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A Longitudinal Study of Progress in Vocabulary Size of Japanese EFL Senior High School Learners: A Comparison of the General and Commercial Courses

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The purposes of this study are (1) to longitudinally measure the receptive vocabulary size (VS) of Japanese EFL senior high school learners; (2) to investigate how the learners develop their VS; and (3) to describe the longitudinal developmental patterns of VS of each learner during their three years of high school. Kasahara's (2005) VS tests, a modified version of Mochizuki's (1998) test were administered to 196 learners three times while they were in high school. Descriptive statistics were calculated and longitudinal comparisons were made, using the data of the identical subjects. One-way ANOVAs and post hoc Bonferroni tests confirmed that the general course learners made progress throughout their time at school. As for the commercial course learners, they made progress during their first and second years. However, there was no statistically significant difference in average scores between the second and third years. The statistics and the line graphs of longitudinally-measured VS revealed that in the commercial course, 14.7% and 42.7% of the learners made little and or negative progress between their first and second testing and their second and third testing respectively. The study results suggest the three main factors explaining this stagnation of the commercial course learners: school curriculum; motivation; and future career path. Further research should be conducted with learners whose academic levels vary widely to investigate this learning plateau.

Key Words: longitudinal study, vocabulary size, high school learners, learning plateau, school curriculum, motivation, future career

1 Introduction

Acquiring accurate knowledge of a large number of words is one of the major challenges facing second language learners, given the fact that the misuse of vocabulary leads to serious communication problems for many second language (L2) learners (Gass, 1988) and making mistakes in selecting

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vocabulary for communication leads to a breakdown in conveying one's thoughts and feelings (Oka, Akaike & Sakai, 2004). As for the importance of learning vocabulary, as Wilkins (1972) notes, 'While without grammar very little can be conveyed, without vocabulary nothing can be conveyed.' Folse (2004) also emphasizes the importance of vocabulary learning in L2 learning. To understand and use the target language appropriately and fluently, learners have to face the big challenge of learning a large number of words. It also can be seen that vocabulary size plays a vital role in second language ability (e.g., Nation, 1990; Read, 2000). Thus, it would be assumed that a lack of vocabulary knowledge hinders L2 communication to a great extent.

In Japan, the Ministry of Education, Culture, Sports, Science & Technology (MEXT) proposed a change in its policy of teaching in English in Practical Guide on the New Course of Study – Foreign Language & English (2010). In the New Course of Study, implemented from April 2013, one of the outstanding changes was that there was an increase in the amount of vocabulary to be taught. As shown in Figure 1, in addition to the new figure of 1,200 words of junior high school English, in senior high school, the new requirements were for 400 words in English Communication I, 700 words in English Communication II, and 700 words in English Communication III were added to 3,000 words in total from junior to high school. This total number of vocabulary items means an overall 800 word increase over the figure prior to the revision. This change suggests that basic communication requires learners to have more vocabulary knowledge. It also means that improving high school learners' knowledge of vocabulary is an urgent issue.

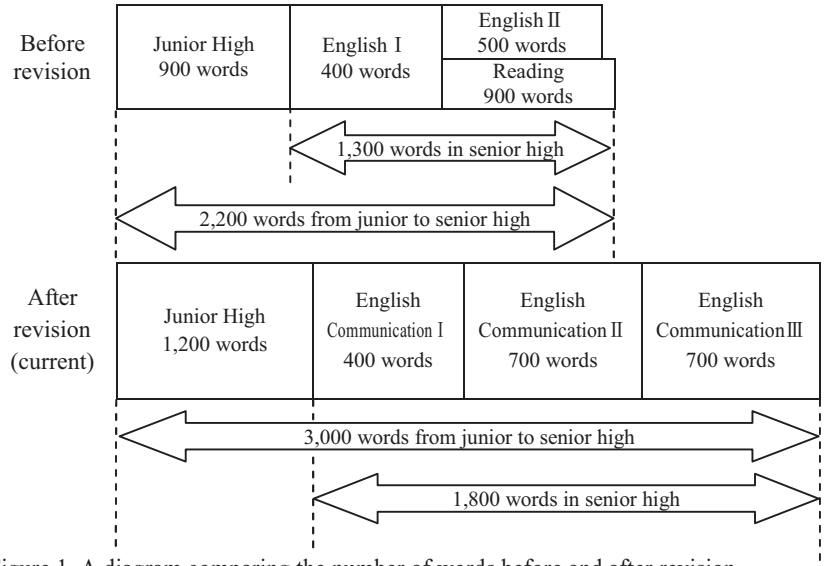

Figure 1. A diagram comparing the number of words before and after revision (after MEXT, 2008)

2 Previous Studies

Vocabulary knowledge is multi-faceted in the sense that there are different aspects of vocabulary knowledge (Read, 2000). One of the most important aspects of vocabulary knowledge is vocabulary size (or breadth), which refers to how many words or word families[1] learners know. Studies on assessing vocabulary size have received much attention because they are seen as giving a more representative picture of the overall state of the learner's vocabulary knowledge. A plethora of research studies have been conducted to estimate the vocabulary size of learners and how many words should be acquired in order to communicate adequately in a second language.

