

# Extensive reading and inference skills of word meaning

Shizuko OZAKI

## Abstract

The major purpose of the study is to find out whether or not Japanese learners of English can develop their skills of inferring the meaning of unknown English words from context through extensive reading (ER). Approximately 155 first and second year university students are given an inferring quiz twice—at the beginning and end of the academic year. The average score gained at the end is hypothesized to be significantly better than that at the beginning. It is also expected that there is a significant correlation between the amount of words the learners read and their quiz scores. Both hypotheses are supported, indicating that they are developing the skills of reaching an acceptable meaning when they encounter unknown English words and that the more they read, the stronger this tendency is.

## Introduction

There have been many benefits reported in the literature of ER for learners of English. Takase (2007), for instance, observes that practitioners of ER start to feel the easiness to read English text after reaching about 50,000 to 60,000 words in the practice of ER. Mason and Krashen (2017) demonstrate the average of .6 reading score gains on TOEIC per hour of ER in their qualitative analysis of eight learners. Lange (2014) also indicates a positive impact of ER on TOEIC scores for groups of learners divided according to the numbers of words they read. The consensus among the studies that have attempted to find a clearer link between ER and TOEIC scores seems that such a link is most likely to be found with learners that have been engaged in ER for a considerably long time (O'Neill, 2012; Carney, 2016).

Yet other studies investigate on vocabulary acquisition through ER (Huckin and Coady, 1999; Pigada and Schmitt, 2006), and vocabulary development is in fact one of the most frequently reported strengths of ER (Macalister, 2008). Since learners choose what to read, and in their own selections of topics, they might repeatedly find the same new words a number of times. It is not hard to imagine that repeated encounters with these words enhance their vocabulary acquisition. Nam (2017) reports that seven times of the encounter with a new word in different contexts most promote learners' acquisition of the word.

The three ER strategies that Sakai (2002) proclaims and have been quite influential are the following:

- (1) Don't use a dictionary.
- (2) Skip parts you don't understand.
- (3) Quit reading the book if you find it boring and move on to another one.

Without using a dictionary, it is safely assumed that ER practitioners are routinely engaged in the act of inferring the meaning of unknown words. The current study sheds light on the development of inference skills of word meaning in relation to ER.

### Objectives

Specifically, the study purports to answer the following research questions:

1. Are the Japanese learners who constantly read English books without using a dictionary developing the skills of reaching an acceptable meaning when they encounter unknown English words?
2. If the above assumption is correct, is it the case that the more they read, the better their skills are?

It should be emphasized that inference skills of word meaning are treated separately from vocabulary acquisition. That is, the purpose of the study is not to examine whether or not learners master words that appear in the books they read but to define inference skills of word meaning and investigate if they can be enhanced through ER. It is hoped that the present study plays a role of bringing out another positive impact of ER on learners' acquisition process and contributes to the research exploring profound possibilities of ER for the classroom and beyond.

### Method

The study involves 189 first and second year university students in Japan with none to within a year experience of ER. They are given an inferring quiz at the beginning of an academic year. Out of the 189 students, approximately 155 students take the same quiz eight months later. During the period, they are instructed to practice ER as part of required assignments for their mandatory English courses. The number of words they read varies from one individual to another, and their English proficiency level is pre-intermediate with the average TOEIC score of around 460.

The inferring quiz requires the students to choose 10 unknown words out of 20 selected from the Academic Word List (AWL), read three sentences including each target word, and write their guess for the meaning of the word in Japanese. The AWL is the carefully selected collection of the most frequent academic words outside of the General Service List (GSL)—the first basic 2000 words described by West (1953) (Coxhead, 2000). It is assumed to make quite a distinction from the vocabulary occurring in the types of ER books that the students read, most of which are illustrated books for children. A sample item from the quiz is given below, and the entire original quiz is provided in Appendix.

Read the three sentences and guess the meaning of the underlined word.

**assess** Your Guess: 【                      】

- a. The formal deadline for **assessing** the tests is July 28.
- b. Twenty percent **assessed** his performance as ‘good.’
- c. A coach can **assess** your strengths and weaknesses.

