# The Ratios of CEFR-J Vocabulary Usage Compared with GSL and AWL in Elementary EFL Classrooms and Suggestions of Vocabulary Items to be Taught 

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#### Abstract

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The present study examined vocabulary usage in elementary English classrooms in Japan using elementary school corpus. The authors used three wordlists to benchmark the lexical items for four classes in the corpus: the CEFR-J, the General Service List (GSL), and Academic Word List (AWL). The percentage of vocabulary usage belonging to the Level A1 in the CEFR-J was below 15\% (Class A: $12.1 \%$, Class B: $12.6 \%$, Class C: $8.9 \%$, and Class D: $13.6 \%$ ) with no statistical difference between levels. The mean ratio of Level A2 vocabulary items was below 10\%, and all classes showed less than $1 \%$ of vocabulary usage for the Levels B1 and B2. Over $70 \%$ of all vocabulary items in the corpus belonged to the most frequent 1,000 -word band (level 1) of the GSL, while the next most frequent word band (level 2 of the GSL and AWL) accounted for less than $10 \%$. The results suggest that elementary school English teachers should use more vocabulary items in the CEFR-J Level A1. The findings demonstrate that elementary school teachers are less likely to expose their pupils to grammatically well-structured sentences with an abundance of lexical items since the teachers repeatedly use the same lexemes in each class.


Keywords: Corpus Linguistics, Primary Education, CEFR-J, GSL, AWL

## 1. Introduction

Elementary schools in Japan taught English as foreign language activities (FLA) until the end of March 2019, since the Japanese Ministry of Education, Sports, Science, Culture, and Technology (MEXT) stipulated the FLA for grades 5 and 6 in the previous Course of Study for elementary schools. Starting in April 2020, the new Course of Study (MEXT, 2017) defines English as substantial subjects such as music, math, and physical education. Elementary school teachers have to evaluate the pupils' English language performances based on a specific language measurement. The elementary school teachers need a framework to evaluate the pupils' English performance.

The Common European Framework of Reference for Languages (CEFR) can be one of many possibilities to measure pupils' English language performance. Since its inception in Europe in 2001, the CEFR has been an international standard used to evaluate language ability on a six-point scale, taking into account vocabulary levels and activities with "can-do descriptors." It is highly valued in English education, with no exception in primary education. The CEFR lists six language levels, ranging from A1 (starter) to C2 (most advanced): A1 and A2 are for beginners, B1 and B2 for intermediates, and C1 and C2 as advanced language users. Tono (2012) adjusted the CEFR to Japanese English educational settings where teachers and students have a shared language (Japanese) and created the CEFR-J wordlist. Tono (2012) introduced the CEFR-J wordlist as a benchmark of vocabulary items that Japanese learners of English at different levels should learn. Thus, this study examined whether the very first level of lexical items in Level A1 of the CEFR-J, which are suggested to be taught to elementary school students, are sufficiently used and taught in elementary school English classes.

We conducted the present study by creating a series of analysis frameworks to utilize a large-scaled elementary English classroom corpus that the authors started in 2015. The authors collected many elementary English classroom data and compiled them into an annotated corpus. The corpus enabled researchers to examine the effective interactions leading the pupils to acquire target
vocabulary items (Ohashi \& Katagiri, 2016), as well as English lexical items in elementary schools (Katagiri \& Ohashi, 2018).

## 2. Background

According to the surveys reported in Yoshida (2012), a majority of Japanese adults have little confidence in using English, believing that the English classes they took during their school days were useless. Besides, the satisfaction and motivation rates toward English classes for the students belonging to public junior high schools in Japan are getting lower as their grades get higher. According to Yoshida (2012), the findings of a questionnaire conducted by the National Institute for Educational Policy Research (NIER, 2006) indicate that the ratios of students' understanding English are decreasing. For example, 55\% of the first-year students said they understood the English classes, while 47\%-less than one half- of second-year students said they did. By the time the students were in the third year, three out of ten students reported that they could not understand English. Moreover, sixty percent of the firstyear students said they liked studying English in their first year. However, the percentage decreased to $51 \%$ after one year. These reports show that the English educational system in Japan leaves problems to be addressed. Although English became a mandatory subject at primary schools in Japan in April 2020, it is neither necessarily true that just lowering the starting age to learn English guarantees success, nor does exposing children to English in primary schools have positive effects on the attainment of higher competence of English in secondary schools (Yoshida, 2012).

