

The Effect of Short-Term Overseas Training on Productive Vocabulary of Japanese Learners of English

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Introduction

In recent years, acquisition of foreign language writing skill grows increasingly important. In writing, learners need to state their opinions logically, and automatization of writing processes will be a significant element to do so. However, writing skill only develops by education and schooling, and many learners find it difficult to use these skills. Therefore, this study investigates how learners can improve foreign language writing skill.

For EFL learners, studying abroad is one of effective ways to be expected to improve foreign language skills. For research area about studying abroad, listening and speaking skills improvements have been investigated. Although, in the research on the effects of studying abroad (Collentine & Freed, 2004), there are few studies about writing proficiency improvements (Sasaki, 2007; Storch, 2009). Moreover, it is said that short-term overseas training such as three-week experiences have no effects on four English skills but to highly

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motivate learners' appetite for learning English. On the other hand, it is clarified that speaking and listening skills improved (Llanes and Munoz, 2009; Suzuki, Yokokawa and Van Moere, 2008), but there are lesser studies about the effects of short-term overseas on writing improvements (Kimura, 2012).

The purpose of the study is to investigate the automatization of Japanese English learners' writing process. In light of the need for vocabulary, I devised experiments to gain an idea of how short-term study abroad in an English speaking country affects a Japanese learner's acquisition of vocabulary. This study investigated how the total number and percentage of use of productive vocabulary in writing improves by improving both speaking and listening skills in overseas.

Background

In previous studies about the effects of English overseas training on second language acquisition, the majority of studies were about effects of long-term training, and few studies researched about short-term overseas training. Of these short-term studies, most put emphasis on speaking and listening skills improvements (Llanes & Munoz, 2009). Levelt's speaking model is the lexical hypothesis model which describes about how the language is understood and generated. In the model, learners generate the message to speak at Conceptualizer, and convert the message into grammatical and phonological codes at Formulator, and then the message goes through Articulator to produce (Levelt, 1989). In this model, speaking and listening skills are closely related and cannot be separated. For writing skill, these are deeply related with speaking skill because writing seems to go through processes similar to speaking. Therefore, there are possibilities that speaking skill improvements

through overseas experience transfer to writing skill improvements. Therefore, in the present studies, I tried to observe the transference of speaking skill improvement through overseas experience to writing skill improvement. However, there are contradicting results which showed that writing skill did not improve, and some stated that Token and number of T-unit increased significantly after overseas training (Kimura, 2012).

Significance of Vocabulary in L2 Writing

Since vocabulary is necessary for writing, the vocabulary size of the writer has a significant role to play. The vocabulary size can be an indicator of learner's writing abilities especially when the writer is a second language learner with a relatively small vocabulary. Measuring the writer's lexical variation clarifies how diverse the productive vocabulary is, by using total number and word types used. It is important to be able to have access to a large vocabulary ranging from high-frequency words to academic, and development in productive vocabulary enables learners to avoid repetitions and use various expressions. Thus, knowing vocabulary size is necessary to examine the development of word usage in L2 language production (Laufer & Nation, 1995). In order to research the vocabulary learners' use, I employed the Lexical Frequency Profile. It lists frequency at the 2,000 words and upper level words used. Laufer (1994) used 2,000 word level in Lexical Frequency Profile as a baseline, and stated that the percentage of vocabulary in 2,000 and upper word level shows learners' development of productive vocabulary. Therefore, I examined if Japanese English learners' productive vocabulary improved by using the 2,000 word level as a baseline.

Effects of Studying Abroad on L2 Language Acquisition

Meara (1994) conducted research on university students who experienced one year study abroad by employing a self-evaluation of four English skills; listening, reading, speaking, and writing. The self-evaluation asked questions about experiences studying abroad and their perceived improvement of the four skills. The study found an improvement in speaking and listening skills but revealed little improvement in reading and writing skills. This study employed the subjective method to examine English skills improvement, so the objective method to measure improvement in four skills need to be employed.

The effects of studying abroad have been proven in many previous studies. However, most of the studies are referring to relatively long-term study abroad programs, such as one to two semesters or around one year (Lafford & Collentine, 2006; Meara, 1994; Storch, 2009). So, the studies that refer to the effect of short-term studying abroad on L2 learners' language acquisition are few. Llanes and Munoz (2009) have claimed that fluency and accuracy in speaking and listening skills improved after 3 to 4 weeks of overseas training. Yokokawa (2006) analyzed the spoken data for Japanese learners of English after conducting a speaking test (Versant English Test, Ordinate Corporation) before and after a three-week short-term overseas training course. He showed that response latency, which is defined as the time learners start speaking after understanding what others have said, became significantly shorter, and the total number of spoken words also significantly increased. In another study, Suzuki, Yokokawa and Van Moere (2008) used Ordinate's automated spoken English test (SET-10) before and after a three-week short-term overseas training course, and found that scores for total sentence organization and fluency significantly differed. Storch (2009) pointed out the short

duration of the research term became one of the factors for a lack of accurate and complex writings; however, giving learners input that postulates output effectively, which is important for language acquisition, can improve their writing skill even in the short-term. Finally, Kimura (2006) said that after a three-week overseas training, Japanese learners' total skills of English, especially listening skill, significantly improved. However, these studies about studying abroad have little to do with writing skill improvements.

