

# Should More Class Time Be Spent on Vocabulary?

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## 語彙の学習時間を授業で増やすべきか?

ワインバーグ ジョール

Useful vocabulary needs to be met again and again to ensure it is learned.

- Paul Nation

Without grammar, very little can be conveyed, without vocabulary nothing can be conveyed.

- Herbertson

### Abstract

The purpose of this research was to determine whether students' vocabulary quiz scores would improve, and if so, how long that improvement would last, after intensively studying vocabulary words for three weeks. Students in this research studied vocabulary words and completed vocabulary exercises in their textbooks. The research group of students spent more time focused on the vocabulary words by completing additional classwork and homework assignments than the control group. The research group far outperformed the control group in their short-term test scores. However, after their two-month summer break, the students were tested again and all of their gains were lost. Average scores in both the research and control group actually fell below what they were at the beginning of this study. Teachers can extrapolate from the findings in this research that students can achieve significant short-term gains in quiz scores by devoting more time to studying vocabulary, but there will be no medium-term advantage for the students.

本研究の目的は、第一に、学生の語彙クイズの点数が伸びたかを判断し、第二に、点数が伸びた場合は、3週間に及ぶ集中的な語彙学習を経て、点数が伸びた期間はどの程度続くのかを判断することである。本研究の対象となる学生は、

テキストで語彙を学び、練習問題に取り組んだ。本研究の対象となる学生グループは、非参加群よりも多くの教室学習および課題に取り組むなど、集中的に語彙の学習に取り組んだ。このような学習を経た直後に実施したテストでは、参加群の点数は非参加群のそれを大きく上回った。しかしながら、2か月の夏季休暇後に再度テストを実施したところ、全ての学生の点数が下がっただけでなく、参加群と非参加群の双方の平均点は本研究の開始時よりも下がったのである。本研究の結果から、学生は短期集中型の学習によって点数を大きく伸ばすことができるが、中期的な視点からすると、学生に何らかの有益をもたらすものではないと推察することができる

**Keywords** : vocabulary, intensive, deliberate, incidental, short-term, medium-term

## 1. Introduction

Vocabulary study is part of the foundation of most language learning programs. Textbooks include learning activities that target specific vocabulary items and have exercises that help students remember those words. It is widely accepted that teachers should devote class time to learning these vocabulary items because vocabulary development is such an integral part of learning another language. However, it is debatable whether the exercises in textbooks provide sufficient practice for the students to learn the words beyond a short period of time and to allow them to understand texts that contain those words (Nagy, 1986). If students are only gaining short-term acquisition through the activities in the textbook, is it possible to improve the students' vocabulary test scores in the medium and long term? There is a finite amount of class time in one semester, so the allocation of time is an important consideration for teachers to consider. In a four-skills class covering reading, writing, listening, and speaking, should equal time be distributed to each of these learning strands? If, for example, vocabulary tests are worth 15% of students' grades, should 15% of the semester be spent on teaching and practicing vocabulary? Researchers have come to different conclusions about the value of spending class time on the

deliberate study of vocabulary words. The purpose of this research was to determine whether spending extra time on the vocabulary acquisition component of a four-skills class resulted in helping students remember the words beyond the short term.

## 2. Literature Review

Research into whether it is worth spending more or less class time on the deliberate study of vocabulary is plentiful but inconclusive as a whole. The following section provides a summary of some studies on both sides of the issue.

### *2.1 Research Supporting Deliberate Study*

Among the research that has shown benefits for the deliberate studying of vocabulary versus incidental acquisition, Sharafi-Nejad et.al (2014) write that students that read a passage and studied the vocabulary words did better on vocabulary acquisition and retention tests than students who only read the passage but did not deliberately study the vocabulary words. Hulstijn (2001) explains that there is a misunderstanding of nomenclature when researchers discuss the difference between “intentional” and “incidental” learning of vocabulary, but ultimately, the more a teacher can help students focus on particular vocabulary, the better those words will be learned. Tabrizi and Feiz’s (2016) results comparing vocabulary test mean scores indicated that there was a significant difference between the deliberate versus incidental vocabulary learners. The deliberate vocabulary learning strategy group far outperformed the incidental group in their posttest results. Paribakht and Wesche (1999) 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. Nation (2005) asserts that “[t]he more deliberate, decontextualized attention a learner gives a word, the more likely it is to be learned” (p585). Nation goes on to clarify that students do better learning vocabulary when it is interspersed throughout a language course, in activities that promote meaning focused input, output,

deliberate study of vocabulary, and fluency focused activities.