As for the vocabulary size of educated speakers of English (e.g. university students), they appear to have a vocabulary size in the range of 15,000-20,000 word families (Goulden, Nation, & Read, 1990). It is assumed that second or foreign language learners are unlikely to master such a large amount of vocabulary. To communicate in daily conversation, around 2,000 word families have traditionally been set as a target and this could provide over 95% coverage of everyday spoken English (Schonell et al. 1956). However, regarding vocabulary size and reading, more recent research has pushed this target upwards. Laufer's (1992) study showed that the vocabulary threshold in reading comprehension would be the 3,000 vocabulary word level (word families) and this level would account for 56% of learners' reading comprehension. Hirsh and Nation (1992) suggested that for ease of reading where reading could be a pleasurable activity, 5,000 word families would be needed. However, even with this vocabulary size, many words will still be unknown, and learners will still need considerable support from a teacher or dictionary. Hu and Nation (2000) found that around 98-99% coverage was necessary for comprehension from written texts. Nation (2006) calculated that 8,000-9,000 word families were necessary to read a range of authentic texts. There is still no consensus of opinion as regards how many words learners should know and it is still not clear exactly what percentage of lexical coverage is necessary. Therefore, the best conclusion possible at the moment is that the vocabulary requirement is between 2,000-3,000 and 6,000-7,000 word families (Schmitt, 2008).

Many vocabulary studies have also been carried out in Japan. Yamauchi (1995) investigated the relationship between guessing of unknown English words and reading comprehension. The results showed that the 2,000 word level was the threshold level in order to be able to guess unknown words in reading. Ishihara, Okada and Matsui (1999) studied the estimated receptive and productive vocabulary of Japanese university learners. It was reported that their receptive vocabulary was 2,000-3,000 words and there was

[1] A word family is usually held to include the base word, all of its inflections, and its common derivatives (Schmitt, 2000).

a strong relationship between the amount of receptive and productive vocabulary knowledge. Shimamoto (1998) concluded that reading comprehension could be predicted by learners' vocabulary size. She also regarded the 3,000 vocabulary level to be an important threshold, supporting the findings of Laufer (1992).

A variety of vocabulary size tests for L2 learners have been developed mainly during the last two or three decades such as Vocabulary Levels Test (Nation, 1990, 2001), the Eurocentres Vocabulary Size Test (Meara and Jones, 1990) and the Vocabulary Size Test (Nation & Beglar, 2007). Although a variety of vocabulary size tests have been developed for L2 learners, few have been created specifically for Japanese learners. One of the most widely-used measurements of vocabulary size in Japan is Mochizuki's test (1998). Studies showed that estimated vocabulary sizes from this test moderately correlated with English ability among Japanese EFL learners in junior high school, high school, and university (Katagiri, 2001). They also revealed that this test could show how many words learners acquired and predict scores on entrance examinations or English ability in general: the vocabulary size of Japanese high school learners was measured cross-sectionally (Yashima, 2002); the vocabulary size of Japanese junior high school learners was measured longitudinally (Kosuge, 2003); and the vocabulary size of Japanese university and junior college learners was estimated both cross-sectionally and longitudinally (Katagiri, 2005; Nonaka, 2009).

The measurement and description of the growth of learners' vocabulary size are considered to provide fundamental data on how successfully teachers teach and how well learners learn vocabulary. As Beglar (2010) has pointed out, vocabulary size tests can be used to see if the learners know sufficient words to perform certain tasks, to chart the growth of learners' vocabulary, to evaluate the extent to which a certain program meets its objective, to choose the right instructional path for learners, and to design relevant curricula and course materials. Although there are a growing number of studies related to assessing vocabulary size of Japanese learners, few studies other than Katagiri's (2009) have yet to describe how they make progress in gaining vocabulary knowledge longitudinally in high school settings. Thus, in order for teachers to have insights into how Japanese EFL learners develop their vocabulary knowledge, there is still room for more work to be done and fundamental research data are needed.

The aim of the research described here attempted to investigate Japanese senior high school English learners' vocabulary size longitudinally and to identify how their vocabulary size was obtained according to whether they are general or commercial course students. As few studies have yet clarify how commercial course learners develop their knowledge of vocabulary, the research reported here aims to provide fundamental data on

the development of their knowledge of vocabulary by comparing the general and commercial learners. The research questions are as follows:

1. What are the average scores on the vocabulary size tests for the general and commercial course learners in their first, second, and third year?
2. How do the learners in the general and commercial courses develop their knowledge of vocabulary throughout their three years of high school?
3. What types of developmental patterns can be seen among the scores on vocabulary size tests for each learner of the general and commercial courses?

3 Method

The school in the present study is a middle-ranking senior high school in Nagano prefecture, which has not only a general but also commercial course. On the whole, after graduating, approximately 50% of the students go to a university or college, 30% of them go to a vocational or professional school and 20% of them find employment. Although there is a great difference in English ability, most of them study for obtaining the qualifications such as the EIKEN test in practical English proficiency, the United Nations Association's Test of English and the English Proficiency Test conducted by the National Association of Commercial High Schools.

