

**Oral Repetitions of English Vocabulary Using Text-To-Speech Synthesis Sounds:
Preparation for University Entrance Examinations**

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1. INTRODUCTION

According to a recent survey (MEXT, 2013), a total of 794,230 students in a comprehensive course, referred to as “Futsuuka” in Japanese, graduated from high school in March 2013. Of these, 62.2% directly proceeded to universities in April 2013. To gain admission in universities, most high school students have to take university entrance examinations that measure students’ English proficiency. To pass these examinations, students need to understand the English sentences in English tests. According to Hirsh and Nation (1992, p. 689), readers need to know 97%–98% of the vocabulary in each English sentence to understand the sentence.

In 2009, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) reported that Japanese high school students have to learn 1,800 English words as part of their English as a Foreign Language (EFL) education under the new English language curriculum, which was enforced in April 2013. However, some students need to master more than 1,800 English words to pass the university entrance examinations, especially if they hope to pass the examinations of some of the higher level universities.

In general, high school students who hope to pass the university entrance examinations study English vocabulary by using specified workbooks. Most of them study workbooks called *Akahon*. Although the *Akahon* series contains English audio CDs for the first stage of the English test of the National Center Test for University Admissions, there are no English audio CDs available for some private university entrance examinations. Therefore, high school students who wish to gain admission in private universities study English vocabulary without the help of these CDs. However, Hatashita, Ikemura, and Togo (2005) reported that high school students who studied English vocabulary by oral repetition—using English speech sounds—had higher vocabulary test scores compared to those who studied without using English speech sounds. Their study revealed that oral repetition is an effective English vocabulary learning strategy for Japanese high school students when using English audio.

Traditionally, high school students study the target English vocabulary by learning two aspects of vocabulary: (1) spelling and (2) meaning.

By using text-to-speech (TTS) synthesis technology, English language teachers can create language learning audio materials that are suitable for their students’ English proficiency levels (Kataoka and Ito, 2013). In the case of no English audio material for private university entrance

examinations, teachers can develop this material using TTS synthesis technology. Listening to target vocabulary speech sounds can offer Japanese EFL learners three learning outcomes: (1) spelling, (2) meaning, and (3) pronunciation.

Thus far, there has been no research on students' use of TTS speech sounds to learn English vocabulary for private university entrance examinations; therefore, studies of this kind are necessary.

2. LITERATURE REVIEW

There is a difference in the pronunciation and linguistic structure between Japanese and English. Previous studies have shown that Japanese EFL learners need to learn and memorize English words, pronunciations, and meanings on a one-by-one basis (Hatori, 1977; Kohno, 1984; Palmer, 1921); this indicates that EFL learners need to have an understanding of the spelling, meaning, and pronunciation of each English word.

According to Widdowson (1978, p. 57), the four language skills of speaking, listening (or understanding speech), reading, and writing are closely related when developing English acquisition among learners. Reading aloud is one type of English learning activity. Considering Widdowson's definitions of the four skills, a reading aloud activity could be considered a practical English learning strategy. Several studies have been conducted on reading aloud in Japanese EFL education (Ishihara, 2002; Miyasako, 2002, 2007; Suzuki, 1998; Takeuchi, Ikeda, and Mizumoto, 2012). Hatashita, Ikemura, and Togo (2005) reported that high school students who learned English vocabulary by oral repetition using English audio had higher English test scores than those who did not use English audio. Therefore, based on the findings of these studies, it can be said that reading aloud is one way in which Japanese EFL learners can develop their English abilities. Although English language learning using English speech sounds has been proven to be an effective way for Japanese EFL learners to study English (Kohno, Ikari, Kadota, Murata, and Yamane (Eds.), 2007), there are not enough research results on the number of repetitions of English vocabulary preferred by Japanese high school students.

Studies on TTS technology in EFL education have already been conducted in Japan as well as overseas (Azuma, 2008; Chew, 2009; Hirai and O'ki, 2011; Jones, Berry, and Stevens, 2007; Kataoka, 2009; Kataoka and Ito, 2013; O'ki, 2010; Yoshida, 2008). All these studies suggest that TTS speech sounds are useful for both Japanese EFL learners to acquire English and for English language teachers to create audio language learning materials that match their students' English proficiency levels. However, thus far, there are insufficient findings on the actual use of TTS speech sounds as English audio material for Japanese high school EFL education.