## 2.2 *Research Supporting Incidental Learning*

In apparent support of Hulstijn (2001), Ramos (2014) explains that a misunderstanding of the words “intentional” and “incidental” has developed when discussing which approach works better. The confusion arises around the issue of variability among learners. Although it is reductive to state that beginner, intermediate and advance learners have different abilities, what works for each person will vary according their individual learning profiles. Researchers seem to agree that a considerable percentage of learners’ L2 vocabulary is acquired incidentally. Hukin and Coady (1999) claim that direct instruction is less effective than incidental vocabulary acquisition as the result of extensive reading. Adding to this theory, Ramos (2014) says that researchers have found that students learn their first thousand words in the early stages of classroom instruction by means of intentional learning, but after that vocabulary is acquired through extensive reading and guessing the meaning of unknown vocabulary items (p. 158).

In a related study, Mason and Krashen (2004) measured the vocabulary growth of two groups of students in a listening class: one group listened to stories without studying vocabulary words; the second group listened and studied the vocabulary words. While the listen-study group learned more vocabulary words than the listen-only group, they also spent more class time on the task. Considering the efficiency of both approaches, the researchers show that “the story-only-group learned words much more efficiently, at least double the rate of the story plus study group” (p. 3). Alipour Madarsara et al. (2014) divided students into two groups to determine the effect of intentional versus incidental practicing among young EFL Persian speakers. They found that the incidental learning group outperformed the intentional group in comprehension task of their research. They go on to assert that “young EFL learners can achieve a remarkable number of vocabularies (sic) much better if they are not being concerned (sic) about the final exam and constantly reminded about it” (p.31).

### *2.3 Research that is Inconclusive*

Webb et al. (2020) present meta-analysis showing wide variation in efficacy of word-focused classroom activities such as flashcards, word lists, writing, and fill-in-the-blank practice. The percentage learning gains resulting from the different activities ranged from 18.4% to 77% on immediate posttests and from 23.9% to 73.4% on delayed posttests (p.715). Their analysis suggests that learning through in-class word-focused tasks occurs, but is far from guaranteed. Karami & Bowles (2019) investigated whether intentional vocabulary learning, incidental vocabulary learning, or a combination of the two best prepares students for learning and retaining vocabulary. Their experimental group that received a combination of both intentional and incidental vocabulary instruction outperformed and retained vocabulary longer than the other groups. Krashen's (1989) input hypothesis holds that incidental acquisition of vocabulary occurs when the learner's attention is focused on the meaning, rather than the form, of comprehensible input. Ellis (1994), however, believes that vocabulary acquisition happens when learners are focused on both meaning and form.

Thus, after reviewing the results of many studies, it can be concluded that there is no consensus on how much time should be spent on the deliberate teaching of vocabulary words.

## **3. Methodology**

The following section describe the details and design of this research.

### *3.1 Participants*

Thirty male and female students studying at Meiji University in Tokyo, Japan, participated in this study. All members of the study were 19 and 20-year-old sophomores. Twenty-eight students' native language was Japanese, and two students were native Korean language speakers. All of the students studied English in school for three years in junior high school, three years in high school, and one year as university students. The students were all in the intermediate level English classes, with TOEIC scores

ranging between 550-600.

### 3.2 *Study Design*

At the beginning of this research study, all of the students were tested to measure their initial familiarity with the target vocabulary words. None of the participants were aware of the significance of the test, nor that they would later be tested again on the same items. After three weeks, both the control group (n=15) and the research group (n=15) took the second vocabulary test, which they were previously informed to expect. Immediately after the second test, the students had a two-month summer break. None of the students were asked to review the vocabulary words during the summer break. The first day after returning from summer break, the students were given the third vocabulary test, which none were expecting.