Effects of Overseas Training on L2 Writing Skill

In terms of writing skill improvements by studying abroad, Storch (2009) examined study abroad students' development in academic writing before and after one semester at university. Students did not take any special classes which supported ESL students overseas. The study revealed that learners improved in writing and their formal language learning in terms of development of organization and ideas. However, the study confirmed that more than one semester studying abroad is needed for further improvement for accurate, complex language use, and strategy usage. Shaw and Liu (1998) researched essay writing skill of study abroad students who took an academic writing course (English for Academic Purposes: EAP) for two to three months. After their time abroad, students' English formality changed from features of spoken English such as colloquial features, to features of formal English writing such as features identified in the literature. For example, one participant used *I can just sum up* to begin first conclusion in the first essay, and changed the expression to *It can be concluded that* in the second essay. However, accuracy and complexity in language did not differ, and the authors suggested that this may have been ascribable to the relatively short-term of the overseas learning.

Sasaki (2007) drew a comparison between changes in the writing of Japanese university students who studied abroad in English L2 countries for four to nine months, and the writing of students who stayed in Japan. The Secondary Level Proficiency (SLEP) test, offered by the SLEP School Services Program (SSP) at Educational Testing Service (ETS) was used in the study, and it measures English listening comprehension and reading comprehension skills. Tape-recorded essay writing and interviews were also conducted to observe their development. After studying abroad, fluency, strategy use in students' writing, and motivation significantly improved compared to students who had no experience living abroad. However, the sample size was small, and the results need to be investigated with bigger size of participants.

In terms of short period of time in overseas, Kimura (2012) examined 14 Japanese learners' development in writing English using written test, essay writing and WTC (Willingness to Communicate). After a three-week overseas training, she observed significant improvements in the writing test and an increase in the total number of words, T-units, T-units with no error and T-units with no acute errors. Thus, the result can be interpreted as improvement in writing fluency due to short-term overseas training. However, the sample size of this research was small and the proficiency level of participants was relatively low. So, the results of the study cannot be necessarily applied to all Japanese English learners. Thus, the present study uses a larger number of participants who have a wider range of English proficiency and measured changes of fluency level in terms of vocabulary.

As mentioned above, few studies have reported about the effects of short-term overseas training on L2 learners' writing skill. In addition, Kimura (2012), which reported an increase of the total number of words, employed

small size of participants. Therefore, in the present study, in addition to the total number of words, the number of types of words used which indicates variety of words according to a learners' proficiency level was used to examine how overseas training influences learners' written production.

Research Questions

In the present study, a free writing task was conducted to investigate how a short-term overseas training program impacts Japanese EFL learners' writing output in terms of total number of words and Types, as well as learners' proficiency level.

1. How does the number of total words and Types change before and after the study abroad experience? What is the cause of this change?
2. What tendency does free writing display when it is analyzed by the Lexical Frequency Profile? What kind of change occurs to the percentage of productive vocabulary use before and after the study abroad experience?

Method

I analyzed the usage of vocabulary in free writing in terms of Token, Types and fluency to investigate changes before and after the three-week short-term overseas training. The topics of the Pre- and Post-tests were different in Experiment 1, and the same in Experiment 2. Sugimori (2009) investigated the influence of topics differences in free writing, and showed that the percentage of upper 2,000 word levels in Lexical Frequency Profile was tended to change when topics differed. I used topics from TOEFL essay for free writing.

Participants

Experiment 1 was conducted on 44 first-year and second-year Japanese university students who participated in a three-week short-term overseas training program (23 females, 21 males). All the participants had studied English approximately 7 to 10 years in junior and senior high school. Participants took an Oxford Quick Placement Test (Oxford University Press, 2001) as a proficiency measurement test. Their mean score for the test was 37 out of 60 and it ranged from B2 (Vantage) to A2 (Waystage) at the CEFR Level (A2: 1 student, B1: 28 students, B2: 15 students). The participants were divided into a high-proficiency group (Pre-test: 36 and over, Post-test: 42 and above), mid-proficiency group (Pre-test: 35 to 34, Post-test: 41 to 38) and a low-proficiency group (Pre-test: 33 and under, Post-test: 39 and under) based on their proficiency measurement test scores. In terms of differences in English abilities among the three groups, I conducted ANOVAs on participants' proficiency measurement test scores. As a result, each group's ability was significantly different ($p < .001$).

Experiment 2 was conducted on 30 first-year and second-year Japanese university students who participated in a three-week short-term overseas training program (16 females, 14 males). Participants in Experiment 2 did not take part in Experiment 1. All the participants had studied English approximately 7 to 10 years in junior and senior high school. Participants took an Oxford Quick Placement Test (Oxford University Press, 2001) as a proficiency measurement test. Their mean score for the test was 38 out of 60 and it ranged from B2 (Vantage) to A2 (Waystage) at the CEFR Level (A2: 2 student, B1: 14 students, B2: 14 students). The participants were divided into a high-proficiency group (Pre-test: 39 and over, Post-test: 44 and above), mid-

The Effect of Short-Term Overseas Training on Productive Vocabulary of proficiency group (Pre-test: 38 to 34, Post-test: 43 to 39) and a low-proficiency group (Pre-test: 35 and under, Post-test: 40 and under) based on their proficiency measurement test scores. In terms of differences in English abilities among the three groups, I conducted ANOVAs on participants' proficiency measurement test scores. Each group's ability was significantly different ($p < .001$).