Tinkham (1993) revealed that most learners require five to seven repetitions to learn English vocabulary. Webb (2007) examined the repetition and memory of English vocabulary for 121 Japanese university students. The results showed that most words were memorized only after ten repetitions. These studies also suggest that English speech sounds are one of the most effective learning strategies for Japanese EFL learners to acquire English. The participants in these previous studies were university students, and more studies need to be conducted on the learning

processes of Japanese high school students.

A collaborative learning approach is adopted to teach English during regular EFL education in high school. However, it is necessary for teachers to understand each student's learning process. Vygotsky (1978) described the general relationship between learning and development as "the zone of proximal development (ZPD)." According to him, this zone represents the distance between the actual developmental level as determined by independent problem solving under adults guidance or in collaboration with more capable peers (p. 86). According to the concept of the ZPD, "scaffolding" by teachers is an important factor affecting learners' language development (Bruner, 1985; van Lier, 1996).

In order to gauge the learners' situation, Wallace (1998, p. 13) suggested that teachers put data of tests and/or questionnaires into the reflective cycle—a framework of action research; this is one way for teachers to acquire the process of their learners' developments. Two important processes for teachers' professional development are to analyze both professional practices during lessons and learner's reflections (Figure 1).

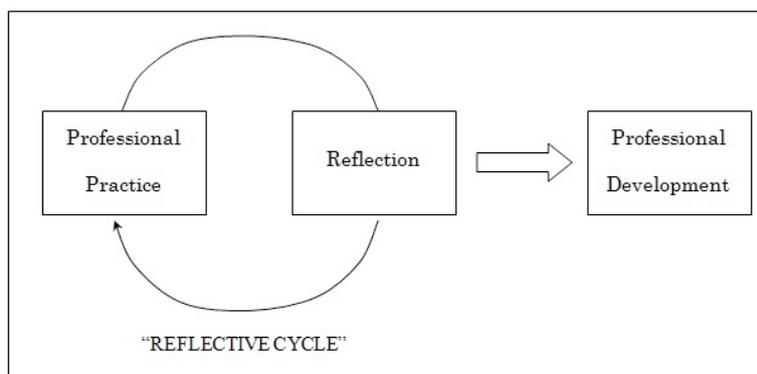


Figure 1. A Framework of Action Research (Wallace, 1998, p. 13)

Sano (2005) also recommended using action research to improve English lessons in Japan. According to him, action research is a useful tool for teachers in Japan who want to develop and improve their English lessons. Sato (2006) defined schools as "collaboration learning systems." These previous studies indicate that students can learn not only the target subject but also numerous other unrelated things through interactions with their classmates/teachers in the classroom setting. To develop students' English proficiency, teachers must plan activities and tasks. Therefore, scaffolding by teachers is necessary for the growth of high school students' English proficiency.

3. METHOD

3.1 Participants

A total of 31 third-year high school students from a boy's private school in Osaka city participated in this study. On average, the students had learned English for 5.5 years, since junior high school. They were enrolled in the comprehensive course, and their average English proficiency levels in the Society for Testing English Proficiency (STEP) test were around the 3rd

grade. All the boys were born in Japan, and none of them had stayed in an English-speaking country or had any experience participating in this kind of experiment. The participants were assured of complete anonymity throughout the study.

3.2 Purpose of the Study

The aim of this study is to use TTS speech sounds to investigate how many oral repetitions of English vocabulary are sufficient for third-year high school students studying for university entrance examinations. All the students in this study wanted to go to university. They also hoped to study English vocabulary during regular English lessons in order to prepare for their university entrance examinations.

3.3 TTS System Used in This Study

The TTS technology used in this study was a digital speech synthesis system and a speech-synthesized software technology that could be executed in personal computers. Just by typing English words on the keyboard of a personal computer, English digital speech is automatically produced (Dutoit, 1997; Taylor, 2009). TTS technology has been widely utilized for our daily lives (Kataoka, 2009). It is also used as a speech-recognition system and/or an automated voice answering system in the latest smartphones (as of 2014). By using TTS technology, teachers can control English speech sounds and produce audio learning materials to suit their students' English proficiency levels (Kataoka and Ito, 2013). In this study, TTS technology was used to produce a TTS English audio CD for the oral repetition activity. Figure 2 is a screenshot of the TTS system used in this study.