A total of 196 learners (128 learners in the general course and 68 in the commercial course) participated in the study. Both the general and commercial course learners took Kasahara's (2005) vocabulary size test, a modified version of Mochizuki's (1998), three times, each November from 2010 to 2012 as they proceeded from their first to third year of high school. The tests are made up of seven word-frequency levels from 1,000 to 7,000 to measure how many of the most frequently-utilized 7,000 words examinees know. However, Nonaka (2004) showed that 2,000- to 3,000-word levels should be achievable while over 4,000-word level would be difficult for high school learners to acquire. For this reason, tests for the four word frequency levels from 1,000 to 4,000 were adopted to measure their vocabulary size. Each time a vocabulary size test was conducted, the question and answer sheets were collected on the spot. By the time the learners took it the second and third time, about a year had passed; therefore, it was assumed that there was little repetition effect on the results of the vocabulary size tests that learners took for the second and third times.

One-way ANOVAs and post hoc Bonferroni tests were used to investigate significant differences between learners in the general and commercial courses and to test significant differences among their grades in high school. Then, basic indices of descriptive statistics were calculated. Longitudinal comparisons were conducted with the data of the same learners over the three years. The progress of each learner was examined to investigate what percentage of the learners made progress, little progress, or

negative progress in vocabulary learning between their first and second year and second and third year tests. It was a goal to find out what kind of developmental patterns exist during their entire high school careers.

4 Results

Table 1 and Table 2 show the descriptive statistics of general and commercial course learners respectively. The means, standard deviations (SD), maximums (Max), minimums (Min), reliability indices (Cronbach's α), and standard errors of measurement (SE) in each test administration are indicated.

Table 1. Descriptive Statistics of General Course Learners (N = 128)

	November 2010 (1st year)	November 2011 (2nd year)	November 2012 (3rd year)	Progress between 1st and 2nd year	Progress between 2nd and 3rd year	Total progress
Mean	**2112.50**	**2501.82**	**2785.16**	**389.32**	**283.34**	**672.66**
SD	390.06	347.00	372.17	308.38	301.38	364.44
Max	3366.67	3600.00	3733.33	1433.33	1433.33	1866.67
Min	866.67	1700.00	1800.00	-566.67	-300.00	0.00
α	0.79	0.70	0.79			
SE	34.48	30.67	32.90			

Table 2. Descriptive Statistics of Commercial Course Learners (N = 68)

	November 2010 (1st year)	November 2011 (2nd year)	November 2012 (3rd year)	Progress between 1st and 2nd year	Progress between 2nd and 3rd year	Total progress
Mean	**1961.27**	**2225.49**	**2311.27**	**264.22**	**85.78**	**350.00**
SD	411.67	388.65	443.48	324.37	329.50	378.99
Max	2733.33	3066.67	3366.67	1933.33	766.67	1733.33
Min	400.00	1233.33	1266.67	-500.00	-966.67	-633.33
α	0.82	0.76	0.80			
SE	49.92	47.13	53.78			

Adequate reliability indices were confirmed and the results corroborate the reliability of each vocabulary size test.

Figure 2 represents line graphs of mean vocabulary size measured longitudinally in both the general and commercial course.

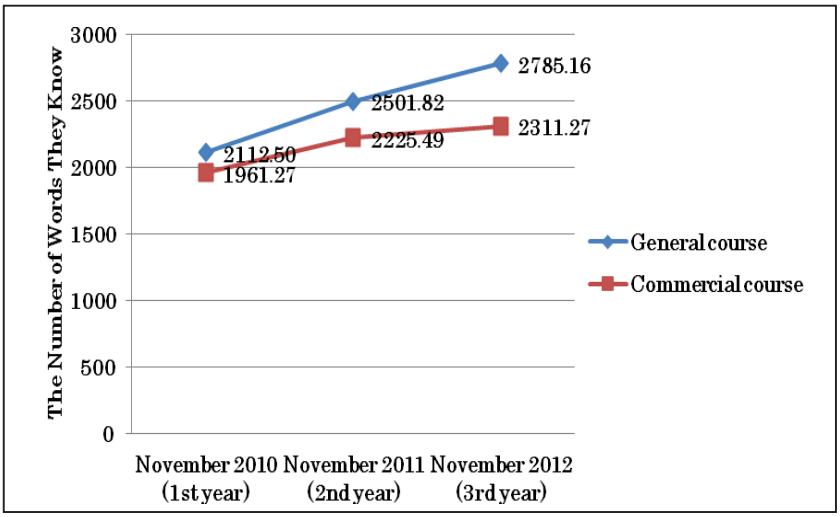

Figure 2. Line graphs of mean vocabulary size measured longitudinally

As Table 1 and Table 2 show, the figures of Cronbach's α of each test were from .704 to .815. Thus, adequate reliability indices were confirmed. The mean differences in vocabulary size among the learners in the first, the second, and the third years were larger than SE each time. Therefore, it can be inferred that as a whole, the learners increased their vocabulary size in every grade in both the general and commercial course. However, there was a difference between the learners of the general and the commercial courses in their progress in each test. The total average progress was 672.7 in the general course and 350.0 in the commercial course, which was little over half of the progress of general course learners. Although all learners made progress throughout their three-year career as high school students, the progress of general course learners was more marked than that of commercial course learners. As they moved from the first to third year, their scores diverged as shown in Figure 2.