Procedures

Free writing with no word limit was assigned to participants who took part in the short-term overseas training within one month before and after the three-week training. The time for the free writing was limited to 30 minutes, and the use of dictionaries was prohibited. Participants handwrote the essays in Experiment 1, and they typed in Experiment 2.

Materials and Design

In order to examine participants' writing skill, free writing was conducted. Free writing in this study is defined as "students write as much as possible about a topic within a given time period (for example, 3 minutes) without stopping", as Richards et al. (1992: 147). The Japanese learners of English were given a specific topic, and they chose their experiences to organize ideas and opinions. Ideas and opinions at the conceptual level were then verbalized into English, and continued writing during a set period of time. Free writing was conducted before and after the short-term overseas training. In Experiment 1, the topics of free writing in the Pre- and Post-test differed, and in Experiment 2, the topics were the same in the Pre- and Post-test.

In Experiment 1's Pre-test, participants were asked "What do you want

most in a friend---someone who is intelligent, or someone who has a sense of humor or someone who is reliable?”. In the Post-test, they were asked “What is a very important skill a person should learn in order to be successful in the world today?”.

For the Pre- and Post-test in Experiment 2, they were asked “Some students like to travel with friends. Other students prefer to travel alone. Which do you prefer?”.

Syllabus for Overseas Training

The participants in this study participated in a three-week short-term overseas training program. The participants took classes that mainly consisted of reading, speaking and listening skill in the morning. In the afternoon, they participated in various activities, and did some sightseeing. The program was aimed at improving their English skill through actual experience interacting with native speakers of English. The final challenge for the students was to make a presentation using material from street interviews. The participants were placed in three classes by means of a placement test, and the contents of each class differed. They were taught speaking skill through activities, had classes with activities like English games, and were taught free writing skill. Each participant stayed with a local family.

Data Analysis

In order to analyze free writing data, Lexical Frequency Profile and readability were used in this study. Lexical Frequency Profile divides words, which are used in free writings, into four frequency levels according to the word's frequency: 1,000 words, 2,000 words, Academic Word List (AWL), and Not in

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the List (NiL). It calculates the percentage of Word Family in each level, and measures the percentage of total usage. Range 32 was used to count used words in terms of Token and Types. RANGE is used to compare the vocabulary of up to 32 different texts at the same time. For each word in the texts, it provides a range or distribution figure (how many texts the word occurs in), a headword frequency figure (the total number of times the actual headword type appears in all the texts), a family frequency figure (the total number of times the word and its family members occur in all the texts), and a frequency figure for each of the texts the word occurs in. It can be used to find the coverage of a text by certain word lists, create word lists based on frequency and range, and discover shared and unique vocabulary in several pieces of writing (Retrieved from <http://www.victoria.ac.nz/lals/about/staff/paul-nation.>). Flesch-Kincaid Grade Level (Kincaid, Fishburne, Rogers, & Chissom, 1975) divides texts that are written by learners into advanced, intermediate, and beginner levels according to the texts' readability, which is subject to word and sentence lengths in texts. It enables examination of the development of participants' text level through the short-term overseas training. The formula of Flesch-Kincaid Grade Level is $(.39 \times ASL) + (11.8 \times ASW) - 15.59$ {ASL = mean length of sentences (number of words by divided by number of sentences) ASW = mean number of syllables per word (number of syllables by divided by number of words)}.

Results

The study investigated how the overseas training program affected participants writing output in terms of total number of words and Types and the percentage of words at each frequency level.

Results of Experiment 1

In Experiment 1, participants' proficiency measurement test scores and free writings in Pre- and Post-test were compared. Table 1 shows participants' scores for a proficiency measurement test in Pre- and Post-test.

Table 1

Scores for a proficiency measurement test

| CEFR Level | A2 | B1 | B2 | C1 |
|---------------|----|----|----|----|
| Pre-test (n) | 1 | 29 | 14 | |
| Post-test (n) | 2 | 21 | 18 | 1 |

According to the proficiency measurement test scores conducted before and after the study abroad experience, participants showed a small improvement from B1 to B2 (4 participants) in CEFR Level. Table 2 depicts the number of participants and mean for a proficiency measurement test scores in Pre- and Post-test.

The data for 27 participants who improved in the proficiency measurement Post-test were analyzed in this study. In terms of mean Token, free writings in the Pre- and Post-test were compared by proficiency level. Figure 1 below shows the change in mean Token before and after the study abroad experience.

In the Post-test, the mid-proficiency group's mean Token for free writing showed an increase in number, and the high-proficiency group showed no difference. In terms of mean Types, free writings in the Pre- and Post-test were compared by proficiency level the same as for the mean Token. Figure 2 indicated the change in mean Types before and after the study abroad experience.