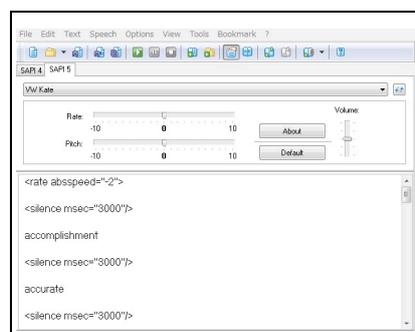


Figure 2. A Screenshot of the TTS System

As an audio recording system, a free audio software “iTunes” was used to record TTS speech sounds onto an audio CD. The lessons were conducted in a regular classroom in a high school. The TTS CD was played for the students on a CD deck.

3.4 Research Questions

The following two research questions were addressed.

RQ1: How many oral repetitions of each English word/idiom—using TTS speech sounds—in one lesson are sufficient for third-grade high school students?

RQ2: Apart from improving learners' English proficiency, are there any additional effects?

3.5 Learning Materials

Two types of learning materials were prepared.

(1) A TTS audio CD to teach the target English vocabulary during lessons.

(2) An English vocabulary list in hard copies, comprising 190 English words and 33 idioms; these were taken from the Kansai University entrance examination workbook called *Akahon* (Kyougakusha, 2005, pp. 74–81, see Appendix A).

3.6 Procedure

Previous studies on Japanese students' language recognition (Hatori, 1977; Kohno, 1984; Kohno et al., 2007; Palmer, 1921), and reading aloud (Hatashita, Ikemura, and Togo, 2005; Ishihara, 2002; Miyasako, 2002, 2007; Suzuki, 1998; Takeuchi, Ikeda, and Mizumoto, 2012) have revealed that a knowledge of both the pronunciation and meaning of each English and Japanese word facilitates students' understanding of English. This is why the oral repetition practice—by the reading aloud method—was used to enable students to learn the target English vocabulary in this study. Table 1 shows the timeline for 33 lessons.

Table 1

Timeline for 33 lessons

Modules	Lessons	Contents of Each Lesson	Pages	Vocabulary
1	1 ~ 3	Each English word was repeated once	p. 74	21 words
	4	The 1st vocabulary test		
	5 ~ 7	Each English word was repeated twice, continuously	p. 75	28 words
	8	The 2nd vocabulary test		
	9 ~ 11	Each English word was repeated three times, continuously	p. 76	30 words
12	The 3rd vocabulary test/The 1st questionnaire			
2	13 ~ 15	Each English word was repeated once × 2 times	p. 77	28 words
	16	The 4th vocabulary test/The 2nd questionnaire		
3	17, 18	Each English word was repeated twice, continuously	p. 78	29 words
	19	Each English word was repeated once × 2 times		
	20	The 5th vocabulary test		
	21, 22	Each English word was repeated twice, continuously	p. 79	27 words
	23	Each English word was repeated once × 2 times		
	24	The 6th vocabulary test		
	25, 26	Each English word/idiom was repeated twice, continuously	p. 80	27 words and 1 idiom
	27	Each English word/idiom was repeated once × 2 times		
	28	The 7th vocabulary test		
	29, 30	Each English word/idiom was repeated twice, continuously	p. 81	32 idioms
31	Each English word/idiom was repeated once × 2 times			
32	The 8th vocabulary test			
33	The 3rd questionnaire			
Total	33 lessons		8 pages	190 words and 33 idioms

Note. The page numbers are taken from *Akahon: Kansai University* (Kyougakusha, 2005).

The participants studied the target English vocabulary for their university entrance examinations by repeating the TTS speech sounds. Building on the results of a previous study on the use of English audio to improve vocabulary (Hatashita, Ikemura, and Togo, 2005), all the students were given TTS speech sounds for each English word/idiom. The pause between each

word/idiom was set to 3,000 ms (= three seconds) so that students could repeat each word/idiom together during the lessons.

The high school students were also given hard copies of the target English vocabulary list; these were taken from the *Akahon* workbook (see Appendix A). Students were asked to read through the list and memorize the spelling and pronunciation of each English word/idiom, and its meaning in Japanese script.

In their English lessons, they were asked to stand up and read one target vocabulary word/idiom silently, while listening to the TTS CD. Then, they had to repeat, in unison, each English word/idiom exactly as they had heard it, while reading that word/idiom on the hard copy list.

