

# **High Frequency Vocabulary and Reading Proficiency in ESL Readers**

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Coady, et al did an experimental study of explicit instruction in high-frequency vocabulary and its effect on ESL reading comprehension. The researchers hypothesized that explicitly focusing student attention on words from the 2,000 most common words in English may help them to automatize lexical recognition of those words while reading in English. Automaticity in processing certain text elements increases the cognitive resources available for processing text elements that have not become automatic yet. The hypothesized effect of this was increased reading comprehension.

## **Learner Participants**

All the learners involved in this study were students enrolled in an intensive English program. No information was given on their L1 educational backgrounds. For phase one of the study, there were 22 subjects in the experimental group and twenty in the control group. No information was given on subjects' English proficiency level; although descriptive statistics from the study indicate that there was a range of proficiency levels. Also, the group selection mechanisms are not explained, although it seems most likely that existing classes were used for the study. In phase two of the experiment, 42 students were involved in the study. For this phase of the study, there was no control group.

## **Study Design**

In phase one of the experiment, all the students completed two pre-tests: a 36-item vocabulary multiple choice synonym test derived from a basic vocabulary list and the Degrees of Reading test from the College Entrance Examination Board (CEEB) (this multiple choice reading comprehension test was created for native speakers). The control group received no specialized reading or vocabulary training other than the regular English instruction they received along with the experimental group.

The experimental group spent one hour per week for 8 weeks working with a computerized vocabulary learning program. The program presented them with words from the 600-2,000 frequency range of the most frequent words in English. Each time a student began a lesson, he would see a list of 20 words from this lesson. The student could select any unknown words to see definitions and sample sentences, and to add his own mnemonic cue to remember the word. The computer would generate multiple choice practice tests and unit tests. Selected words and words missed on tests would be added to a personalized review file, which could be used to create individualized units.

At the end of the 8-week period, all students completed the same vocabulary and reading measures that were used for the pre-test.

In phase two of the experiment, all students had access to the vocabulary learning program. The vocabulary and reading comprehension measures were altered for this phase: the vocabulary was selected randomly from the computer program, and a different version of the reading test was used, one that included readings targeted at lower levels of reading comprehension. The phase two students also completed a short, closed-ended questionnaire asking them to evaluate the computer program.

## **Findings**

The results from both phases of the experiment indicate that studying high-frequency vocabulary does increase reading comprehension. In phase one of the study, students from the experimental group

experienced significantly greater gains in both reading comprehension and vocabulary knowledge than the control group ( $F(41,1)=9.55, p<.005$ ). In the second phase of the study, the students significantly increased their reading comprehension scores and their vocabulary scores, according to matched t-tests ( $p<.05$  for each reading comprehension and vocabulary). On the questionnaire, the majority indicated that they enjoyed using the program and felt that it had helped them to learn vocabulary and improve their reading comprehension.

### **Comments on the Study**

The study seems to indicate a link between studying high frequency vocabulary and reading comprehension. It would have been strengthened by separately considering the performance of students at different proficiency levels rather than grouping them into unified control and experimental groups. It is possible that learning high frequency vocabulary is more effective for learners at certain levels of reading proficiency than for others.

Also, closer examination of the statistics reveals that the control and experimental groups were not equivalent at the beginning of the study. The experimental group started the study with a much lower mean score on the reading comprehension test than did the control group. Both groups improved their reading comprehension during the study, but the control group's gains were more pronounced than the experimental groups. On most language proficiency measures, more dramatic gains are made by lower-proficiency learners; thus, it is not possible to determine whether the experimental group had more dramatic reading proficiency gains because of exposure to the vocabulary learning computer program or because of the disparity of learners' proficiency levels before the treatment.

Also, it is important to remember that this study does not investigate the effectiveness of vocabulary learning on reading comprehension in general, but rather the effect of one specific, individualized vocabulary learning system. These findings may not be generalizable to other methods of vocabulary teaching.

### **Implications for Practice**

The findings of the study give preliminary indications that reading comprehension can be facilitated when students are encouraged to increase their familiarity with high frequency vocabulary. This offers an example of how a bottom-up text processing practice such as vocabulary building can support reading comprehension.

### **Areas for Further Research**

This study could be replicated, controlling for student proficiency levels. It also could be replicated with a larger number of students at different levels of proficiency to determine what effects, if any, proficiency level has on the impact of high-frequency vocabulary learning on reading comprehension. Different methods of instruction of high-frequency vocabulary learning could be compared to establish which methods do positively influence reading comprehension.

In T. Huckin, M. Haynes, & J. Coady (Eds.) *Second language reading and vocabulary learning* (pp. 217-228). Norwood, NJ: Ablex Publishing Corporation.

Downloaded from <http://www.cal.org/ncle>. Summarized by Bella Hanson

Questions for individual consideration or group discussion:

- 1) What is bottom-up text processing? What is top-down text processing? What are some examples of teaching/learning activities for each type of processing? Which type do you teach and why?
- 2) Have you explicitly taught words from the 2000 most common words in English list before? If so, what outcomes have you noted? Did you teach these words embedded in a relevant context, or in a decontextualized way? Which way do you prefer and why?
- 3) It appears from the study design that the experimental group received 8 additional hours of direct instruction compared to the experimental group. Could these hours have led to their additional gains? Why or why not?
- 4) Do you think that studying the list of high-frequency vocabulary increases reading comprehension in general, or comprehension of readings including those vocabulary words? Is it clear from this study? What has been your experience?
- 5) How might the results of this study affect your teaching? Why?