In the Post-test, low and mid-proficiency group means for Types for free writing showed an increase in number. As for the low-proficiency group, the

Table 2

Data of participants' Pre- and Post-test by proficiency level

| | N (Pre-test) | Mean for QPT (SD) | N (Post-test) | Mean for QPT (SD) |
|------------------------|-----------------|----------------------|------------------|----------------------|
| High-proficiency group | 9 | 39 (2.06) | 10 | 43 (2.62) |
| Mid-proficiency group | 8 | 34 (0.51) | 6 | 40 (0.54) |
| Low-proficiency group | 10 | 32 (1.43) | 11 | 37 (1.25) |

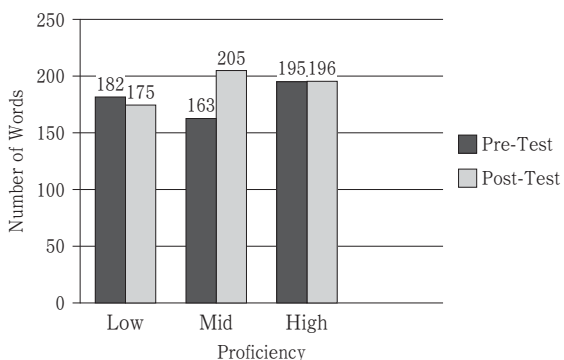


Figure 1. Mean Token in Pre- and Post-test by proficiency level.

mean Token decreased in the Post-test; however, the mean Types increased. Type/token ratio (TTR) for the high-proficiency group's Pre-test was 45.0, and the Post-test score was 48.5. Compared to the TTR for the Pre-test, the TTR for the Post-test suggested that lexical density for high-proficiency participants' Post-test data was higher than for Pre-test data. It showed that Types contained in free writings increased in the Post-test. Some participants in each group differed in Pre- and Post-test because of their proficiency improvements, so it proved a challenge to compare the number of words directly. However, comparing each group's number of words according to proficiency

level clarified the vocabulary development in each proficiency level.

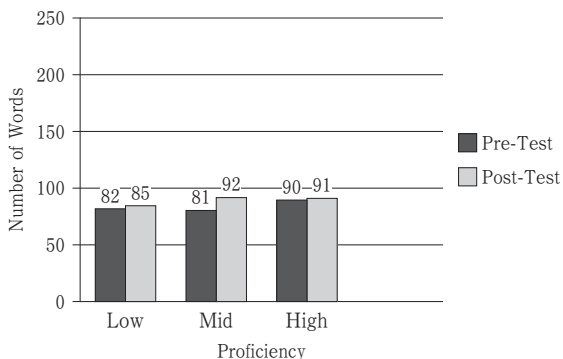


Figure 2. Mean Types in Pre- and Post-test by proficiency level.

Figures 3 and 4 show readability scores for high and low-proficiency groups' free writing texts. Both group's Pre- and Post-test's readability scores were compared to examine their texts' level improvements and if English proficiency level has influence on its' improvements.

For both groups, scores for the Post-test were higher than the scores for the Pre-test. In terms of fluency of free writing texts, the number of words per minute (wpm) did not change in Pre and Post-test (6 wpm in both tests). As a result of Experiment 1, the low-proficiency group's mean Token decreased in the Post-test, but the mean Types increased. It can be suggested that the range of productive vocabulary broadened for the low proficiency group.

For readability, the scores for the Post-test (Mean: High: 8.6, Low: 6.9) were higher than those for the Pre-test (Mean: High: 4.9, Low: 5.3). Readability score is subject to word and sentence lengths in texts, so increases in scores showed that participants became able to write longer and more complex sentences because of the overseas training program.

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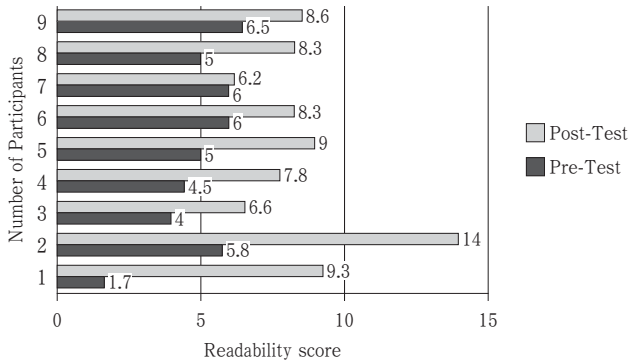


Figure 3. Readability scores for the high-proficiency group's free writing.

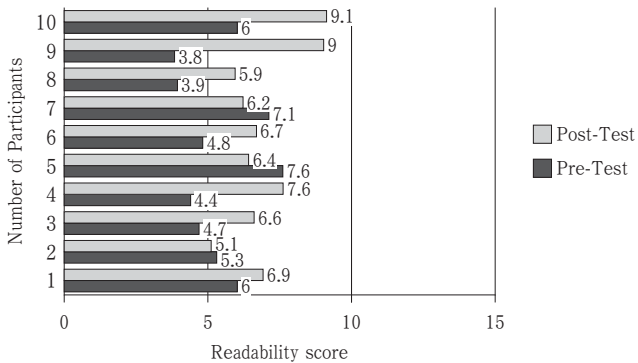


Figure 4. Readability scores for the low-proficiency group's free writing.