In order to sustain the students' motivation to study English vocabulary for university entrance examinations, action research (Wallace, 1998; Sano, 2005) was adopted to monitor them during their regular English lessons. Data were gathered in two ways—(1) eight vocabulary tests and (2) three questionnaires—during their regular English lessons for a total of 33 lessons (see Table 1).

As already mentioned, the target English vocabulary list was taken from *Akahon* (see Appendix A). Each page of the *Akahon* workbook was studied and tested for four sessions. After three sessions of oral repetition practice, a vocabulary test/questionnaire was issued in the fourth session (see Table 1 and Figure 3).

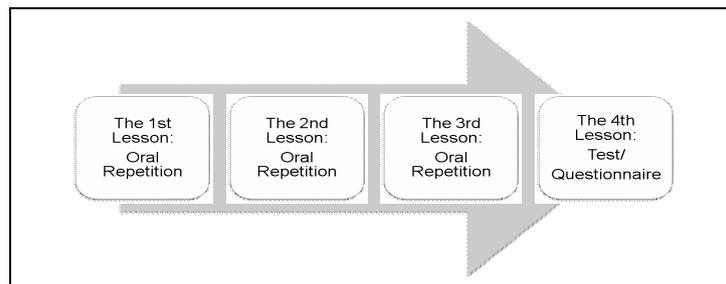


Figure 3. Repetition Practice

The 33 lessons were divided into three modules to determine the students' motivation levels when studying English vocabulary (see Table 1); the results of the two types of research—(1) English vocabulary tests and (2) questionnaires—were used to improve subsequent lessons.

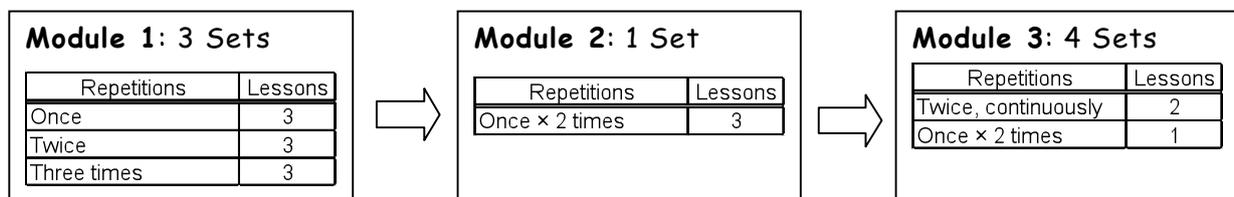


Figure 4. English Vocabulary Repetitions During the Three Modules

In order to determine the most effective oral repetition times for the students, the repetition times in the practice sessions were decided on the basis of the results of the questionnaires that were given to students during the lessons (see Table 1 and Figure 4).

3.7 Data Collection

The following two types of data were collected to analyze how high school students learned English vocabulary for university entrance examinations, using action research.

a. English vocabulary tests: A total of eight tests were conducted in this study (see Table 1, Appendix B), each comprising ten questions. A correct answer to a question was assigned 1 point, and the total score was 10 points.

b. Questionnaires: The questionnaires were administered to gather data about the most effective number of repetitions of English vocabulary. Three questionnaires in three modules were administered in this study.

4. RESULTS AND DISCUSSION

4.1 Results of the English Vocabulary Tests

Table 2 shows the mean, standard deviation, and minimum and maximum scores for the eight vocabulary tests. The score for “all students” was marked as “AS,” and that for the “students who completed all eight tests” was marked as “S” in Table 2. The tests comprised ten questions, and 1 point was given for each correct answer, 10 points being the total score (see Appendix B). The average scores for each test were different, although different contexts of vocabulary tests were conducted. The eight vocabulary tests were administered during the second semester, from September to November. Some students who were taking the writing tests and interviews for private university entrance examinations—called “Suisen nyuushi” in Japanese—were absent from regular high school lessons. This is why the total number of “AS” students for each vocabulary test changed.

Table 2

Results of the eight English vocabulary tests

	Test 1		Test 2		Test 3		Test 4		Test 5		Test 6		Test 7		Test 8	
	AS	S														
<i>n</i>	31	18	31	18	31	18	30	18	29	18	29	18	27	18	26	18
<i>M</i>	6.13	6.06	6.16	4.89	7.48	6.94	7.37	7.33	5.69	4.28	6.28	5.06	5.96	5.67	8.04	7.67
<i>SD</i>	3.34	3.06	3.47	3.10	2.83	2.46	2.76	2.54	3.43	2.87	2.91	2.55	2.67	2.57	2.57	2.72
Minimum	1	1	1	1	0	2	1	1	1	1	1	1	1	1	3	3
Maximum	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

Note. A correct answer to a question was assigned 1 point, and the total score was 10. “AS” refers to “all students” in each test; “S” means the student who took all eight tests.