### 3.3 *Administration Procedures*

The control group only studied the textbook, which consisted of a reading passage where the target vocabulary words were shown in bold letters or footnoted at the bottom of the page. This “textbook-only” group also completed a vocabulary word log in which they listed the target vocabulary, part of speech, definition in Japanese (or Korean for the native Korean speakers), definition in English, and a sample sentence using the vocabulary word or phrase (see Appendix A). The students reviewed their word logs with partners for 5 minutes during the length of this research (six classes). Finally, the textbook-only group worked through the activities in the textbook such as sentence completion or definition matching exercises. All of the missing words in the textbook’s exercises were the target vocabulary words and phrases from the reading passage.

The research group did the same activities as the textbook-only group: they read the passage in the textbook, completed the word log and accompanying partner discussions, and finished the textbook activities. Additionally, the research group completed homework assignments that were intended to focus students’ attention on the vocabulary words and

phrases. These assignments included making crossword puzzles with the vocabulary words, writing summary paragraphs of the reading passage that included at least five of the vocabulary items, writing cloze sentences in which the missing word was a target vocabulary item, writing the vocabulary words on the Quizlet.com website (a website designed to make online flashcards), and writing sample vocabulary test questions in the same format as the level check test they took before they studied the vocabulary. All of these homework assignments were used as classwork activities for 15-20 minutes during the six class meetings that took place over the period of this research.

### *3.4 Vocabulary Items*

The vocabulary words and phrases used in this study were taken from the textbook, published by Oxford: Q Skills for Success 5, Reading and Writing, unit 4, readings 1 and 2. Every reading in this textbook has 12 vocabulary words and phrases in bold font, and then uses these 12 words and phrases in post-reading comprehension exercises. In addition to these bold words, reading 1 had 11 words footnoted at the bottom of the page, and reading 2 added 8 footnoted vocabulary items. The theme of unit 4 was international relations and focused on the rhetorical question “Is global cooperation necessary?” The first reading was titled “In Norway, Global Seed Vault Guards Genetic Resources” and was roughly 1,230 words long. The second reading was titled “Building the Perfect Spaceman” and was about 1,120 long.

### *3.5 Test Instrument*

To establish a baseline of the students’ understanding of the vocabulary words that would appear in the readings and on the tests, a level-check test was administered before the students looked at the readings in the units. The vocabulary tests, both before and after the readings, were uploaded to the internet and every student used either their smartphone, tablet computer or notebook computer to access and complete it. The test consisted of 46 words and phrases taken from two reading passages in the

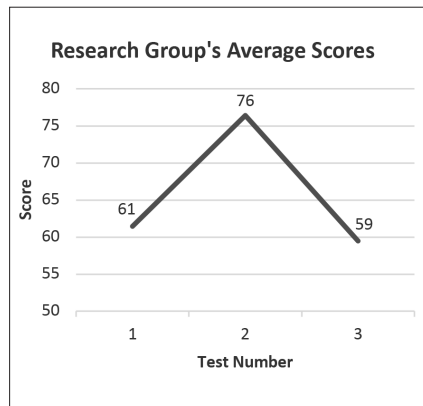
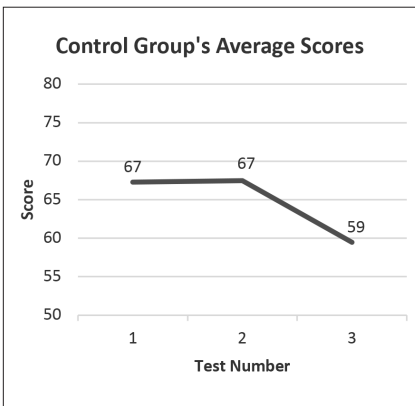
textbook. Each test question presented the vocabulary word or phrase, followed by four answer choices (see Appendix B). The tests were administered during class and time was limited to 30 minutes.

