Vocabulary Acquisition through Read-Alouds and Discussion: A Case Study

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Abstract: Penny, an eight-year-old student of English as a foreign language, heard and discussed interesting stories over an eight-week period. No attempt was made to teach her vocabulary, but every effort was made to make sure the stories were comprehensible. Pre- and post-testing revealed that Penny had acquired receptive knowledge of 52 words from the stories, acquiring about five words per hour. In comparison, she acquired or learned about .5 words per hour from her EFL class.

A number of studies have demonstrated significant increases in vocabulary knowledge among children after hearing stories containing unfamiliar words (Eller, Pappas, and Brown 1988; Elley 1989, Leung and Pikulski 1990; Stahl, Richek and Vandevier 1991; Mendelsohn, Mogiler, Dreyer, Forman, Weinstein, Broderick, Cheng, Magloire, Moore and Napier 2001). In a series of studies, Mason (2013) demonstrated that hearing new vocabulary in a second language in meaningful stories results in more efficient vocabulary development than formal instruction; Mason's studies, however, were done with adults, and may have involved some conscious learning in addition to subconscious acquisition.

This study examines vocabulary development in one child in English as a foreign language. Our goal is compare the efficiency of vocabulary acquisition from stories (read-alouds) accompanied by discussion of the story, with the efficiency of formal instruction.

There is good reason to hypothesize that stories (read-alouds) will be more efficient for vocabulary acquisition than traditional instruction. Read-alouds are a rich source of vocabulary: Hsieh, Wang, and Lee (2011) compared the vocabulary input provided by the 65 storybooks (from Wang and Lee, 2007) with three representative textbook series used in Taipei, Taiwan. The books provided far more vocabulary than any of the three textbook series. Also, stories often contain rich and interesting context, which is lacking in textbooks (Wang, Hsieh, and Lee, 2011), context that helps make unfamiliar vocabulary comprehensible.

THE SUBJECT

The subject of this study, Penny, was an eight-year-old second grader from a middle class family in a public elementary school in northern Taiwan. Penny thought that English was an easy subject, and she always got high grades. Her parents sent her to a cram school in order to expose her to more challenging English input. She did not, however, enjoy the learning environment in the cram school, especially the many tests and quizzes, and stayed only one year.

   After two years of English study, Penny's proficiency was still at the beginner level, despite her high achievement in class. Our observations were that she had not, for example, acquired important aspects of verb tense and pronoun case.
   Eight storybooks, well-known to children in English-speaking countries, *Leo the Late Bloomer*, *The Snowman Storybook*, *Little Beauty*, *Willy the Dreamer*, *The Other Day I Met a Bear*, *Brown Bear, Brown Bear, What Do You See?*, *The Carrot Seed*, and *The Giving Tree*, were selected by the first author as the materials for a one-month storytelling project (Table 1). These eight storybooks, varying in length, covered a myriad of topics—colors, animals, occupations, and included intense, emotional and encouraging story plots—all designed for pleasure reading with meaningful and authentic contexts, a clear contrast with textbook-like reading materials.

Table 1. The Storybooks

Title of the Storybook	Author / Illustrator	Year of Publication
Leo the Late Bloomer	Robert Kraus / Jose Aruego	1994
The Snowman Storybook	Raymond Briggs	1997
Little Beauty	Anthony Browne	2008
Willy the Dreamer	Anthony Browne	2000
The Other Day I Met a Bear	Russell Ayto	1998
Brown Bear, Brown Bear, What Do You See?	Bill Martin / Eric Carle	1983
The Carrot Seed	Ruth Krauss / Crockett Johnson	1973
The Giving Tree	Shel Silverstein	1964

STORYTELLING PROCEDURE

   The first author and Penny met twice a week for a total of eight sessions, each lasting about an hour, with 40 minutes for storytelling (and retelling; see below) and 20 minutes for a discussion of the story, except for the first and the last sessions, which included an extra hour in order to include the pre-tests, post-tests, and an interview. All storytelling sessions took place after the end of the school year (second grade).