The results revealed that the average scores for “AS” in all tests were higher than those for “S.” This showed that the students in the AS group, who took *Suisen nyuushi*, had higher English proficiency levels.

4.2 How Many Repetitions of Each English Vocabulary Words/Idioms per Lesson are Sufficient for Third-grade Japanese High School Students?

4.2.1 Results in Module 1

Action research (Sano, 2006; Wallace, 1998) was adopted to analyze students’ perspectives on

learning English vocabulary during lessons, in order to investigate the two research questions: (1) How many oral repetitions of each English word/idiom—using TTS speech sounds—in one lesson are sufficient for third-grade high school students?, and (2) Apart from improving learners' English proficiency, are there any additional effects?

To determine the optimal number of vocabulary repetitions for students during the practice, by reading aloud, different repetition times were assigned to the students (see Module 1 in Table 1 and Figure 4). The number of vocabulary items per test was limited to one page of the *Akahon* workbook (see Appendix A). Through a comparison of three tests—the 1st, 2nd, and 3rd English vocabulary tests—I found that the 3rd test showed the best average score (see Table 2).

The first questionnaire was administered to assess the number of oral repetitions students felt comfortable with after the 3rd English vocabulary test administered in the 12th class (see Table 1).

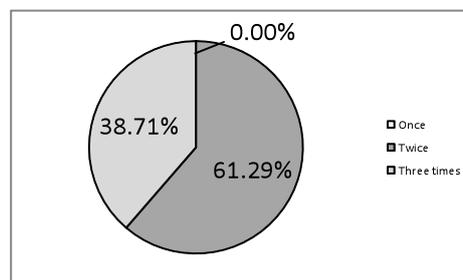


Figure 5. Results of the first questionnaire: How many repetitions do you believe to be sufficient?

The results revealed that 61.29% of students believed that each target English vocabulary word should be repeated twice, continuously; 38.71% believed that each word should be repeated three times; none of the students believed one oral repetition to be sufficient (see Figure 5). Since the data were not distributed normally, a non-parametric chi-square test was carried out. A significant difference was found between the three questionnaire categories ($\chi^2(2) = 17.87, p = .00, W = .29$)¹. Based on the result of the first questionnaire, I concluded that the students perceived that orally repeating vocabulary twice, continuously, was most effective.

Each questionnaire contained a free descriptive column; based on the comments the students wrote in this column in the first questionnaire in Module 1, there were two reasons for their perception that two repetitions were sufficient: (1) the moderate sense of time during repetitions, and (2) the concentration required to memorize the spelling of the target vocabulary. Some negative comments were also reported, such as “In case I had already memorized some target vocabulary, the three times, continuously, oral repetition style annoyed me.” I wondered whether the students' dislike for the three times repetition style caused a gradual decrease in their willingness to study, even if their score in the 3rd test was better than those in the 1st and 2nd tests. This is why during the 13th and 15th classes in Module 2, they studied the target vocabulary using the two times oral repetition method (see Table 1 and Figure 4).

4.2.2 Results in Module 2

The second questionnaire in Module 2 was administered after the 4th vocabulary test in the 16th

class (see Module 2 in Table 1). This questionnaire elicited information on which type of two times oral repetition students preferred: oral repetitions (1) to repeat target vocabulary twice, continuously (twice, continuously, oral repetition style) and (2) to repeat target vocabulary only once at the end of the list, and then repeat it all again (once \times 2 times oral repetition style).

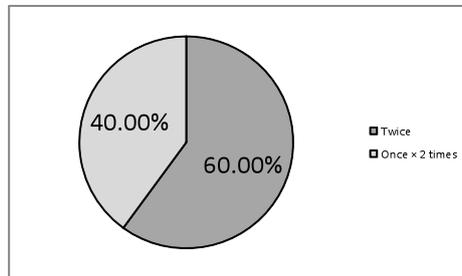


Figure 6. Results of the second questionnaire: Which repetition do you prefer?