Results of Experiment 2

In Experiment 2, the same topics were used for free writing for the Pre-test and the Post-test. Table 3 shows participants' scores for a proficiency measurement in the Pre- and Post-test.

According to the proficiency measurement test scores conducted before and after the study abroad experience, participants showed an improvement from

Table 3

Scores for a proficiency measurement test

| CEFR Level | A2 | B1 | B2 | C1 |
|---------------|----|----|----|----|
| Pre-test (n) | 2 | 14 | 14 | |
| Post-test (n) | | 10 | 16 | 4 |

B1 to B2 (6 participants), and from B2 to C1 (4 participants) at the CEFR Level. Table 4 describes participants' data for the proficiency measurement score in the Pre- and the Post-test divided into proficiency levels.

Table 4

Data of participants' Pre- and Post-test by proficiency level

| | N (Pre-test) | Mean for QPT (SD) | N (Post-test) | Mean for QPT (SD) |
|---------------------------|-----------------|----------------------|------------------|----------------------|
| High-proficiency group | 12 | 42 (1.93) | 9 | 47 (1.56) |
| Mid-proficiency group | 4 | 37 (1.15) | 9 | 42 (0.78) |
| Low-proficiency group | 7 | 32 (2.56) | 5 | 36 (3.74) |

The data for 23 participants who improved in the proficiency measurement test in the Post-test was analyzed in this study. In the Pre-test, participants' proficiency and Token, Types in free writing were significantly correlated ($p < .01$). This suggests the tendency that when participants' proficiency is raised, Token and Types also increase. I conducted ANOVAs on Token and Types in terms of Pre- and Post-test and proficiency. In the results, proficiency level was significantly affected by Token and Types (Token: $p < .05$, Types: $p < .005$).

In terms of mean Token, free writings in Pre and Post-test were compared by proficiency levels. Figure 5 below shows the change in mean Token before

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and after the study abroad experience.

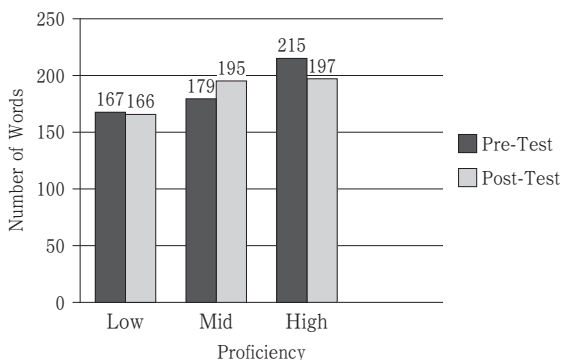


Figure 5. Mean Token in Pre- and Post-test by proficiency level.

In the Post-test, the high-proficiency group's mean Token for free writing showed a decrease in number. Mean Token for the low-proficiency group did not show a change, and the mean Token for the mid-proficiency group increased. In terms of mean Types, free writings in the Pre- and Post-test were compared by proficiency levels in the same way as for the mean Token. Figure 6 describes the change in mean Types before and after the study abroad experience.

In the Post-test, the low and high-proficiency group's mean Types for free writing showed a slight increase in number while the mid-proficiency group's mean Types decreased. For the mid-proficiency group, the mean Types decreased when the Token increased. This suggests that the mid-proficiency group came to use high frequency words more often. As for the high-proficiency group, the mean Token decreased in the Post-test while the mean Types increased. The TTR for the high-proficiency group's Pre-test was 18.1, and the Post-test score was 21.3. Compared to the TTR for the Pre-test, the

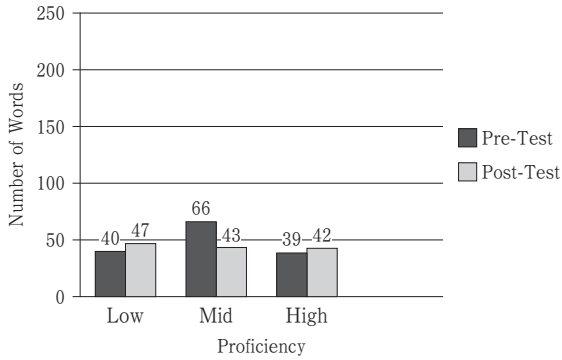


Figure 6. Mean Types in Pre- and Post-test by proficiency level.

TTR for the Post-test suggests that lexical density for high-proficiency participants' Post-test data was higher than the Pre-test data. Therefore, the productive vocabulary developed according to the results.

Vocabulary results in the Pre- and Post-test is shown in Table 5.

Table 5

Numbers of used vocabulary in free writing in the Pre- and Post-test and its relative percentage

| Word List | Pre-Test Token/ % | Post-Test Token/ % | Pre-Test Types/ % | Post-Test Types/ % |
|-----------|----------------------|-----------------------|----------------------|-----------------------|
| 1,000 | 180/92.50 | 177/92.65 | 21/72.32 | 21/74.92 |
| 2,000 | 9/4.42 | 9/4.53 | 3/12.08 | 4/12.77 |
| AWL | 2/0.94 | 2/0.96 | 1/4.13 | 1/4.31 |
| NiL | 4/2.14 | 4/1.87 | 3/11.47 | 2/8.00 |
| Total | 195 | 192 | 28 | 28 |

By comparing numbers of used vocabulary in free writing in the Pre- and the Post-test, the number of Token for the Post-test slightly decreased compared to Token for the Pre-test, and number of Types remained the same. From this result, words in the 1,000 level occupied over 90% of total used vocabulary,

which was the same for the Pre- and Post-test.