The correct answer range for each word is established based on whether or not a given answer would lead to a serious comprehension or communication breakdown. If the answer is within the range, it receives a point. The total of 10 questions amounts to the maximum score of 10.

In accordance to the research questions above, the following hypotheses are posited:

1. The average score of the inferring quiz at the 2<sup>nd</sup> session is significantly better than that at the 1<sup>st</sup> session.
2. There is a significant correlation between the amount of words/books the learners read and their scores on the inferring quiz.

**Results and discussions**

Table 1 demonstrates the mean scores of the learners at the first and second sessions. The mean score of the 189 university students at the beginning of the academic year is 2.7143 out of 10, and that of the 155 university students at the end of the year is 3.4258. Independent samples *t*-test proves that the difference between the two scores is significant. Thus, the first hypothesis is supported.

Table 1. Mean Scores of Inferring Quiz at Two Sessions

Session	Number	Mean Score out of 10	Significance (p<.05)
1	189	2.7143	<i>t</i> (342)=-3.555 <i>p</i> =.000(s.)
2	155	3.4258	

Figure 1 indicates the correlation between the students’ scores on the inferring quiz and the numbers of words they read. Similarly, figure 2 shows the correlation between the quiz scores and the numbers of books. For each figure, all the valid responses provided at the two sessions are collapsed into one data set and computed for a one-tailed Pearson’s correlation coefficient. The coefficients are .110 and .197 respectively, and the correlations turn out to be significant. Therefore, the second hypothesis also pans out.

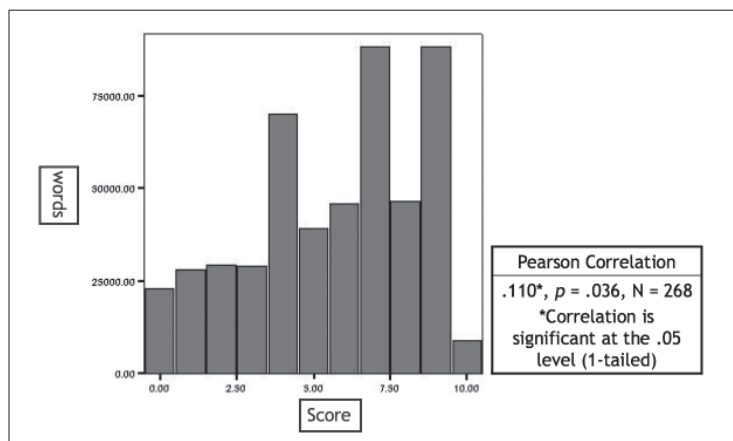


Figure 1. Correlation between Numbers of Words and Quiz Scores

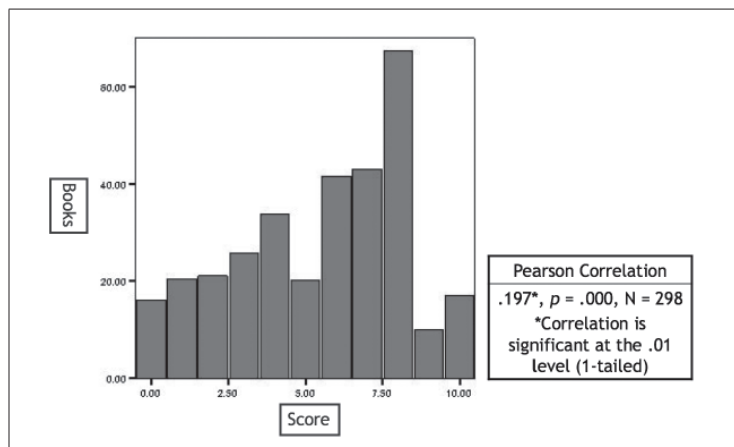


Figure 2. Correlation between Numbers of Books and Quiz Scores

General findings of the study indicate that extensive reading has positive impact on the development of inference skills of word meaning and that the more learners read, the stronger the impact is.

It goes without saying that the study entails a number of limitations. For one, a control group consisting of those without the practice of ER would be strongly desired. Factors other than ER, such as general improvement of English proficiency over time is expected to correlate with the test scores of the inferring quiz. Employing a control group would contribute to removing such factors.

