The role of Extensive Reading in second language vocabulary acquisition

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Reference Data:

The purpose of this paper is to raise ER practitioners’ awareness of the centrality of the acquisition of vocabulary to the development of all language skills (Grabe & Stoller, 2002), and to encourage them to reflect carefully on the extent to which their practices are in keeping with the recommendations made in the literature on second language vocabulary acquisition (SLVA). Practitioners will be further encouraged to consider if and how an integrated approach (ER+) developed by the author might be adapted to his/her particular teaching circumstances.

The main question being addressed is: How can ER help to maximise L2 vocabulary development? To address this question I will discuss three central issues regarding the role that ER can play in the development of L2 vocabulary knowledge and skills, and then describe ER+ - an approach I have developed over the past number of years in which ER serves as a springboard for vocabulary study, writing, and discussion, and which I have designed to maximise the vocabulary knowledge and skills that learners derive from their ER.
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Key issues in Second Language Vocabulary Acquisition (SLVA)

The following quotation is indicative of a view held by some of the most influential members of the ER community (e.g. Krashen, Day, Bamford and Prowse):

Reading is good for you. The research supports a stronger conclusion, however: Reading is the only way, the only way we become good readers, develop a good writing style, an adequate vocabulary, advanced grammar, and the only way we become good spellers (Krashen, 1993, p. 23).

This point of view raises some serious issues related to the ways in which vocabulary can be most efficiently acquired, four of which are discussed below: (a) the incidental learning hypothesis, (b) the efficacy of inferring word meanings from context, (c) the value of explicit vocabulary instruction and study, and (d) the limitations of input in developing productive vocabulary skills.

The Incidental Learning Hypothesis (ILH)

Although the ILH has established free reading as the main source for L1 children’s vocabulary, it has been criticised for a number of reasons. Gardner (2004) citing the limited range of vocabulary found in narrative texts, argues against free reading, and states that unless (L1) learners are required to read non-fiction, their reading will not provide them with much of the vocabulary they need for their studies. Having found no vocabulary learning benefits after having students in grades 3-5 engage in 23 hours of free reading, Carver and Leibert (1995) also argue against the effectiveness of such practices as a source of vocabulary learning. In addition, it has been suggested that by not factoring forgetting into the ILH, rates of incidental learning may have been seriously over-estimated (Duffelmeyer, 1985), that starting from a young age L1 children receive far more explicit instruction than is generally recognised (McLaughlin, 1989), and that other significant sources of vocabulary learning (e.g., conversation, study, dictionaries, news, documentaries, music, etc.) have been overlooked. Carver and Leibert (1995), for example, suggest that (difficult) aural sources may be the more effective, and Corson (1997) and Hall (1992) point out that it is often through discussion and “talking about text” that learners help each other to discover the rules of vocabulary usage. In sum, as its originators acknowledge, the ILH is a default argument almost devoid of any empirical evidence (Nagy & Herman, 1987; Nagy, Herman, & Anderson, 1985), and although it has also been applied to L2 learners (Nation, 2001), its relevance in L2 contexts is questionable (Gu, 2003).

The efficacy of inferring word meanings from context

Incidental learning and inferring word meanings from context are the learning processes which are most often invoked to support the ILH. However, much doubt has been cast on the applicability of the ILH to L2 contexts by the inefficient rates at which EFL readers have been found to pick words up incidentally (Cobb & Horst, 2001; Horst et al., 1998; Laufer, 2003, 2005; Waring & Takaki, 2003; Zahar et al., 2001)—particularly if clear form-meaning relationships for new words are not initially established (Hulstijn, 2001; Parry, 1991). Similarly, although inferring
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The value of explicit instruction and study