## 4. Data Analysis

### 4.1 Results

	Pretest	1 <sup>st</sup> posttest	2 <sup>nd</sup> posttest
Control group	67.27%	67.47%	59.47%
Research group	61.47%	76.4%	59.47%

Mean scores on the level-check test were somewhat similar, averaging between 61.47% and 67.27%, with the control group scoring roughly 6% higher. After completing the chapter, the control group's vocabulary test mean was nearly unchanged; just a 0.2% increase. The research group achieved a significantly larger increase in their vocabulary test mean score of 14.93%. Following the two-month summer break, the control group's mean score fell 8%. The research group's mean fell 16.93%, entirely erasing the improvement they had made after intensively studying the vocabulary words before summer break. Coincidentally, both the control and the





research groups' final mean score was identical at 59.47%. Between the level-check and the 2<sup>nd</sup> posttest, the control group's mean score fell 7.8%, while the research group's mean score fell just 2% points.

## 5. Discussion

Clearly, the form focused exercises helped the research group achieve significantly better scores than the control group on the second vocabulary test. This result was neither unexpected nor particularly noteworthy. It stands to reason that students who spend more time studying a specific set of vocabulary words will do better on a vocabulary test immediately following their studying. A few items, however, were noteworthy from the results of this research.

The first observation that can be made by looking at the results of this research is that the control group made almost no improvement, in spite of having completed the textbook's vocabulary practice activities. Based on these results, it is possible to conclude that the textbook's exercises are not preparing the students to do well on the vocabulary test that they took. The students may have done better if the test was similar to the textbook's exercises that focused on the meaning of the words. However, the vocabulary test was deliberately written to determine if the students could recognize not just the correct meaning of the words, but also whether the words were used appropriately. Although an extremely small improvement (0.2%) was achieved by the control group, teachers may decide that the time-allocation cost in completing the textbook's vocabulary exercises does not justify the miniscule score-improvement benefit.

The second observation from this research is the outstanding short-term improvement seen in the research group after their intensive focus on the vocabulary items. A nearly 15% increase in test scores is remarkable and attests to the value of studying. Teachers can take from these results the understanding that it is eminently possible to temporarily improve their students' vocabulary test scores by intensively focusing on a word list for three weeks before a test. This is useful information if students have an important test in the very near future in which they need to quickly boost

their scores, such as an entrance examination.

The third observation from this research is how both the research and control groups' scores fell after not studying for a period of two months. While it is understandable that on the first day back from summer break, the students' brains were not yet activated. However, it is especially surprising that both classes' mean scores dropped to below their initial level-check scores. From these results, teachers should recognize that the students are not at their best on the first day back after a two-month vacation. More importantly, however, is the observation that the research group, which spent a significant amount of homework and classwork time practicing the vocabulary, did not benefit from that focused attention on the words when they were tested only two months after studying. Given these results, teachers could question the benefit of devoting so much class time to vocabulary words, and wonder about the expense in opportunity cost in relation to other aspects on their syllabi. Although it is clearly beneficial in the short term to devote class time to intensively studying the vocabulary, there appears to be no medium-term benefit, and no reason to expect long-term benefits to show improvement either.

It is interesting to note that although both classes' mean scores fell after the summer break, compared to their level-check mean scores, the research group fell much less (the control group fell 7.8%; the research group fell 2%). This difference may be attributable to the extra studying done by the research group, and may provide some modicum of justification for devoting class time to studying the vocabulary more intensively.