Despite the efforts to boost the English ability of the Japanese, the Test of English as a Foreign Language (TOEFL, Educational Testing Service, 2010) and Test of English for International Communication (TOEIC, Educational Testing Service, 2006) reported the lowest test scores by the Japanese not only in Asia but in the world. These facts raised concerns that the CEFR framework might not suit the current ability of Japanese learners. Facing the current challenges, the CEFR-J was presented, whose progress is reported in Negishi,

Takeda, and Tono (2012); Negishi, Tono, and Fujita (2012) reported the development process of CEFR-J, describing the CEFR-J as a modified version of CEFR branching CEFR A1-B2 levels. A detailed explanation of the CEFR-J is described in Tono (2012). In CEFR-J, preA1 is added before level A1. Level A1 consists of three sub-levels, from A1.1 to A1.3, and level A2 features two sub-levels, A2.1 and A2.2. In the same way, two sets of sub-levels entered levels B1 and B2, respectively, although levels C 1 and C 2 remained the same as in the CEFR (Tono, 2013). Tono presented the CEFR-J wordlist based on the English textbook corpora with the information corresponding to CEFR levels (Retrieved from http://www.cefrj.org/download.html\#cefrj_wordlist). The CEFR-J has currently become a new yardstick to measure the English ability of the Japanese people since its onset.

Many corpus-related studies presented findings in basic vocabulary items to learn, including the introduction of basic vocabulary items to teach, such as the General Service List (GSL) (West, 1958) and Academic Word List (AWL) (Coxhead, 2000). The GSL comprises 2,000 word families, whereas the AWL contains 570. As for the studies of vocabulary items to be taught in primary schools, few studies deal with classroom vocabulary usage.

Studies reported the advantages of connecting corpus compilation with language education (O’Keeffe, McCarthy \& Carter, 2007; Ishikawa, 2008; Akano, Hori \& Tono, 2014). As the MEXT is making progress in its English educational reform plan, elementary school teachers are attempting to figure out how well the students can learn English through FLA. Ohashi and Katagiri (2016) compiled the elementary school corpora to examine the efficacy of classroom activities. They compared the efficacy of explicit instructions with feedback, suggesting the effectiveness of teaching vocabulary items by explicitly integrating well-known stories or topics. Teaching strategies in combination with peer feedback or using drama help primary school students remove their aversions to English, for example, Zhao (2009) demonstrated the efficacy of peer feedback where learners create opportunities for negotiating of forms, correcting errors, and active participation. Target expressions
learned through drama are likely to rest in students’ memory (Rew \& Moon, 2013).

About the materials used in elementary schools, Chujo (2015) compiled an elementary school English textbook corpus. She showed the utility of textbooks used in elementary English schools in Japan and the possible number of vocabulary items that students could learn in elementary and junior high school, respectively. While the study showed that elementary English textbooks were reasonable English materials in Japan, the readers need more information as to whether the vocabulary items included in the textbooks were fully used in a classroom, nor did it reveal the usage ratios of vocabulary items included in CEFR-J classrooms.

The present study utilized the elementary school English corpora presented in Ohashi and Katagiri (2016) and examined the appropriateness of usage ratios of vocabulary items comprising the level A1 of CEFR-J wordlist in Japanese elementary schools.

### 2.1. Research Questions

Using elementary school corpora compiled in (Ohashi \& Katagiri, 2016), this study poses the following research questions.

1. What are the ratios of vocabulary usage of all levels of the CEFR-J wordlist compared with the usage of vocabulary items of the GSL and AWL?
2. Is the usage ratio of vocabulary items of CEFR-J wordlist level A1 reasonable in English educational settings in Japanese elementary schools?

Answering these questions will enable us to know whether the vocabulary items included in level A of the CEFR-J wordlist are sufficiently taught in elementary classrooms and whether the Japanese elementary school English education corresponds to the needs by using CEFR-J wordlists and its can-do descriptors

## 3. Methodology

This section describes the materials, i.e., the elementary school English corpus and the three benchmark wordlists-the CEFR-J, the GSL, and the AWL. The section also explains how the present study analyzes the materials to answer the two research questions.

The present study utilized the elementary school corpora (Ohashi \& Katagiri, 2016) referred to in the previous sections, the wordlists from the CEFR-J, levels A1, A2, B1, and B2, the GSL, and the AWL. This study examined the ratios of vocabulary usage of four levels, A1, A2, B1, and B2, which pertain to the CEFR-J wordlist. We also examined the CEFR-J level A1 vocabulary items observed in the corpus and those that were not included in the corpus then compared them with the usage of vocabulary items belonging to GSL and AWL.

### 3.1. The Elementary School Corpus

Table 1 shows a summary of the elementary school English class corpus (Ohashi \& Katagiri, 2016). It describes the class profiles used for compiling the elementary school corpus. All four classes had two teachers: one homeroom teacher (HRT) and one native English assistant language teacher (ALT)—and while the same ALT taught all the four classes, the HRTs were different for each class. The materials used in each class were almost the same regardless of the school year grades. In each class, the teachers used a smartboard with the textbook, according to the students' grades.