The results indicated that 60.00% of students supported the twice, continuously, oral repetition style (see Figure 6). The data were not distributed normally; therefore, a non-parametric chi-square test was carried out. No significant difference was found between two questionnaire categories ($\chi^2(1) = 1.20, p = .27, W = .04$). Based on the results of the second questionnaire, a mixed style of the two times repeating practice was chosen for the 17th to 31st classes in this study (see Module 3 in Table 1 and Figure 4).

4.2.3 Results in Module 3

The third questionnaire in Module 3 was administered after the 8th vocabulary test in the 33rd lesson (see Table 1); it aimed at eliciting information on which type of two times repeating practice the students preferred.

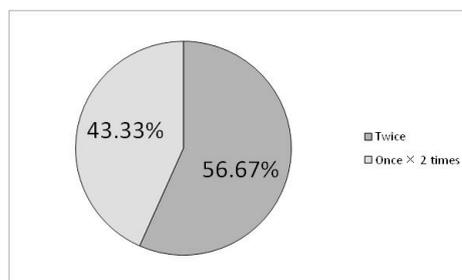


Figure 7. Results of the third questionnaire: Which repetition do you prefer?

The results showed that 56.67% of students preferred the target vocabulary to be repeated twice, continuously (see Figure 7). Since the data were not distributed normally, a non-parametric chi-square test was carried out. No significant difference was found ($\chi^2(1) = .53, p = .47, W = .13$).

The results of the three questionnaires in Modules 1, 2, and 3 revealed that the third-grade high school students preferred to repeat the target English vocabulary twice, continuously, per lesson. They repeated one target word/idiom six times in total. Considering the results of previous related

studies (Tinkham, 1993; Webb, 2008), repeating a word/idiom six times appears to be an appropriate and valid result.

4.3 The Results of the Third Questionnaire in Module 3: High School Students' Perspectives

Other items in the third questionnaire were assessed using a 5-point scale (Takeuchi, 2003, p. 254) ranging from 1 (I strongly disagree) to 5 (I strongly agree). Table 3 depicts the questionnaire results for each item. Items 5 and 7 from the third questionnaire in Module 3 revealed the students' perception that English speech sounds helped them to learn English vocabulary.

Table 3

Results of the third questionnaire in Module 3: High school students' perspectives

Questionnaire items		<i>M</i>	<i>SD</i>
1	Were you able to hear each English word/idiom?	3.48	0.89
2	Were you able to pronounce the vocabulary repeatedly after each English sound?	3.48	0.89
3	Did you feel the speed of each English word/idiom was fast?	2.97	0.48
4	Did you feel that the pause between vocabulary items was long?	2.81	0.54
5	Do you think that the repetition practice helped you memorize the target English vocabulary?	3.58	0.76
6	Did you get better scores because of the vocabulary repetition practice?	3.52	0.81
7	Do you think that it benefited you to learn English vocabulary using the English sounds?	3.65	0.84
8	Do you think it was useful for you to memorize the target English vocabulary by repeating it together in class?	3.35	0.84
9	Did you learn the target English vocabulary outside class?	2.35	1.31

Note. 5 = strongly agree, 4 = agree, 3 = neither agree nor disagree, 2 = disagree, 1 = strongly disagree.

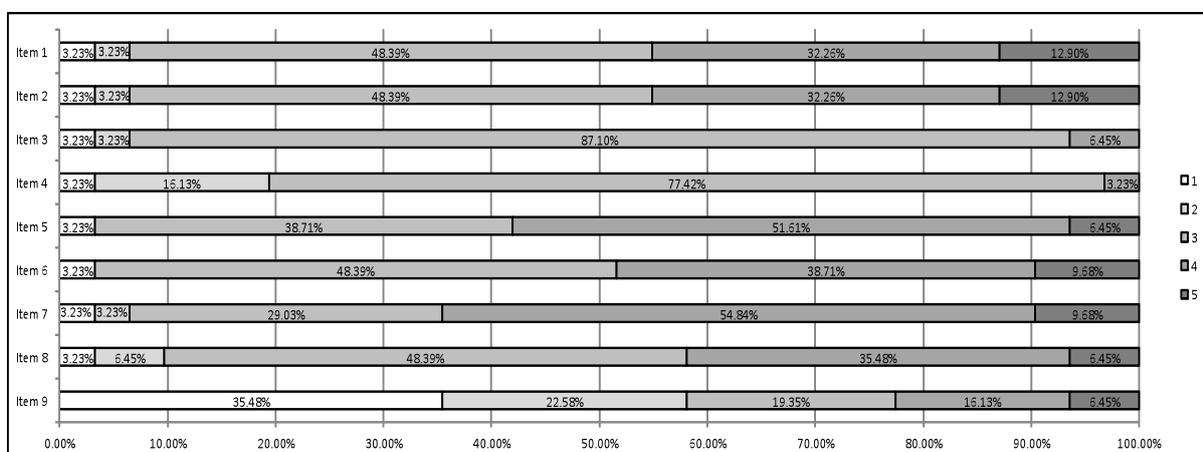


Figure 8. Results of the Third Questionnaire in Module 3: High School Students' Perspectives