Given that vocabulary knowledge is the key ingredient in successful reading (Cobb & Horst, 2001; Nation & Coady, 1988), it seems essential for all ER programs to incorporate methods which will maximise vocabulary development. However, despite the long history of research demonstrating the effectiveness of vocabulary instruction and study (Nation, 2001), Krashen (1989, 2004), among others, continues to ignore this research, as well as that showing the greater efficiency of a combination of reading and vocabulary instruction or study (e.g., N. C. Ellis & Laporte, 1997; Folse, 2004; Gu, 2003; Nassaji, 2003; Paribakht & Wesche, 1997, 1999). Joe (1995), for example, in a case study involving a read and retell task, and based on test as well as detailed interview data, identified three conditions which seemed to contribute to learning: (a) focusing on word meanings, (b) noticing similarities and differences between related words, and (c) retrieving and creatively using them. Given this growing evidence, as Jenkins and Dixon (1983) put it, the more interesting question about vocabulary instruction and study, “is not so much whether it should happen, but how to perform this task most efficiently” (p. 241). Mason and Krashen (2004) provide an interesting counter example and argue that, based on a calculation of words learned (see below) per minute, listening (with minimal focus on vocabulary) is more efficient than listening plus activities, and further, than even if input alone were not as efficient, because learners enjoy it, there would still be good reason to prefer it. Their study certainly provides food for thought, but they make two assumptions that should be recognized and investigated: (a) that the quality of the

word meanings from context clues has been found to be the most important strategy for enhancing vocabulary growth (de Bot, Paribakht, & Wesche, 1997; Nation, 1993; Stahl, 1999), Harley, Howard and Roberge (1996) provide a succinct summary of the research in stating that “inferring the meaning of vocabulary in context is a lengthy and error prone undertaking which, by itself, is an inefficient way of mastering second language vocabulary” (p. 281). As Sternberg (1987) points out, although it is often assumed to be an efficient process because that is how many words are learned, guessing is actually relatively inefficient.

The research also suggests that while guessing from context may be an effective comprehension strategy (see Hulstijn (2001) for an opposing view), and possibly a good way to consolidate known vocabulary (Nassaji, 2003), it is a poor strategy for learning new vocabulary (Birch, 2002; R. Ellis, 1994; Folse, 2004; Laufer, 2003; McLaughlin, 1989; Nassaji, 2003; Nation, 2001) – and possibly for less frequent words in particular (Parry, 1991). Contexts are frequently unhelpful or even misleading (e.g., Beck, McKeown, & Kucan, 2002; Parry, 1991), and conversely, helpful contexts often enable learners to comprehend the text while ignoring unfamiliar words (e.g., Mondria & Wit-de Boer, 1991; Nation & Coady, 1988). In addition, Grabe and Stoller (1997) suggest that when overused, guessing can lead to high levels of frustration and undermine a learner’s confidence in reading—although, training learners to become more successful guessers has been found to be an effective way to overcome such problems (Sternberg, 1987; Van Parreren & Shouten-Van Parreren, 1981).

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learning that results from input versus input plus activities is the same (they use only a shallow, receptive L2>L1 translation test), and (b) that learners do not enjoy follow-up activities. Although more research is required, from my research and experience, neither of these assumptions can be supported.

And finally, a seldom mentioned aspect of the research is the unwritten assumption in much of the literature that learners have no need to develop their vocabulary skills beyond a shallow, receptive knowledge. This is often reflected in the measures of vocabulary growth that are employed (e.g., receptive, multiple choice tests), as well as the use frequent of the terms “learn” and “acquire” to refer to the development of only rudimentary word knowledge. Krashen’s (2004) statement “once we have understood it, we have learned it” (p. 4) seems quite representative. Not only does this assumption misrepresent the desires of many learners, more importantly from a pedagogical perspective, it overlooks the additional effort and knowledge necessary to develop productive vocabulary skills.