In order to examine whether or not the score differences over time in each of the vocabulary size tests for general and commercial course learners was statistically significant, repeated measures of one-way ANOVAs were performed. One independent variable in this study was their grades at high school (1st year, 2nd year, and 3rd year). The dependent variable was the scores on their vocabulary size test, with higher scores indicating higher levels of vocabulary knowledge. The results showed that there was a significant difference among the scores on vocabulary size test in the general and commercial courses (F (2, 254) = 274.80, $p < .01$; F (2, 134) = 37.99, $p < .01$; respectively). Additionally, appropriate post hoc analyses were conducted using the Bonferroni multiple comparison analysis. The results are presented in Table 3 and Table 4.

The average scores on vocabulary size tests administered to the general course learners (See Figure 3) showed statistically significant increases (1st year < 2nd year < 3rd year). Figure 4 also shows the average scores of commercial course learners. The results for commercial course learners revealed statistically significant increases between the first and second year. However, between the second- and third-year scores, there was not a significant difference attributable to this difference of grade (1st year < 2nd year - 3rd year).

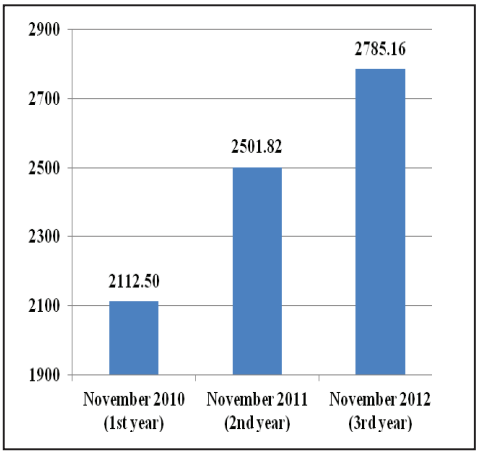

Figure 3. Average scores of general course learners (N = 128)

Table 3. Multiple comparisons for general course learners

Pairwise comparison			p
1st year	-	2nd year	.00
1st year	-	3rd year	.00
2nd year	-	3rd year	.00

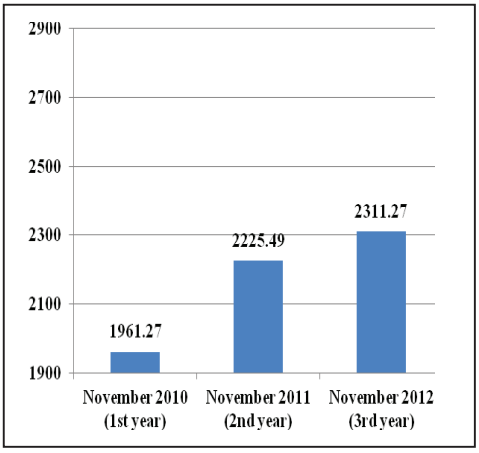

Figure 4. Average scores of general course learners (N = 128)

Table 4. Multiple comparisons for commercial course learners

Pairwise comparison			p
1st year	-	2nd year	.00
1st year	-	3rd year	.00
2nd year	-	3rd year	.13

Table 5 and Table 6 show the average scores of vocabulary size of the learners for the general and commercial courses in each year respectively.

Table 5. Progress in scores on vocabulary size tests for general course learners (N = 128)

		Between 1st and 2nd year		Between 2nd and 3rd year	
Progress beyond SE	↑	**117**	**(91.41%)**	**103**	**(80.47%)**
Little change within SE	→	2	(1.56%)	7	(5.47%)
Deterioration beyond SE	↓	9	(7.03%)	18	(14.06%)

Table 6. Progress in scores on vocabulary size tests for commercial course learners (N = 68)

		Between 1st and 2nd year		Between 2nd and 3rd year	
Progress beyond SE	↑	**58**	**(85.29%)**	**39**	**(57.35%)**
Little change within SE	→	1	(1.47%)	9	(13.24%)
Deterioration beyond SE	↓	9	(13.24%)	20	(29.41%)

Around 91% of the general course learners and 85% of the commercial course learners made progress between the 1st and 2nd year, while 80% and 57% improved their knowledge of vocabulary between the 2nd and 3rd year respectively. However, nearly 20% of the general course learners and almost 43% of the commercial course learners made little or no progress. Their scores actually fell between the 2nd and 3rd year.

Table 7 shows the types of development patterns for general course learners and Figure 5 summarizes the details of learners according to their types.