Tables 6 and 7 show the number of used vocabulary in free writing in the Pre- and the Post-test and its relative percentage by proficiency level in order to examine the changes which occurred to the percentage of productive vocabulary use before and after the study abroad experience.

Table 6

Numbers of used vocabulary in free writing in the Pre-test and its relative percentage

| | 1,000 Token (%) | 1,000 Types (%) | 2,000 Token (%) | 2,000 Types (%) | AWL Token (%) | AWL Types (%) | NiL Token (%) | NiL Types (%) |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|
| High (n=12) | 198 (91.97) | 30 (76.36) | 11 (5.10) | 4 (11.72) | 2 (1.00) | 1 (3.56) | 4 (1.93) | 3 (8.37) |
| Mid (n=4) | 163 (90.82) | 53 (79.78) | 7 (4.17) | 5 (7.87) | 2 (1.11) | 1 (2.25) | 7 (3.89) | 6 (10.11) |
| Low (n=7) | 158 (94.70) | 34 (84.45) | 5 (3.08) | 3 (7.42) | 1 (0.68) | 1 (2.47) | 2 (1.54) | 2 (5.65) |

Table 7

Numbers of used vocabulary in free writing in the Post-test and its relative percentage

| | 1,000 Token (%) | 1,000 Types (%) | 2,000 Token (%) | 2,000 Types (%) | AWL Token (%) | AWL Types (%) | NiL Token (%) | NiL Types (%) |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|
| High (n=9) | 182 (91.82) | 35 (78.80) | 10 (5.16) | 4 (10.97) | 1 (0.95) | 1 (3.74) | 4 (2.07) | 2 (6.48) |
| Mid (n=9) | 184 (93.69) | 35 (80.00) | 7 (3.66) | 5 (11.25) | 1 (0.96) | 1 (3.00) | 3 (1.69) | 2 (5.75) |
| Low (n=5) | 154 (92.24) | 40 (83.06) | 8 (5.01) | 4 (8.68) | 1 (0.95) | 1 (2.48) | 3 (1.79) | 2 (5.79) |

In the high-proficiency group, the number of Token in the 1,000 level decreased but Types increased. In the low-proficiency group, the number of Token in the 1,000 level also decreased and Types increased. The number of Token in the 2,000 level showed a slight increase.

Based on the proficiency levels in the Pre-test, I also compared changes in participants' Token and Types before and after the study abroad experience to examine individual changes. Figure 7 below shows participants' changes in mean Token before and after the study abroad experience.

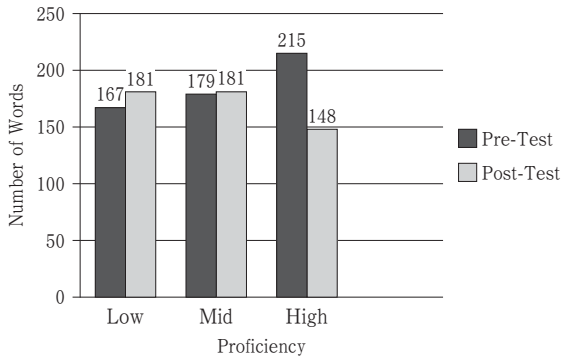


Figure 7. Mean Token in the Pre- and Post-test by proficiency level.

In the Post-test, the high-proficiency group's mean Token for free writing showed a very large decrease. In terms of mean Types, free writings in the Pre- and the Post-test were compared by proficiency levels just as for the mean Token.

Figure 8 describes the change in mean Types before and after the study abroad experience.

In the Post-test, the high-proficiency group's mean Types for free writing showed a decrease in number, though the low and mid-proficiency groups' mean Types did not change. As for the high-proficiency group, the mean Token dropped by a large number in the Post-test, while the mean Types decreased only a little. The TTR for the high-proficiency group's Pre-test was 18.1 and the Post-test score was 22.3. Compared to the TTR for the Pre-test,

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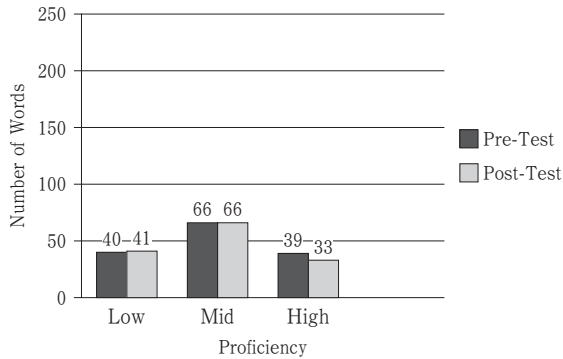


Figure 8. Mean Types in the Pre- and Post-test by proficiency level.