   English was the major medium of communication. When there were comprehension problems, the first author would appeal to Penny's background knowledge, point to pictures in the books, and, as a last resort, explain in Mandarin, their first language.

   After reading the story through without interruption, with the first author pointing to the words and occasionally pointing to pictures, the first author would ask Penny to tell him what the story was about. They would then go

back to the storybook, starting from the first page, to see if Penny was right. If time permitted, the first author would ask Penny to take turns reading the story out-loud with him and sometimes they would role-play the story.

For the discussion, the first author would prepare several questions for Penny, asking about the story content and her opinions about the story. Most of the time only the content was discussed, as Penny would come up with her own questions about the stories. The first author would conclude story time by playing a recording of a story he had made himself. Since the storybooks were borrowed from the reading lab in the first author's university, Penny did not have access to them after story time. For this reason, the first author provided Penny with story recordings and slides with pictures that went with the story. We have some evidence that Penny did indeed listen to the recordings at least occasionally, but do not have quantitative data.

At no time was Penny asked to do any activities related to vocabulary, nor was she told that she should try to remember the vocabulary used in the stories.

THE VOCABULARY LISTS

Two kinds of vocabulary lists—a storybook vocabulary list of 307 words and a textbook vocabulary list of 241 words, 80 for production and 161 for recognition, were used to measure Penny's acquisition of vocabulary. The textbook vocabulary list was based on the vocabulary lists provided in the textbooks used in Penny's EFL classes in school (Pearson Longman Book 1 to Book 4). The lists are presented in appendix 1 and appendix 2.

The full storybook list was used for the pre-test and post-test. Different forms of a verb, such as *eat* and *ate*, were counted as two different words.

VOCABULARY TESTING PROCEDURE

The first author tested Penny on the pre-storybook test and textbook test at the start of the first storybook session and the post-storybook test (identical to the pre-storybook test) after the last storybook session. Each administration of the tests took about an hour; Penny was willing to take the tests when it was explained that tests would not be included as part of the storytelling sessions. If Penny could supply the meaning(s) of the word in Chinese, she was given credit for knowing the word. In other words, the tests probed recognition.

RESULTS

Table 2 presents the results of the vocabulary tests. The table includes the results of the storytelling vocabulary test given before and after the eight-week storytelling sessions, and the results of the test for the textbook words, administered once, before the read-aloud sessions began.

Table 2: Results of the Vocabulary Tests

N = number of words tested

Storybook = words contained in storybooks
Textbook = words contained in textbooks used in school; test given before storybook sessions began.

Source	N	pretest	Posttest	Gain	Hours	rate/hour
Storybook	307	84	136	52	10	5.2
Textbook	241	111			256	0.43

Following Mason (2004), we performed an efficiency analysis, calculating words acquired per hour. As presented in Table 2, Penny acquired 52 new words over the eight weeks, a total of ten hours, resulting in a gain of 5.2 words per hour. We estimated that Penny had had 256 hours of English instruction before the storytelling sessions began. Her score of 111 on the pretest represents the number of words she had learned from her English textbooks in English class. The textbooks thus helped her learn new vocabulary at the rate of .43 words per hour in school, or about half of a word per hour. Picking up words incidentally from listening to stories appears to be more than ten times as effective as traditional formal English instruction for vocabulary acquisition based on a textbook, a result identical to that reported for reading in English as a first language (Nagy, Herman, and Anderson, 1985).

If Penny had spent a significant amount of time listening to the recordings the first author made for her, our figure of 5.2 words per hour would be an overestimate. But even if Penny had been a dedicated listener, spending 10 hours with the recordings, her resulting rate of acquisition would be 2.6 words per hour, still more than five times more efficient than instruction. In addition, it must be noted that we have no idea of how many words were introduced in class that were not in the textbook.

It could be argued that the pre-test, given in the first session, may have primed Penny to pay attention to certain words. This is possible, but there was no focus at all on remembering vocabulary during the reading sessions.