Table 1. Elementary School Class Description Referred from Ohashi and Katagiri (2016)

| Class <br> (year) | Students <br> total | Teachers | Materials | Activity |
| :---: | :---: | :--- | :--- | :--- |
|  |  | Female | 1. Textbook (Hi, <br> friends) 2 2. Electric | Listening to <br> "Elementary <br> Class <br> $1(5)$ |
| 202 | ALT Male | Elackboard with <br> bre (A) <br> audiovisual aids | school in New <br> Zealand" |  |


| Class <br> (year) | Students <br> total | Teachers | Materials | Activity |
| :---: | :---: | :--- | :--- | :--- |
| Class <br> $2(5)$ | 25 | Female <br> ALT Male <br> HRT (B) | 1. Textbook (Hi, <br> friends) 2 . Electric <br> blackboard with <br> audiovisual aids | Listening to <br> "Elementary <br> school in New <br> Zealand" |
| Class | 21 | Female <br> ALT Male <br> HRT (C) | 1. Textbook (Hi, <br> friends) 2 2. Electric <br> blackboard with <br> audiovisual aids | Listening to the <br> story, <br> "Momotaro"b |
| Class <br> $4(6)$ | 18 | Female <br> ALT Male <br> HRT (D) | 1. Textbook (Hi, <br> friends)a. Electric <br> blackboard with <br> audiovisual aids | Listening to the <br> story, <br> "Momotaro"b |

Note. ${ }^{\text {a }}=$ "Hi, friends" is an English education book for elementary schools published by the Ministry of Education, Culture, Sports and Technology. ${ }^{\text {b }}=$ "Momotaro" is a Japanese folk story for children.

Ohashi and Katagiri (2016) compiled the elementary classroom corpus based on the recorded four English as a foreign language (EFL) classes in one public elementary school in Japan. They transcribed the data and classified all the utterances into three categories; Japanese, English, and mixed utterances. They also annotated the tokens of all utterances in the transcriptions with extensible markup language (XML) tags. These annotations helped quantify the elementary school English classroom instruction characteristics.

### 3.2. Benchmark Wordlists

Tables 2 and 3 show the total types of vocabulary items belonging to each level of the CEFR-J wordlist, GSL, and AWL. The CEFR-J wordlist is composed of 7,799 vocabulary items with some words doubly included in different levels; for example, the word "next" is included in both levels A2 and B2. Some words comprise plural meanings with different word classes. Referring to next, for example, the one included in level A2 is described as an adverb or determiner, while the one in level B2 describes next as a pronoun. Accordingly, the procedure of this study includes checking the word class of all the vocabulary items observed in each class.

Table 2. Vocabulary Levels in CEFR-J Wordlist and Total Numbers of Vocabulary Items of Each Level

| Word Levels | Total <br> Numbers | Descriptions of Vocabulary Levels |
| :---: | :---: | :--- |
| A1 | 1,164 | From beginners to lower intermediate |
| A2 | 1,411 | From higher beginners to lower <br> intermediate |
| B1 | 2,446 | From lower intermediate to intermediate |
| B2 | 2,778 | From higher intermediate to advanced |
| All levels | 7,799 |  |

Table 3. GSL and AWL With Total Numbers of All Lexical Items Included

| Word Levels | Total Numbers |
| :---: | :---: |
| GSL List 1 | 1,000 |
| GSL List 2 | 1,000 |
| AWL | 570 |

Note. GSL = General Service List. AWL = Academic Word List.

### 3.3. Analysis Procedure

The following three steps describe how the authors examined the corpus L2 (English) lexemes that also appeared in the benchmark word lists.

First, the authors extracted all English utterances observed in each class included in the elementary school corpus. The corpus included three types of utterances made up of the L1 (uttered in Japanese), the L2 (uttered in English), and the mixture of both the L1 and the L2. These three types of language use were accordingly annotated in an XML style. Such an XML annotation enabled us to distinguish the L2 (English) utterances through XSL transformation (XSLT). The authors used an XML editor, EditiX (version: 2015), to separate the L2 utterances. Then, the authors used Perl scripts to untag the L2 utterances to obtain plain L2 text and count the number of tokens.

Second, we categorized all the vocabulary items into all levels of the CEFR-J wordlist and calculated the usage ratios of vocabulary
items of all levels on the benchmark wordlists, i.e., the GSL and the AWL. We used the RAMGE program for lexical analyses. RANGE was introduced by Nation Paul, available free through the website (https://www.wgtn.ac.nz/lals/about/staff/paul-nation). RANGE can compare a text against vocabulary lists of GSL and AWL to see what words in the text are and are not in the lists, showing what percentage of the items in the text is covered by the lists. It can also compare the vocabulary of two texts to see how much of the same vocabulary they use and where their vocabulary differs. Utilizing this function, we sorted out which vocabulary items from the corpus could be observed in the benchmark wordlists. RANGE program also counted the total number of lexical items of English utterances excerpted from the corpus.