Table 7. Longitudinal developmental patterns for general course learners (N = 128)

	Between 1st and 2nd year	Between 2nd and 3rd year	N	%
Type 1	↑	↑	**92**	**71.88**
Type 2	↑	→	7	5.47
Type 3	↑	↓	18	14.06
Type 4	→	↑	2	1.56
Type 5	→	→	0	0.00
Type 6	→	↓	0	0.00
Type 7	↓	↑	9	7.03
Type 8	↓	→	0	0.00
Type 9	↓	↓	0	0.00
Total				100

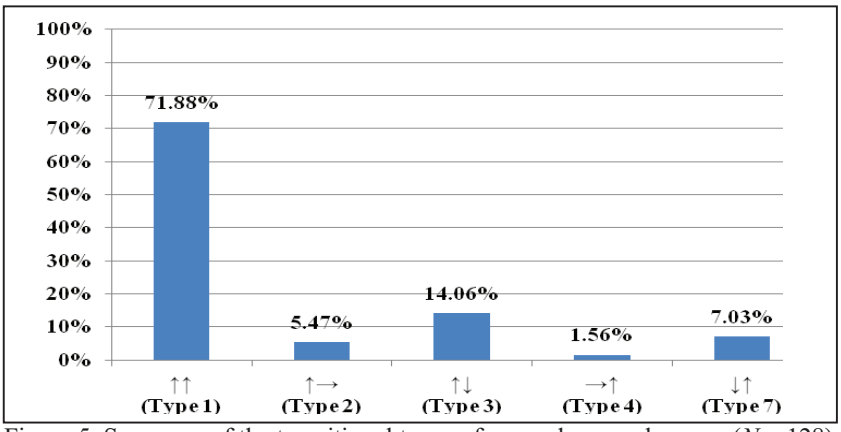

Figure 5. Summary of the transitional types of general course learners (N = 128)

In the general course, five patterns were found. The most frequent pattern (71.88%) was Type 1 (↑↑), for learners who increased their vocabulary size during their high school career. The second most frequent pattern (14.06%) was Type 3 (↑↓), for learners who improved their vocabulary size between their 1st and 2nd year but deteriorated between their second and third year. The third most frequent pattern (7.03%) was Type 7 (↓↑), for learners who regressed during their first to second year, but made progress in between the second and third year. The results show that over 70% of the learners made ideal progress in their vocabulary size and nearly 30% of the learners made little progress or deteriorated during their three years at high school.

Similarly, Table 8 shows the types of development patterns for commercial course learners and Figure 6 summarizes the details of learners according to their types.

Table 8. Longitudinal developmental patterns for commercial course learners (N = 68)

	Between 1st and 2nd year	Between 2nd and 3rd year	N	%
Type 1	↑	↑	**31**	**45.59**
Type 2	↑	→	9	13.24
Type 3	↑	↓	18	26.47
Type 4	→	↑	0	0.00
Type 5	→	→	0	0.00
Type 6	→	↓	1	1.47
Type 7	↓	↑	8	11.76
Type 8	↓	→	0	0.00
Type 9	↓	↓	1	1.47
Total				100

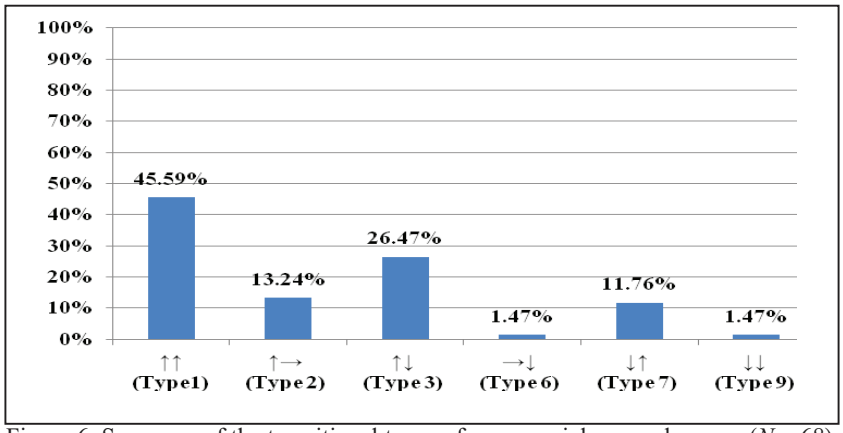

Figure 6. Summary of the transitional types of commercial course learners (N = 68)

In the commercial course, six patterns were identified. The most frequent pattern (45.59%) was Type 1 (↑↑), but this ideal progress was not as common as for general course learners. The second most frequent pattern (26.47%) was Type 3 (↑↓), which was nearly twice the percentage of general course learners. The third most frequent pattern (13.24%) was Type 2 (↑→), for learners who increased their knowledge of English vocabulary between the first year and second year, but made little or no progress between the second and third year. The results suggest that fewer than half of these learners made progress in their vocabulary learning throughout their time at high school, with over 40% experiencing a drop in their vocabulary size at some point in their high school career.

In sum, the results of one-way repeated measures ANOVAs and the subsequent paired comparisons using the Bonferroni method provide ample evidence that there is a significant difference between the mean scores of the general course learners from year to year. As for the commercial course learners, while there was a statistically significant difference between the first and second year, no significant difference was found between the second and third year. The progress in vocabulary learning for the course learners went smoothly between the first and second year. However, many commercial course learners were faced with a setback in their learning of vocabulary between the second and third year, which had a negative effect on their total learning rates over the three years.