The limitations of input in developing productive vocabulary skills

The limitations of input in developing productive language skills have most conclusively been demonstrated by research on Canadian French immersion programs in which an input rich environment has produced learners with native-like receptive skills but very unnative-like productive skills (Gass, 1988; Hammerly, 1988; Kowal & Swain, 1997). Receptive aspects are picked up more easily because they require less precise knowledge (Nation, 2001; Schmitt & Zimmerman, 2002). Learners whose language education involves very little speaking and writing (e.g., in Japan) face an analogous problem whereby even advanced students find themselves unable to use words appropriately (Moras, 2001). Similarly, Laufer (1991) suggests that learners’ productive vocabulary will not develop beyond that of their peers unless pushed to do so by their teachers, Joe (1998) found that generative processing helped learners to use words productively in context and to remember them better than subjects who merely read, and Webb’s (2005) findings suggest that productive tasks may be more effective not only in developing productive knowledge, but knowledge of word meanings as well. As Corson (1997) and Hall (1992) point out, learning the rules of use is far from automatic, and these are best learned not simply through reading, but through study and discussion.

ER+ - An integrated approach

Although the ER literature focuses almost exclusively on programs in which learners read self-selected titles, usually with few or no follow-up activities, as a result of my experimenting with courses involving self-selected, group, and class readers, I came to feel that the class reader approach best enabled me to meet my learners’ needs. Consequently, I developed ER+ - an integrated approach which I felt maximised the possibility of my students being able to raise their levels of proficiency in English. As the research project described below demonstrates, ER+ enabled my students to develop significantly better knowledge of words meanings, as well as greater ability in both using and recalling the words themselves.
I found that through reading books as a class, many of the difficulties inherent in supporting learners who read self-selected books could be overcome. The less confident or proficient learned from the more proficient, and the teacher could address commonly observed problems. Learners were able to repeatedly hear and use new words during the interaction afforded by an integrated approach, and as a result were exposed to many opportunities for vocabulary enrichment. They gained insight into word meanings and usage from each other, and as a result became better able to comprehend, retain, and use the words (Corson, 1997; Hall, 1992; Morgan & Rinvolucri, 1986; Stahl, 1999).

Discussing and studying new words, and then using them orally or in writing helped learners not only to develop their vocabulary skills (Hall, 1992; Joe, 1995, 1998; Stahl & Fairbanks, 1986), but, in my experience, to increase both the quantity and the quality of the group and class reader discussions. Learners became more confident and successful in expressing their opinions, had opportunities to use the words they had studied, and because they had all read the same passage, they could more easily help to correct each other’s misunderstandings – in English!

Incorporated into ER+ is the recognition of three research-based findings: (a) that language input is a necessary but not sufficient condition for the development of accurate L2 production (e.g., Laufer, 2005; Paribakht & Wesche, 1997), (b) that ER is a very enjoyable and motivating way to increase language input/contact, (e.g., Day & Bamford, 1998), and (c) that the development of vocabulary knowledge is fundamental to all language skills (e.g., Grabe & Stoller, 2002). In practice, the ER+ learners engaged in a weekly cycle of (see Figure 1, below): (a) reading one third of a (teacher-selected) graded class reader, (b) intensively studying ten words assigned from their reading (selected largely according to their frequency of occurrence in the book), and in addition, using their vocabulary worksheets as a guide, learners were given time to share, discuss and correct their understanding of the meanings and uses of the target words, (c) discussing the story in groups for 20-30 minutes (using a teacher-provided list of comprehension and opinion questions). The questions were written strictly to stimulate discussion of the stories, and no attempt was made to focus on the target vocabulary. The vocabulary study routine and worksheet, example discussion questions, and other worksheets can be seen at <www.extensivereading.net/er/rosszell.html>.

The research questions being addressed in this paper are:

1. Does intensive vocabulary study, within the context of an ER class, result in greater gains in knowledge of word meaning and use than doing writing tasks (the control condition) within the same context? Are the gains retained over a one-month interval?