For another, inference skills of word meaning should be scrutinized. In inferring the meaning of an unknown word, some of the learners in the current research are clearly inspired by the meaning of the word that looks or sounds similar to the word in question. Examples are given in Table 2.

Table 2. Common Wrong Assumptions

Word tested	Word in learners' mind
assess	access
convene	convenient
confer	confuse
accumulate	stimulate
comprise	compromise

Detailed analysis on learners' common approaches might reveal more about the development of inference skills of word meaning, which is expected to help devise a more refined instrument for similar research in the future.

## Conclusion

The present study attempts to reveal whether or not inference skills of word meaning are promoted by ER. It is suggestive that the Japanese learners of English who read English extensively are developing the skills of reaching an acceptable meaning when they encounter unknown English words. It is also indicated that the more they read, the better they can infer the meaning of unknown words—the words that are not necessarily they are exposed to in the practice of ER. With more refinement with the method, the development of the skills could further be evidenced as another benefit of ER.

## References

- Carney, N. (2016). Gauging extensive reading's relationship with TOEIC reading score growth. *Journal of Extensive Reading*, 4, 69-86.
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34 (2), 213-238.
- Huckin, T. and Coady, J. (1999). Incidental vocabulary acquisition in a second language. *Studies in Second Language Acquisition*, 21 (2), 181-193.
- Lange, K. (2014). An analysis of 5 years of TOEIC score results: What can we learn from the data? *Bulletin of Shimane Women's College*, 52, 87-98.
- Macalister, J. (2008). Integrating extensive reading into an English for academic purposes program. *The Reading Matrix*, 8 (1), 23-34.
- Mason, B. and Krashen, S. (2017). Self-selected reading and TOEIC performance: Evidence from case histories. *International Buddhist University Bulletin*, 63, 469-475.
- Nam, H. (2017). How many word encounters do we need?: In regard to the frequency and presentation of contexts. *English Language & Literature Teaching*, 23, 77-96.
- O'Neill, B. (2012). Investigating the effects of extensive reading on TOEIC® reading section scores. *Extensive Reading World Congress Proceedings*, 1, 30-33.
- Pigada, M. and Schmitt, M. (2006). Vocabulary acquisition from extensive reading: A case study. *Reading in a Foreign Language*, 18 (1), 1-28.
- Sakai, K. (2002). *Kaidoku hyakumango* [Toward one million words and beyond]. Tokyo: Chikuma Shobo.
- Takase, A. (2007). The effectiveness of picture books and SSR in extensive reading classes. *Kansai University Foreign Language Education Forum*, 6, 1-13.
- West, M. (1953). *A General Service List of English Words*. London: Longman.

## Appendix

### Inferring Quiz

I. 以下から知らない単語を 10 個選んで丸を付けてください。

- |               |               |               |                |            |
|---------------|---------------|---------------|----------------|------------|
| 1. assess     | 2. constitute | 3. distribute | 4. acquire     | 5. reside  |
| 6. compensate | 7. convene    | 8. confer     | 9. impose      | 10. amend  |
| 11. aggregate | 12. allocate  | 13. comprise  | 14. accumulate | 15. append |
| 16. confine   | 17. erode     | 18. compile   | 19. conceive   | 20. levy   |

II. 上で選んだ 10 個の単語に関する質問のみお答えください。選ばなかった単語に関する質問は空欄のままにしておいてください。

3つの文を読んで下線の単語の意味を推測してください。

(例) threaten 推測: [                      脅かす                      ]

- A Circle K clerk was **threatened** by a man with a gun early Friday.
- He **threatened** the boy with a knife.
- In the thirteenth century, Japan was **threatened** by a Mongol invasion.

1. assess 推測: [                      ]

- The formal deadline for **assessing** the tests is July 28.
- Twenty percent **assessed** his performance as 'good.'
- A coach can **assess** your strengths and weaknesses.

2. constitute 推測: [                      ]

- The school was **constituted** as a separate college in 1993.
- It is easy to **constitute** a company through a lawyers' office.
- The working groups will be **constituted** by August 31 this year.

