be pointed out that the gains seen for hearing stories may underestimate its effects. Listeners may have acquired vocabulary in the story that was not tested in this study. They could also have acquired other aspects of language, such as grammar.

Finally, it has been firmly established that hearing stories is pleasant (Krashen, 1994). Even if hearing stories were somewhat less efficient than skill-building for vocabulary development, there would still be good reason to prefer it.

References


Footnotes

1 These calculations do not consider time devoted to testing. As noted in the text, it could be argued that the pretest primed the students for the vocabulary words as well as focused them on the task. Moreover, the posttest could have helped subjects keep words in mind for the delayed posttest. Efficiency on the first posttest incorporating the pretest was recalculated, adding five minutes to the total time for the story-only group, and ten minutes for the story-plus-study group, as they had a posttest after hearing the story as well. Efficiency for the story-only group was $9.3/20 = .47$, for the story plus study group it was $15/75 = .2$. For the delayed posttest, recalculated efficiency for the story-only group was $3.8/25$ (pre plus posttest included) = .15, for the story plus study group it was $11.4/85$ (pre and two posttests included) = .13.

2 From listening to several students retell the story, the first author has noted that students did not make special efforts to use the target words in their retellings. Rather, their goal appeared to be to tell the story coherently. It appears to be the case that even when students are aware that the exercise is intended to help them acquire vocabulary, concern with meaning influences their retellings more than vocabulary learning.