2. Does intensive vocabulary study, within the context of an ER class, result in greater gains in the ability to recall words than doing writing tasks (the control condition) within the same context? Are the gains retained over a one-month interval?

The subjects (n=40) were intermediate and advanced level (Pre-TOEFL (ITP) scores, M = 446, SD = 30), motivated learners in four intact, streamed, elective (sentaku hishu) classes in a private Japanese university.
A counter-balanced (i.e., the students acted as their own controls), quasi-experimental study was carried out over the course of a semester, with each student reading one reader with complementary vocabulary study, and one without. To equalise for time on task, the control groups completed an Instant Report (see example at <www.extensivereading.net/er/rosszell.html>) instead of studying vocabulary. All students completed two unannounced pre, post, and follow-up tests on the 30 target words from each class reader—a modified Vocabulary Knowledge Scale (VKS - Paribakht & Wesche, 1993, 1997; Wesche & Paribakht, 1996), as well as a recall test modeled on those of Laufer and Nation (1999) (see example items below). Two repeated-measures ANOVAs (with the alpha level conservatively set at p=.001) revealed a significant advantage for the ER+ group on the post and delayed tests (administered one month later) for both the VKS and the Recall Test (F (1,39) = 23.17, p=.000, and F (1,39) = 82.37, p=.000, respectively).

A) Recall Test example item:

‘I have a warr______ for Tenjy Mtintso,’ one policeman said. ‘Are you Tenjy Mtintso?’

(each item was rated on a scale of 0-3, inter-rate reliability was .97-.99).

B) Modified Vocabulary Knowledge Scale (VKS) example item:

warrant (n.)

i) I don’t think I have ever seen this word.

________________________

ii) I have seen this word before, but I don’t know what it means. ______________________

iii) I have seen this word before and think that it is related to the following word or idea:

________________________

iv) I have seen this word before, and I think it means ______________________

(For Levels iii) and iv), write in English or Japanese hiragana)
v a) I can use this word in a sentence. (Write a sentence.)

_______________________________.
(If you write a sentence, you must also write the meaning in iii) and/or iv).)
b) Your English sentence translated into Japanese (in hiragana).

_______________________________.

(Levels i-iv were combined and rated on a meaning scale of 0-3, inter-rater reliability was .78-.79; and Level v was rated according to semantic and syntactic appropriacy on a use scale of 0-3, inter-rater reliability was .75).

Why did the ER+ group do better? It seems it is because the vocabulary study required learners to focus on individual words. This forced students to think about their meanings and uses more deeply, and to actually use each of the words in a written sentence. Furthermore, such study built on the learning already derived from the relatively shallower processing of the meaning that took place while they were reading. Given the sparseness of vocabulary research on the development of depth of knowledge, and the difficulties students have in developing their knowledge of the semantic and syntactic factors constraining word use, these results represent a significant finding. For those teachers looking for ways to help their students to begin closing the gap between their receptive and productive vocabularies, intensive vocabulary study within the context of extensive reading may be the way to go.
**Conclusion**

Language teachers believe that extensive reading helps their students acquire new vocabulary.... But as learners read, does word learning occur to any practical extent? And given a choice of methods, is reading extensively more effective than direct vocabulary instruction, as Krashen (1989) has argued? (Horst et al., 1998, p. 207).

These are key questions that every ER practitioner should ask him/herself. The research described above resulted in affirmative answers to all four research questions, and the significantly greater gains in vocabulary knowledge (receptive as well as productive, and breadth as well as depth) made by the ER+ group would suggest that while ER can play a major role in the development of a learner’s vocabulary knowledge (notice that the ER group also made substantial and sustained improvement on both measures), without some complementary form-focused instruction and/or study, vocabulary learning for learners in foreign language contexts will remain an inefficient and haphazard process—especially with regard to the development of deeper knowledge and productive vocabulary skills.