5. Discussion

The results of this study provide a possible answer to each research question posed for this study. Research question 1 asked ‘What are the average scores on the vocabulary size tests for the general and commercial course learners in

their first, second, and third year?' The average English scores of general course learners were 2112.50 in their first year in 2010, 2501.82 in their second year in 2011, and 2785.16 in their third year in 2012. For the commercial course learners, the average scores of them were 1961.27 in their first year in 2010, 2225.49 in their second year in 2011, and 2311.27 in their third year in 2012. Yashima (2002) found approximately 500-word progress as high school subjects moved up from year to year. Katagiri's (2009) English course learners also increased their knowledge of English vocabulary by about 700 words each year. In both of those studies, the subjects started with an English vocabulary from around 2,900 to 3,100 words and their level of English ability and motivation for learning were also different from the subjects of this study, who started with around 1,900 to 2,100 words.

Research question 2 asked 'How do the learners in the general and commercial courses develop their knowledge of vocabulary throughout their three years of high school?' The average progress of general course learners between their first and second year was 389.32 and the progress between their second and third year was 283.34. The average progress per year was 336.33, which was closer to that of Katagiri's (2009) regular course learners, at 367.67. On the other hand, the progress of commercial course learners between their first and second year was 264.22 and the progress between their second and third year was 85.78 words. The average progress per year was 175.00, which was almost half of the progress of general course learners. One-way repeated measures ANOVAs confirmed that there were statistically significant differences between the mean scores of vocabulary size for the general and commercial course learners. In order to see whether mean differences were significant, a post-hoc analysis using the Bonferroni method was run. The results indicated that all the mean differences from year to year in the general course learners were significant. However, regarding the commercial course learners, there was no significant difference between their second and third year. It can be thought that they were on a learning plateau, confirming Katagiri's (2009) finding that there was a slower stage of learning in high school students' second or third year.

Research question 3 asked 'What types of developmental patterns can be seen among the scores on vocabulary size tests for each learner of the general and commercial courses?' Various longitudinal developmental patterns were found and they were classified into five patterns or types in the general course. The frequency patterns were Type 1 (↑↑) (71.88%), Type 3 (↑↓) (14.06%), Type 7 (↓↑) (7.03%), Type 2 (↓→) (5.47%), and Type 4 (→↑) (1.56%). As for the commercial course, the developmental patterns were classified into six types and they were Type 1 (↑↑) (45.59%), Type 3 (↑↓) (26.47%), Type 2 (↓→) (13.24%), Type 7 (↓↑) (11.76%), Type 6 (→↑) (1.47%), and Type 9 (↓↓) (1.47%). The developmental pattern of Type 1 was the most common type in learners of both courses, but the commercial course learners' ratio for this pattern was below 50%. Instead, negative or little

progress patterns such as Type 3 and Type 2 in the third year of the course, were closer to 40%. Therefore, it was also confirmed that a large proportion of commercial course learners were unsuccessful in responding to the challenge of improving their knowledge of English vocabulary.

The progress of the general and commercial course learners may be susceptible to several factors, such as the school curriculum, motivation, and plans for their future lives. Firstly, the curriculum for general course allowed learners more options of taking elective English courses, while learners in the commercial course had limited options and basically took only mandatory English classes. Secondly, motivation for learning English is thought to be an important factor in facilitating or impeding learners' progress in vocabulary learning. On the whole, general course learners were more likely to feel that it was important for them to learn English. However, the commercial course learners tended to feel it less important to learn English because of future careers. Thirdly, their future paths may also be determining factors in how hard they study English. Typically, about 80% of the general course learners aim to get into universities or colleges, while about 70% of the commercial course learners want to go on to vocational schools or find employment after graduating from high school. The general course learners take English as one of the important subjects in entrance examinations, while the commercial course learners put emphasis on the learning of accounting and bookkeeping rather than English.

The general course learners have more opportunities to learn English and to use a wider variety of English textbooks than the commercial course learners. Learners of both courses take five mandatory English I classes per week in their first year, but the general course learners have more classes in English in their second and third years. Their learning attitude toward English and their future directions may also have determined the success with which they studied vocabulary. As a result, the general course learners were considered to be typically exposed to more vocabulary than commercial course learners, especially in their second and third years. This may help why the commercial course learners made less progress in their second and third years.

6 Conclusion

The research reported here investigated the progress made by Japanese senior high school learners in their English vocabulary over three years. The descriptive statistics showed that, on the whole, both general and commercial course learners increased their vocabulary between the first and second year and between the second and third year. While one-way repeated measures ANOVAs and the subsequent paired comparisons using Bonferroni method confirmed that the general course learners expanded their knowledge of vocabulary year by year, although there was a statistically significant increase

between their first and second year, no significant difference was found between their second and third year for commercial course learners.