3. distribute 推測: [                      ]

- You can **distribute** the newspaper to most local businesses.
- Give students time to think about the problem before you **distribute** the handouts.
- After dinner was over, Tom **distributed** the cookies to each member of his family.

4. acquire 推測: [                      ]

- I would like to **acquire** information on possible internships.
- Acquire** interview skills and improve your chances of success at an interview.
- Check out these recently-**acquired** items.

5. reside 推測: [                      ]

- The US citizen parent must have **resided** in the US prior to the birth.
- I have never **resided** in the Republic of Croatia.
- Less than 1 in 20 British people want to **reside** in a care home in their old age.

6. compensate 推測: [                      ]

- We try to **compensate** for a stressful day with simple pleasures.
- Never waste the time, which you can never **compensate**.
- Buy a new suitcase to **compensate** the broken one.

7. convene 推測: [ ]  
a. Hong Kong is to **convene** a meeting of technical experts in two weeks.  
b. The Global Scenario Group was **convened** in 1995 by the Stockholm Environment Institute.  
c. We need to **convene** the session at a date not too late.
8. confer 推測: [ ]  
a. The specialists **confer** about each case and choose the best treatment option.  
b. I want to **confer** with my lawyer prior to any conversations with you.  
c. I then **conferred** on the problem at some length with John.
9. impose 推測: [ ]  
a. We should **impose** a rule that says we have to put our cars in the park.  
b. Many online galleries **impose** a limit on the number of photographs you can upload.  
c. Tennessee may **impose** \$50 fine for text chatting while driving.
10. amend 推測: [ ]  
a. I wasn't careful with my words and now it's too late to **amend** the mistake.  
b. I don't want to give up trying to **amend** our friendship.  
c. Please feel free to **amend** wrong sentences and phrases.
11. aggregate 推測: [ ]  
a. In this posting, we discuss how to **aggregate** data across a specific time range.  
b. They **aggregate** money from many small investors.  
c. Are you serving as a forum to **aggregate** ideas and comments?
12. allocate 推測: [ ]  
a. Who determines how much money is **allocated** to each school in the district?  
b. PC USA **allocates** everyone in your family their own email account.  
c. I was **allocated** a 3rd floor room without a lift.
13. comprise 推測: [ ]  
a. The group is **comprised** of married couples with school age/teenage children.  
b. The Expo will **comprise** of over 1000 local and international sellers and buyers.  
c. The photographs **comprise** a variety of themes like News, Sports, Entertainment and Politics.
14. accumulate 推測: [ ]  
a. I **accumulated** a lot of miles as I traveled to Europe.  
b. Shoppers who **accumulate** receipts will get a coupon.  
c. **Accumulate** more points than Simon to win the game!
15. append 推測: [ ]  
a. Please **append** any additional information about the problem to the end of the message.  
b. The letter was **appended** with a list of suggested reading material.  
c. Don't forget to **append** your link to the end of the official website address.

16. confine 推測: [                      ]
- For safety reasons, pets should be **confined** to the back seat.
  - The use of the library is **confined** to students.
  - Don't **confine** yourself to one job when you could go for ten.
17. erode 推測: [                      ]
- Sand is easily **eroded** by wind, whereas rock is **eroded** much more slowly.
  - The old building was **eroded** in the river more than 10 years ago.
  - Year after year this wall **erodes** and breaks apart because of nature.
18. compile 推測: [                      ]
- Information and photographs were **compiled** from extensive research in libraries.
  - We've **compiled** all the movie trailers for you!
  - We're going to take some time to **compile** our favorite pictures.
19. conceive 推測: [                      ]
- It took time to **conceive** this idea and it was never in secret.
  - Soul Slinger, the artist who **conceived** the event, invited Greenpeace in July of last year.
  - Eli Thayer **conceived** the plan as early as February, 1854.
20. levy 推測: [                      ]
- The tax was first **levied** in 1898 on long-distance telephone calls.
  - They have the power to **levy** any fees and charges.
  - The credit card company can **levy** your bank account.