The majority of the students' scores declined after summer break, however there were a few exceptions in which students improved after returning to school. In an effort to understand how these few students improved while most declined, a questionnaire was completed by all the students. The questionnaire consisted of the following two questions: (1) Did you study English during summer break? (2) If you studied English during summer, what did you study, and how many minutes per day or week did you study? 34% of students reported that they did not study, and their scores understandably declined. However, 65% reported that they

studied, yet only 18.5% of those students improved. This discovery deserves more investigation. First, there was a large disparity in the amount of time spent studying among the self-declared studiers. On the high end, one student studied 15 hours per week for three weeks while studying abroad, and yet this student's vocabulary score fell 3% when she returned to Japan. Among the students who reported to have studied during summer break, one student in particular stood out by achieving an astonishing 48% increase above his second test, for a total score of 98%. According to the answer given on his questionnaire, he apparently by chance reviewed the exact words that were on the vocabulary quiz for 45 minutes on the last day of summer break. This fortuitous happenstance likely helped this student achieve a nearly perfect score. Given this student's results, it is possible to expect that more students could have achieved better scores if they had reviewed the words at the end of the summer, before taking the 2<sup>nd</sup> posttest. However, the purpose of the research was to determine how much vocabulary students retained two months after studying the words, and immediately following a two-month period of not studying. Asking the students to study the words before the test would have been contrary to this purpose.

Another issue that is apparent through reviewing the summer study questionnaire is the broad disparity among students in their understanding of what constitutes "studying." While some students explained that they studied one or two hours each day by reviewing sample TOEIC questions and vocabulary, other students wrote that watching "a lot of Disney movies in English," or watching TED talks 10 minutes per day could be considered studying. Although the students were not told to study over the summer, it is clear from their answers that when they did study, some devoted much more time and effort than others. It is possible that many students would benefit from more instruction on how, what, and for how long it is necessary to study in order to make the effort worthwhile.

## 6. Conclusion

When comparing the scores of the level check vocabulary test and the first test after completing the unit, the control group achieved just a slight

increase in test scores (0.2% increase in their mean score). These results show that studying the vocabulary exercises in the textbook, and keeping a word log of the new words, did not help students learn the words to significantly increase their vocabulary test scores. It is important to point out that the vocabulary test was written to assess whether the students could recognize the proper usage of the words, while the vocabulary exercises in the textbook taught the meaning of the words. The research group, meanwhile, significantly improved their mean scores on the first post-study test by nearly 15%. They achieved this increase by studying for three weeks how the vocabulary words were used in sentences, and wrote their own sample test questions in the same style as the test. These results prove that intensively studying vocabulary words, and writing their own sample test questions, immediately before taking a vocabulary test can dramatically improve test score results. However, upon returning from a two-month summer break in which very few of the students from either the control or research group studied vocabulary words, just 20% of all the students equaled or bettered their pre-summer vacation scores (6 students out of 30). The 15% increase that the research group achieved after the first post-study test was entirely erased. Instead, the research group's mean score dropped by nearly 17% to a level below their initial level-check scores. It is not possible at this stage to determine the long-term impact that studying these words will have on the students. It is possible that some degree of learning was achieved, and perhaps the students will recognize the vocabulary words more easily in the future as a result. However, it can be concluded from these results that intensively studying for three weeks before a vocabulary test can raise scores significantly, but the vocabulary words are not integrated into students' medium-term memory. Given the conclusions of this research, it is important for teachers to consider how much time they should devote to intensive vocabulary study during valuable and limited class time.

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## Appendix A

### Vocabulary Word Log

Word	Part of speech	Meaning	Definition	Sentence
Ex: Daunting	adj	非常に困難な	Frightening in a way that makes you feel less confident	The trip seemed rather <b>daunting</b> for a young girl.

## Appendix B

The following is a sample of 5 questions from pre-reading vocabulary test:

1. confront (1 point)

- The confront of this house makes it look larger than it really is.
- I've never been able to confront my fear of heights.
- Both
- Neither

2. conserve (1 point)

- Conserve your energy because this is going to be a long day.
- The waiter will be here to conserve you in a minute.
- Both
- Neither

3. consolidate (1 point)

- It doesn't look very strong, but if you knock on the walls you can hear that it is consolidate.
- I need to consolidate my finances because it is hard to keep track of everything.
- Both

Neither

4. crucial (1 point)

- Our next moves are crucial to our success.
- It is crucial that you be here next week when we make our decision.
- Both
- Neither

5. devastating (1 point)

- The pandemic was devastating to the local economy.
- Devastate your ideas clearly and then stick to them.
- Both
- Neither