Given the fundamental role that vocabulary acquisition plays in the development of all language skills, it is unfortunate that it is not given a higher priority in many L2 reading courses (Grabe & Stoller, 2002; Haynes, 1993), and that there isn’t more recognition of the important implications that an understanding of the factors which foster vocabulary development has for L2 instruction. As Brown (1993) put it, “Just as word acquisition is important to language learners, knowledge about word acquisition is important to language pedagogues” (p. 281). As stated
earlier, the purpose of this paper was to encourage EFL instructors to reconsider the prominence of vocabulary development in their teaching, and if found to be lacking, I hope that ER will offer an adaptable and viable way to better meet their learners’ needs.

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Rory Rosszell has been teaching in Japan for the past 16 years and his main interests include classroom-based research on content-based language teaching, Extensive Reading, and second language vocabulary acquisition. He can be contacted at rosszell@he.tokoku.ac.jp.

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**Appendix 1**

**Typical weekly set of words**  
(The Bride Price – Section 1)

- inherited (v.)
- anxiety (n.)
- mourner (n.)
- swollen (adj.)
- provider (n.)
- sympathetic (adj.)
- sore (adj.)
- veranda (n.)
- graveyard (n.)
- allowed (v.)

**Appendix 2**

**Vocabulary item study routine**

Out of class (done on the Vocabulary Worksheet):

1. Write down the word and its part of speech (n., v.i., v.t., adj., adv., etc.).
2. Copy a sentence containing the word from the book or the concordance.
3. Write what you think the word means (in the sentence you just copied from the book).

4. Look the word up in your English-English dictionary, and then select and write the definition which best describes the meaning of the word (in the sentence from the book).

5. Write the pronunciation, and underline the stressed syllable in words with more than 1 syllable.

6. Write any (common) related words and their parts of speech.

7. Write a Japanese translation (only if you find the word difficult to understand).

8. Look in the concordance and in your dictionary for words that the word you are studying collocates with.

9. After studying the word and looking at the sentences in the concordance and your dictionary, write your own original sentence (Don’t copy!).

In-class activities (in groups of 3 to 5 students in the following class):

10. Compare and discuss your completed vocabulary and collocation worksheets with the members of your group.

11. Find and correct any mistakes you made.

12. Hand your vocabulary worksheet in to the teacher.

(I now give my students guidelines for self-selecting 5 words per week, have them use wordcards instead of worksheets, and list common collocations for each word.)
Appendix 4
Example comprehension/opinion questions
The Bride Price — Section 1 (p. 1-27)
1. Where had Ma Blackie gone? Why?
2. Where was Ezekiel going? Why?
3. Describe Aku-nna in as much detail as possible.
4. Describe Ma Blackie in as much detail as possible.
5. Why was everyone upset and being so kind to Akunna?
6. Why did Aku-nna and her family move back to Ibuza?
7. How are Aku-nna and her family going to survive now that Izekiel is dead?
8. What is Okonkwo planning to become? How?
9. How do their customs compare to the ones in your culture? How are they similar and how are they different? What about 50 or 100 years ago? (Remember that this story took place in Nigeria in the 1950s.)

ANSWERS (on back of the sheet)
1. She went back to Ibuza to ask the River Goddess for another child.(p. 1-2)
2. He is going to the hospital to get his swollen feet examined (due to an injury during the war in Burma.(p. 3-4)
3. She is well brought up, thin, unhealthy, and like her father (p. 3-4)
4. She is huge, tall and straight, with black shiny skin, and is always smiling. (p. 1)
5. Because they new her father had died (e.g. Dick, the quiet kitchen, Auntie Uzu, Aunt Mary) (p. 9-11)
6. Because they no longer had a father and it was too expensive to live in Lagos.(p. 19-21)
7. She and her family have been ‘inherited’ by Ezekiel’s brother and he will look after them.(p. 16-17, 23)
8. Through the money that he inherited and Aku-nna’s bride price, he is planning to become an Obi. (p. 26)