DISCUSSION: AN UNFAIR COMPARISON?

It can be argued that we have made an unfair comparison: Classes do more than focus only on vocabulary. But read-alouds and stories do far more than help vocabulary acquisition. There is good evidence that read-alouds and stories are a much richer source, not only of vocabulary, but also of grammar and cultural knowledge than textbooks (Hsieh, Wang, and Lee, 2011). It is therefore no surprise that studies show that read-alouds improve listening comprehension (Senechal and Lefevre, 2002) and grammatical development (Chomsky, 1972). In addition, read-alouds promote voluntary reading (Wang and Lee, 2007; Brassell, 2003; Cho and Choi, 2008), a powerful source of nearly all aspects of literacy.

Of course, the treatment included more than read-alouds. As noted in the text, Penny also engaged in discussion and retold the stories. Read-alouds were, however, the core of the treatment and consumed most of the time spent with Penny. Most important, none of the additional activities involved any kind of direct teaching.

Future research could systematically analyze all curriculum goals of traditional second and foreign language programs, and determine whether read-alouds and other forms of comprehensible input are more efficient for each goal. There is no question that they are more pleasant than traditional programs as well as less expensive than traditional materials.

REFERENCES

Hsieh, M. Y., Wang, F. Y., & Lee, S. Y. (2011). A corpus-based analysis comparing vocabulary input from storybooks and textbooks. *The International Journal of Foreign Language Teaching*, *6*(1), 25-33.

Brassell, D. (2003). Sixteen books went home tonight: Fifteen were introduced by the teacher. *The California Reader*, *36*(3), 33-39.

Cho, K. S., & Choi, D. S. (2008). Are read-alouds and free reading "natural partners"? *Knowledge Quest*, *36*(5), 69-73.

Chomsky, C. (1972). Stages in language development and reading exposure. *Harvard Educational Review*, *42*(1), 1-21.

Eller, R., Pappas, C., & Brown, E. (1988). The lexical development of kindergartners: Learning from written context. *Journal of Reading Behavior*, *20*, 5-24.

Elley, W. B. (1989). Vocabulary acquisition from listening to stories. *Reading Research   Quarterly*, *24*, 174-187.

Leung, C., & Pikulski, J. (1990). Incidental learning of word meanings by kindergarten and first-grade children through repeated read aloud events. In J. Zutell and S. McCormick (Eds.), *Literacy theory and research: Analysis from multiple paradigms* (pp. 231-240). Chicago: National Reading Conference.

Mason, B. (2004). The effect of adding supplementary writing to an extensive reading program. *The International Journal of Foreign Language Teaching*, *1*(1), 2-16.

Mason, B. (2013). Efficient use of literature in second language education: Free reading and listening to stories. In J. Bland and C. Lutge (Eds.), *Children's literature in second language education* (pp. 25-32). London: Bloomsbury.

Mendelsohn, A., Mogiler, L., Dreyer, B., Forman, J., Weinstein, S., Broderick, M., Cheng, K., Magloire, T., Moore, T., & Napier, C. (2001). The impact of a clinic-based literacy intervention on language development in inner-city preschool children.   *Pediatrics*, *107*(1), 130-134.

Nagy, W., Herman, P., & Anderson, R. (1985). Learning words from context. *Reading Research Quarterly*, *23*, 6-50.

Senechal, M., & LeFevre, J. (2002). Parent involvement in the development of children's reading skill: A five-year longitudinal study. *Child Development*, *73*(2), 445-460.

Stahl, S., Richek, M., & Vandevier, R. (1991). Learning meaning vocabulary through listening: A sixth-grade replication. In J. Zutell and S. McCormic (Eds.), *Learner factors/teacher factors: Issues in literacy research and instruction* (pp. 185-192).   Chicago: National Reading Conference.

Wang, F. Y., & Lee, S. Y. (2007). Storytelling is the bridge. *The International Journal of Foreign Language Teaching*, *3*(2), 30-35.