TTR for the Post-test suggested that lexical variety for the high-proficiency participants' Post-test data was higher than that for the Pre-test data. It suggests that Types contained in free writings increased in the Post-test. So, the development of productive vocabulary was observed in this result.

Table 8 showed the number of used vocabulary in free writing in the Pre- and the Post-test and its relative percentage based on scores for Pre-test pro-

Table 8

Numbers of used vocabulary in free writing in the Pre- and the Post-test and its relative percentage

| | Pre-test 1,000 Token (%) | Pre-test 1,000 Types (%) | Post-test 1,000 Token (%) | Post-test 1,000 Types (%) | Pre-test 2,000 Token (%) | Pre-test 2,000 Types (%) | Post-test 2,000 Token (%) | Post-test 2,000 Types (%) |
|----------------|-----------------------------------|-----------------------------------|------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|------------------------------------|------------------------------------|
| High (n=12) | 198 (91.97) | 30 (76.36) | 136 (91.82) | 26 (78.80) | 11 (5.10) | 4 (11.72) | 7 (5.16) | 3 (10.97) |
| Mid (n=4) | 163 (90.82) | 53 (79.78) | 168 (92.57) | 56 (84.96) | 7 (4.17) | 5 (7.87) | 8 (4.40) | 5 (7.89) |
| Low (n=7) | 158 (94.70) | 34 (84.45) | 169 (93.38) | 34 (82.07) | 5 (3.08) | 3 (7.42) | 7 (3.86) | 3 (9.31) |

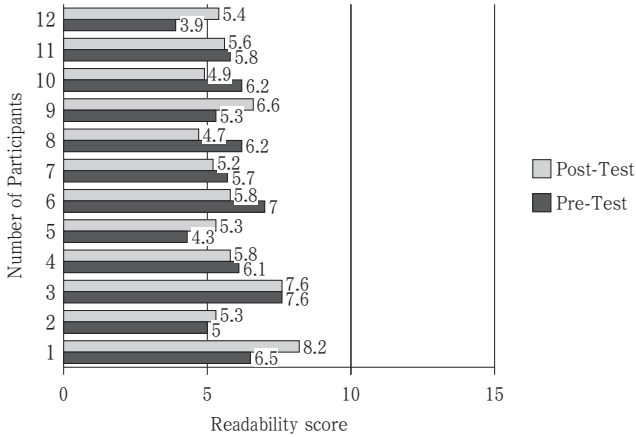


Figure 9. Readability scores for the high-proficiency group's free writing.

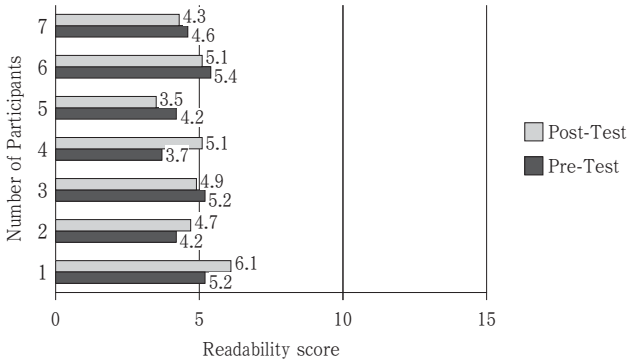


Figure 10. Readability scores for the low-proficiency group's free writing.

iciency test.

For the mid-proficiency group, the number of 1,000 Token and percentage of 1,000 Types increased. For the low-proficiency group, the number of 1,000 Token and percentage of 2,000 Types increased. Figures 9 and 10 show the changes in terms of readability. I compared readability scores of free writing

texts of the high and low proficiency groups.

The score for the readability of texts was slightly higher for the high-proficiency group (Mean: Pre-test: 5.8, Post-Test: 5.8) as compared to the score for the low-proficiency group (Mean: Pre-test: 4.6, Post-Test: 4.8). This indicates that the difference in proficiency affected the text level which shows that participants became able to write longer and more complex sentences. In terms of the fluency of free writing texts, the number of wpm did not change in the Pre- and Post-test (6 wpm in both tests).

Discussion

Research question one was about changes in total number of words and Types before and after the overseas training program. In Experiment 1, the variety of content and vocabulary used broadened because the topics differed, and also the low-proficiency group's productive vocabulary broadened as the total number of words decreased and word types increased. However, these results could not be easily compared because of the topic differences. In Experiment 2, Pre- and Post-tests' results were compared in terms of Token and Types. The number of Tokens for the Post-test slightly decreased compared to Tokens for the Pre-test, and number of Types remained the same overall. It can be suggested that the variety of words broadened after the program and productive vocabulary developed. The free writing task was limited in terms of used vocabulary since a topic was given; however, each learner's content of the text could be controlled and usage of vocabulary could be compared by employing the same topics in Pre- and Post-test.