There were some positive/remarkable descriptions that were written by the participants in the third questionnaire. “S” in the following excerpt stands for “student.”

Excerpt 1 from the free description column in the third questionnaire in Module 3.

- S1: I have understood the pronunciation of English words.
- S2: By listening to the English vocabulary and repeating it, I was able to memorize it easily.
- S3: I could not learn the English vocabulary outside the classroom.
- S4: I had a deep understanding of the English vocabulary, because I paid attention to other students’ oral repetitions.
- S5: I guess we should be able to learn the English vocabulary only by hearing the pronunciations in a short time during the lessons.
- S6: I could listen to my classmates’ English pronunciations, and I was able to ask them how they memorized English words.
- S7: The first time I had read the English vocabulary list, I guessed I would not be able to remember it at all. I lost my motivation. However, I found that I was able to memorize the list by patiently studying it.

(Author’s translation)

These comments from Excerpt 1 indicate that listening to English speech sounds is a useful strategy by which high school students can study English vocabulary. According to previous studies (Hatori, 1977; Hayashita, Ikemura, and Togo, 2005; Kohno, 1984; Kohno et al., 2007; Palmer, 1921), learning both the pronunciation and meaning of each English and Japanese word enables third-grade Japanese high school students to memorize English vocabulary for their university entrance examinations.

5. CONCLUSION AND IMPLICATIONS

This study investigated how many oral repetitions of each English word/idiom, using TTS speech sounds, third-grade high school students thought to be sufficient. In order to conduct this research, two research questions were addressed.

RQ1: How many oral repetitions of each English word/idiom—using TTS speech sounds—in one lesson are sufficient for third-grade high school students?

The results of the three questionnaires in Modules 1, 2, and 3 (see Figures 5, 6, and 7) revealed that the third-grade high school students in this study believed that repeating a vocabulary item twice, continuously, was sufficient to learn the vocabulary. They repeated one target word/idiom six times in total. According to previous studies (Tinkham, 1993; Webb, 2008), repeating a word/idiom six times appears to be an appropriate and valid result.

RQ2: Apart from improving learners’ English proficiency, are there any additional effects?

The results of the nine items (see Table 3) and the comments in the free description column (see Excerpt 1) for the third questionnaire in Module 3 revealed the following three facts.

First, TTS speech sounds are useful for English language learning. According to the results

summarized in Table 3 and Excerpt 1, it is clear that some students prefer to repeat target English vocabulary using TTS speech sounds during lessons. Some also reported that this oral repetition helped them to memorize the vocabulary (see S2, S4, S5, and S6 in Excerpt 1).

Second, each student was able to recognize his learning strategy (see S7 in Excerpt 1). During the 33 classes, all the students tried to find out the best self-learning strategy to boost vocabulary test scores. Through this, students finally realized the importance of knowing their own learning styles.

Finally, the interaction among students was vital to change their perspectives on English language learning (see S6 in Excerpt 1). During this study, students gradually changed and tried to communicate with each other. They discovered the importance of collaborative learning, a learning style followed in schools around the world (Bruner, 1985; Sano, 2005; Sato, 2006; van Lier, 1996; Vygotsky, 1978). The results of this study also showed the importance of learning in class, referred to as “collaborative learning.” These findings suggest that scaffolding by teachers can expand learners’ English language acquisition and foster their metacognition for language learning.

Before concluding, two limitations of this study should be pointed out (1) the results of the eight English vocabulary tests were the comparison of different tests, and (2) students could not be divided into two groups—a control group and an experimental group. A follow-up study will be necessary to confirm the validity of the above findings between the two groups.

The results of this study show that TTS speech sounds are useful for both Japanese EFL learners and English language teachers. Using the TTS system, teachers could create a TTS audio CD that students could use to prepare for private university entrance examinations during regular English lessons in high school.