These results were also confirmed by the progress rates shown in above-mentioned longitudinal developmental patterns for general and commercial course learners. In the general and commercial courses, progress rates were 71.88% and 45.59% respectively while they were in high school. As the results of this study showed, there may be a learning plateau, where development stops for a while. This learning plateau is considered to be between their second and third year, and there is a possibility that for commercial course learners this was more of a challenge compared to the general course learners. As for the reasons for this learning plateau, the following three factors could be pointed out: school curriculum, motivation, and future career path. School curriculum is one of the decisive factors because it determines the range of options from which learners can choose. Motivation and future career may be connected. If the learners have a clear purpose or vision in mind, they can keep their motivation accordingly. These factors may be intertwined with one another and decide how much time they spend on learning English vocabulary.

Future research should be promoted to obtain more reliable and objective research results based on data from a greater number of learners, especially those learners whose academic levels vary widely. In addition, this study investigated only receptive knowledge of English vocabulary. Therefore, there is still a need for longitudinal studies of other types of vocabulary knowledge, such as productive vocabulary knowledge or depth of vocabulary knowledge. Further, the participants in this study also completed a vocabulary learning strategies questionnaire three times during their three years at high school. The relationship between vocabulary size and vocabulary learning strategies can be explored for further studies.

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Appendix
Vocabulary Size Test Samples

1,000-Word Level

日本語の意味を表す英語を(1)～(6)の中から選び，その番号を解答欄に書き入れなさい。

1．小麦粉を焼いた菓子			2．集まり，会		
(1) birthday	(2) cookie	(3) fork	(4) party	(5) star	(6) sweater
3．玉ねぎ			4．ぶどう		
(1) grape	(2) lettuce	(3) onion	(4) pear	(5) rose	(6) tree
5．丸い入れ物			6．クッションのある長いす		
(1) bath	(2) lamp	(3) phone	(4) pot	(5) sofa	(6) stove
7．40			8．100		
(1) forty	(2) hundred	(3) month	(4) six	(5) twelve	(6) year
9．町			10．橋		
(1) bridge	(2) garage	(3) place	(4) scene	(5) square	(6) town
11．食事			12．1つ，1個，1片		
(1) air	(2) meal	(3) piece	(4) sign	(5) sound	(6) while
13．男の人			14．象		
(1) change	(2) elephant	(3) man	(4) rabbit	(5) wolf	(6) woman
15．顔			16．手ぬぐい		
(1) face	(2) finger	(3) hair	(4) leg	(5) shoe	(6) towel
17．不可解なこと，不思議なこと			18．試験		
(1) act	(2) butterfly	(3) exam	(4) mystery	(5) tennis	(6) trouble
19．点，地点			20．太陽		
(1) dam	(2) magazine	(3) pajamas	(4) point	(5) sun	(6) war
21．持っている			22．しなければならない		
(1) do	(2) get	(3) give	(4) have	(5) must	(6) raise
23．聞く			24．続ける		
(1) add	(2) continue	(3) die	(4) listen	(5) mean	(6) understand
25．すてきな，すばらしい			26．大きい		
(1) cool	(2) hot	(3) large	(4) least	(5) nice	(6) quiet
27．偉大な，りっぱな			28．早く		
(1) complete	(2) early	(3) great	(4) most	(5) never	(6) usually
29．彼女のもの			30．私の		
(1) below	(2) hers	(3) my	(4) past	(5) which	(6) whom

2,000-Word Level

日本語の意味を表す英語を(1)～(6)の中から選び，その番号を解答欄に書き入れなさい。

1．旗			2．丸くて大きい緑色野菜		
(1) cabbage	(2) campus	(3) flag	(4) railway	(5) tin	(6) tournament
3．信じること・信念			4．盤上で白黒の駒を動かして，勝敗を競うゲーム		
(1) attention	(2) belief	(3) chess	(4) hook	(5) pride	(6) union
5．限界，制限			6．指導員，指導・助言を与える人		
(1) bottom	(2) coach	(3) flight	(4) limit	(5) proof	(6) quantity

7．通路，通行			8．意見，眺め		
(1) climate	(2) factory	(3) law	(4) link	(5) passage	(6) view
9．勝利			10．力・強さ		
(1) bridge	(2) garage	(3) place	(4) scene	(5) square	(6) town
11．洪水			12．設備，備品		
(1) account	(2) courage	(3) equipment	(4) factor	(5) flood	(6) luck
13．しつけ，訓練			14．海岸		
(1) benefit	(2) coast	(3) discipline	(4) division	(5) soap	(6) truth
15．修理する，修繕する			16．口づけする		
(1) advise	(2) establish	(3) kiss	(4) repair	(5) request	(6) settle
17．発見する，見つけ出す			18．救う，救出する		
(1) attract	(2) discover	(3) observe	(4) pour	(5) recognize	(6) save
19．直す，繕う			20．競争する		
(1) complete	(2) defend	(3) delay	(4) mend	(5) occur	(6) trace
21．憎む			22．解決する		
(1) appoint	(2) forgive	(3) hate	(4) pray	(5) solve	(6) spread
23．余分な			24．自動的な，自動の		
(1) automatic	(2) extra	(3) honest	(4) legal	(5) sharp	(6) smooth
25．費用のかかる，高価な			26．簡単な，単純な		
(1) awake	(2) exact	(3) expensive	(4) loud	(5) patient	(6) simple
27．心地よく感じる，気楽な			28．生の，加工していない		
(1) comfortable	(2) equal	(3) independent	(4) raw	(5) social	(6) steady
29．分かれた，分離した			30．緊急の，差し迫った		
(1) bright	(2) frequent	(3) initial	(4) safe	(5) separate	(6) urgent