These experiments were intended to investigate the writing skill improvement in terms of total number of words and word types. Changes in the

number of Token and Types imply how wide and varied words are that learners can use. However, unlike the result of Kimura (2012), overall, the total number of words decreased a little and word types did not differ in the present experiments. The number of words per minute also did not change. Additionally, the total number of words in writing did not increase as a total number of spoken words as in Yokokawa's (2006) study. Since the total number of spoken words was smaller than written words, it can be assumed that it was easier for learners to write enough number of words in the limited time for both the Pre- and Post-test in our study. Because writing has a slower pace than speaking and it leaves a permanent record for learners to monitor and review, they could potentially try out new or vague structures which led to a large number of words in both tests (Williams, 2012). For future study, there is a need to qualitatively investigate the usage of highly-frequent words such as use of "I" in the Pre- and Post-tests. The word "I" was the most frequent word in Pre-test, but it declined in the 6th frequent word and the word "you" appeared in the 4th position in Post-test from the 21st frequent word. The change shows that participants became to use more objective views instead of using subjective views.

Also, for speaking skill, participants were able to concentrate on the content of what they wanted to say, and it led them to produce a larger number of spoken words (Yokokawa, 2006). Therefore, for writing skill, number of Tokens and Types did not change significantly, but it can be interpreted that participants could concentrate more on content of what they wrote which made them take more time for writing by automatization of word retrieval. Thus, organization and content of free writing texts also needs to be considered.

Research question two was about how the tendency in vocabulary use

changed before and after the program. From the results, the number of vocabulary used in the free writing in the Pre- and the Post-test and its relative percentage revealed that words in the 1,000 level occupied over 90% of the total vocabulary used equally in the Pre- and the Post-test, and it was reinforced after the program. These results indicate that having many opportunities for input and output while overseas led to reinforcement of basic vocabulary which made learners able to access highly-frequent words more smoothly since they exposed to highly-frequent words often in daily life. As for the high-proficiency group, the mean Token decreased in the Post-test, and the mean Types at the 1,000-level increased, meaning that free writings written by high-proficiency learners showed changes mainly at the 1,000 level. In the mid-proficiency group, mean Types decreased when Token increased in the Post-test, so their writing fluency improved after the study abroad experience. In addition, by comparing the data in terms of Pre-test proficiency, the mid-proficiency group's number of Tokens and percentage of Types at the 1,000 level increased. The low-proficiency group's number of Tokens at the 1,000 level and the percentage of Types at the 2,000 level increased. It suggests that learners with relatively low English levels improved to higher vocabulary levels than learners with high English proficiency. As a result, the variety of 1,000 and 2,000 levels' vocabulary mainly changed. Based on proficiency levels, learners with relatively low English levels improved to higher vocabulary levels than learners with high English proficiency. Our results showed progress in the word levels used.

I attempted to reveal the part of writing process of Japanese EFL learners. Learners in our study had many opportunities for speaking and listening in spite of short-term overseas study program, but few for writing. However,

automatization of word retrieval in writing was observed in this study. Writing skill is deeply related with speaking skill by going through processes similar to speaking. Therefore, it could be thought that one skill's improvement have an impact on another skill's improvement. So, speaking skill improvement (Suzuki, Yokokawa & Van Moere, 2008) seemed to be transferred to writing skill improvement. The 1,000 word level reinforcement and changes in the words used implies that learners became able to access and retrieve high-frequency vocabulary from mental lexicon more smoothly as a result of exposure of high-frequency vocabulary in overseas, and it helped learners focus attention more on the content because of automatization. So, improvements in speaking skill affected automatization for access and retrieval of basic words that involve syntactic, semantic and spelling information in writing. For pedagogical implications, giving learners many opportunities for improving speaking skill will also motivate writing skill.

Laufer and Nation (1995) argued that low-proficient learners tended to use words in the 1,000 word level; however, learners in this study have learned academic words at university, and the basic words were reinforced from the short-term overseas program. In this program, the quantity of exposure to reading materials or any input that contained upper word level vocabulary differed by individual. Therefore, in this study, by having daily life conversation with a host family and attending classes with teachers while overseas enabled learners to reinforce high frequency vocabulary which was often used in daily life.

By conducting these experiments, it can be said that the short-term overseas program had some effects on access and retrieval of high-frequency words with syntactic and semantic processing in the EFL writing process. For

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further studies, since these experiments only considered writing skill, the relationship between speaking skill and writing skill need to be investigated.

Conclusion

From the results, short-term overseas training seemed to affect reconfirmation of concept and word retrieval with syntactic and semantic processing when the attention was focused on EFL writing process. By automatization of highly-frequent word access and retrieval, learners became able to focus on contents more. Therefore, it is important to focus learners' attention to linguistic features, in order to lead learners to learn for L2 writing improvements. Despite of limited period of time in overseas, the fundamental skill of English improved, and its improvements also led to encourage learners' motivation for English learning.

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The Effects of Short-Term Overseas Training on Productive Vocabulary of Japanese Learners of English

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The study investigated the influence of short-term overseas training on Japanese learners of English's word usage in free writing. The results indicated that basic 1,000 level vocabularies were reinforced by short-term overseas training with few writing opportunities, and there was possibility for being able to smoothly access and retrieve high-frequent words from mental lexicon. From the results, short-term overseas training seemed to affect lexical retrieval with syntactic and semantic processing when the attention was focused on EFL writing process.

Keywords: writing, vocabulary, free writing, short-term overseas training