In case of no audio CDs, learners can study only two aspects of vocabulary: (1) spelling, and (2) meaning contained in the *Akahan* English vocabulary list. However, through oral repetition using TTS speech sounds, the high school students in this study could learn three aspects of vocabulary: (1) spelling, (2) meaning, and (3) pronunciation.

It will be important for further research into English language learning using TTS technology to take into account the interaction among high school students before creating teaching plans for Japanese high school EFL education.

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NOTE

1. According to Field (2009, p.576), Kendall's W , which is also written (W), shows the agreement of raters. W has a limited range from 0 (no agreement between judges) to 1 (complete agreement between judges).

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Appendix A.

Target Vocabulary List on Page 75 in *Akahon: Kansai University*

関西大学／重要語句	
過去4年分の入試データを徹底分析し、本学の頻出重要単語を厳選して掲載。入試直前の vocabulary チェックに最適！	
<input type="checkbox"/> accomplishment	n. 達成, 業績 → v. accomplish 成し遂げる
<input type="checkbox"/> accurate	a. 正確な → n. accuracy
<input type="checkbox"/> adapt	v. 適合させる, (oneself to ~) ~に順応する
<input type="checkbox"/> admit	v. 認める *→ n. admission 入場許可, 入学許可
<input type="checkbox"/> adopt	v. 採用する, 養子にする
<input type="checkbox"/> affair	n. 出来事, (<~s> 仕事, (漠然とした) 事情
<input type="checkbox"/> affection	n. 愛情, 愛着 → v. affect 影響する, 感動させる
<input type="checkbox"/> afford	v. (経済的・時間的) 余裕がある, 与える
<input type="checkbox"/> alternative	a. 二者択一の, どちらかを選ぶべき → n. 選択肢, 代替案
<input type="checkbox"/> annoy	v. 困らせる, いらいらさせる
<input type="checkbox"/> anticipate	v. 予期する, 楽しみにして待つ
<input type="checkbox"/> anxious	a. (about ~) ~を心配して <for ~ / to do> ~ (すること) を切望して
<input type="checkbox"/> appreciate	v. (価値や本質を) 認識する, 高く評価する
<input type="checkbox"/> appropriate	a. 適切な, 固有の
<input type="checkbox"/> approve	n. 賛成, 認可 → v. approve 賛成する
<input type="checkbox"/> arise	v. 起こる, 生じる
<input type="checkbox"/> aspect	n. 顔つき, 様相, 外観
<input type="checkbox"/> assign	v. 割り当てる, 任命する
<input type="checkbox"/> assume	v. 想定する, 当然~と思う → n. assumption [ə'sʌmpʃən] 仮定, 想定
<input type="checkbox"/> assure	v. 確信させる → n. assurance 保証, 確信
<input type="checkbox"/> attribute	v. (原因が) ~のおかげだと考える → n. attribute 属性, 付属物

Appendix B.

The First Vocabulary Test

第1回 (月 日) 関西大学 大学入試問題集 (赤本) 抜粋単語		点数	点
年 組 番 名前			
【A】各単語の意味を下記の選択肢①～⑩から選び、記号で答えなさい。			
(1) adapt		(1)	_____
(2) admit		(2)	_____
(3) adopt		(3)	_____
(4) alternative		(4)	_____
(5) annoy		(5)	_____
(6) anxious		(6)	_____
(7) appreciate		(7)	_____
(8) arise		(8)	_____
(9) assign		(9)	_____
(10) assure		(10)	_____
【 選択肢 】 ※名詞(<i>n.</i>)=noun 動詞(<i>v.</i>)=verb 形容詞(<i>a.</i>)=adjective 副詞(<i>adv.</i>)=adverb			
①(<i>v.</i>)採用する、養子にする		②(<i>v.</i>) (価値や本質を) 認識する、高く評価する	
③(<i>v.</i>)割り当てる、任命する		④(<i>v.</i>)認める	
⑤(<i>a.</i>)二者択一の、どちらかを選ぶべき (<i>n.</i>)選択肢、代替案			
⑥(<i>a.</i>)～を心配して、～ (すること) を切望して		⑦(<i>v.</i>)起こる、生じる	
⑧(<i>v.</i>)適合させる、～に順応する		⑨(<i>v.</i>)確信させる	
⑩(<i>v.</i>)困らせる、いらいらさせる			