3,000-Word Level

日本語の意味を表す英語を(1)～(6)の中から選び，その番号を解答欄に書き入れなさい。

1．巻き毛			2．肉，肉体		
(1) beach	(2) curl	(3) economy	(4) flesh	(5) glory	(6) worker
3．手のひら			4．重さの単位		
(1) baggage	(2) circuit	(3) fool	(4) palm	(5) poet	(6) ton
5．旅行者			6．比較		
(1) access	(2) bounce	(3) comparison	(4) sunshine	(5) tourist	(6) wound
7．豆			8．天火（調理器具）		
(1) bean	(2) fisherman	(3) ceiling	(4) margin	(5) oven	(6) ray
9．船			10．かすみ，もや		
(1) barn	(2) existence	(3) heap	(4) manufacturer	(5) mist	(6) vessel
11．儀式			12．緊急事態		
(1) apparatus	(2) boundary	(3) ceremony	(4) emergency	(5) horizon	(6) sympathy
13．民主主義			14．是認，賛成		
(1) approval	(2) contract	(3) democracy	(4) institution	(5) recall	(6) wheat
15．心理学			16．説明		
(1) billion	(2) bundle	(3) explanation	(4) flavor	(5) lighting	(6) psychology
17．食事をする			18．切り倒す		
(1) admit	(2) deny	(3) dine	(4) fell	(5) inquire	(6) rescue
19．改訂する			20．腐る，朽ちる		
(1) decay	(2) distribute	(3) fasten	(4) fold	(5) isolate	(6) revise

２１．投資する			２２．しきりに勧める		
(1) admire	(2) cease	(3) celebrate	(4) construct	(5) invest	(6) urge
２３．気がついて			２４．まっすぐに立っている		
(1) absent	(2) aware	(3) central	(4) drunk	(5) historical	(6) upright
２５．等しい，全く同様の			２６．毎年の，年間の		
(1) annual	(2) constant	(3) deaf	(4) identical	(5) modest	(6) recent
２７．可能性のある			２８．機械の，機械的な		
(1) confident	(2) mechanical	(3) odd	(4) potential	(5) splendid	(6) unusual
２９．実際に			３０．とにかく		
(1) actually	(2) anyhow	(3) completely	(4) indeed	(5) somewhere	(6) whenever

4,000-Word Level

日本語の意味を表す英語を(1)～(6)の中から選び，その番号を解答欄に書き入れなさい。

１．顕微鏡			２．望遠鏡		
(1) cube	(2) kilometer	(3) license	(4) microscope	(5) studio	(6) telescope
３．化学者			４．消費者		
(1) chemist	(2) consumer	(3) emperor	(4) membership	(5) sergeant	(6) sovereign
５．交響曲			６．美術館		
(1) charity	(2) distribution	(3) faculty	(4) gallery	(5) session	(6) symphony
７．認めること，承認			８．祝宴，宴会		
(1) admission	(2) bull	(3) feast	(4) geometry	(5) hedge	(6) succession
９．案内所，事務所			１０．小さな包み		
(1) bureau	(2) certificate	(3) evolution	(4) lane	(5) packet	(6) poll
１１．赤道			１２．同意，承諾		
(1) bullet	(2) consent	(3) equator	(4) facility	(5) lap	(6) poll
１３．船			１４．特権，得点		
(1) cereal	(2) craft	(3) deposit	(4) pastry	(5) privilege	(6) opponent
１５．移行，移り変わり			１６．群れ		
(1) complaint	(2) cone	(3) flock	(4) leadership	(5) temptation	(6) transition
１７．ドシンと当たる，ぶつかる			１８．広くする		
(1) bump	(2) confront	(3) graduate	(4) promote	(5) scan	(6) widen
１９．促す，刺激する			２０．固執する，貫く		
(1) arouse	(2) clash	(3) invade	(4) persist	(5) prompt	(6) soak
２１．仲直りさせる			２２．変える，修正する		
(1) conclude	(2) modify	(3) murmur	(4) reconcile	(5) stagger	(6) weave
２３．購入する，買う			２４．再び始める		
(1) alternate	(2) collapse	(3) fetch	(4) pat	(5) purchase	(6) resume
２５．論理的な			２６．中立の		
(1) dense	(2) logical	(3) neutral	(4) partial	(5) residential	(6) spiritual
２７．単数の			２８．ことばの，言語の		
(1) administrativ	(2) atomic	(3) concrete	(4) frank	(5) linguistic	(6) singular
２９．ただ…だけ，単に			３０．その結果として，したがって		
(1) consequently	(2) nearby	(3) necessarily	(4) occasionally	(5) solely	(6) technically