Counting the ratios of the usage of CEFR-J vocabulary items among all the corpus lexical items enabled us to create a list of the vocabulary items used in elementary EFL classrooms in Japan, which also reveals the vocabulary items which were not likely to be taught in elementary classrooms. The final procedure would show what vocabulary items elementary school English teachers should have used. Since we assumed that elementary school English pupils should learn all the lexical items included in CEFR-J level A1, unveiling unused vocabulary items pertaining to level A1 will be helpful.

## 4. Research Findings

### 4.1. Vocabulary Coverage of the Benchmark Wordlists

Table 4 shows the coverage rates of vocabulary items used in classrooms compared to all vocabulary items included in each level of the CEFR-J. The total number of types of all levels observed in each class was compared to the total number of types in each level of the CEFR-J wordlist shown in Table 2. The percentage of vocabulary usage belonging to the level A1 of CEFR-J in all four classes was less than $15 \%$ (Class A, $12.1 \%$; Class B, $12.6 \%$; Class C, $8.9 \%$, and Class D, $13.6 \%$ ), which is the highest among all different levels. The usage of level A2 vocabulary items was lower than 10\%
(Class A, 1.7\%; Class B, 7.5\%; Class C, 1.4\%, and Class D, 2.4\%). As for levels B1 and B2, all classes showed less than one percent of vocabulary usage.

Table 4. The Coverage Rates of Vocabulary Items Used in Classrooms Based on Word Type Compared to All Vocabulary Items Pertaining to All Levels of CEFR-J Wordlist

|  | CEFR-J Wordlist Levels |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Class | A1 (\%) | A2 (\%) | B1 (\%) | B2 (\%) |
| 1 | 11.1 | 1.7 | 0.1 | 0.0 |
| 2 | 11.6 | 1.8 | 0.2 | 0.0 |
| 3 | 8.2 | 1.3 | 0.1 | 0.18 |
| 4 | 12.5 | 2.3 | 0.1 | 0.32 |
| $\chi$ squared | $n s$ | $n s$ | $n s$ | $n s$ |

Tables 5 and 6 describe the total types and tokens of each CEFR-J wordlist level, the GSL, and the AWL observed in classes.

Table 5. Comparison of Word Types and Tokens of Each Level in CEFR-J Wordlist Observed in Each Class

|  | Level |  |  |  | Non-classified |  |
| :---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Class | A1 |  | A2 |  |  | Type |
|  | Token | Type | Token | Type | Token |  |
| 1 | 129 | 528 | 24 | 60 | 21 | 55 |
| 2 | 135 | 651 | 26 | 90 | 23 | 67 |
| 3 | 95 | 721 | 19 | 46 | 10 | 52 |
| 4 | 146 | 1,107 | 33 | 101 | 11 | 51 |


|  | Level |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Class | B1 |  | B2 |  | Token sum |
|  | Type | Token | Type | Token |  |
| 1 | 3 | 11 | 0 | 0 | 654 |
| 2 | 5 | 18 | 0 | 1 | 826 |
| 3 | 3 | 14 | 1 | 5 | 834 |
| 4 | 2 | 45 | 2 | 9 | 1,306 |

Table 6 shows the percentage of specific vocabulary items included in the GSL or the AWL, which were used in all classes (Class 1, $17.2 \%$; Class 2, $22.1 \%$; Class 3 , $10.6 \%$, and Class 4, $9.6 \%$ ). These vocabulary items are proper nouns or numbers, including no delicate lexical items such as technical terms. More than $70 \%$ of all vocabulary items used in all classes belonged to GSL, level 1, while GSL level 2 and AWL accounted for less than 10\%. The total number of tokens in Table 6 includes vocabulary items included in mixed utterances such as "strong ha karada ga tuyoi desyo," ("strong means physically strong"). Ohashi and Katagiri (2016) counted such mixed utterances as mixed words. However, these English words included in the mixed utterances are also counted in Table 6 because this study focuses on English vocabulary usage.

Table 6. Coverage of the Corpus in the GSL and the AWL

| Class | Token sum | Wordlist |  |  | Nonclassified |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | GSL1 | GSL2 | AWL |  |
| 1 | 654 | 523(78.9\%) | 17(2.6\%) | 9(1.4\%) | 105(17.2\%) |
| 2 | 826 | 574(71.6\%) | 37(4.6\%) | 14(1.7\%) | 201(22.1\%) |
| 3 | 834 | 711(81.3\%) | 71(8.1\%) | 0 (0\%) | 52(10.6\%) |
| 4 | 1,306 | 1,098(82.6\%) | 95(7.1\%) | 9(0.7\%) | 104(9.6\%) |

Note. GSL1 = the most frequent 1,000-word band, GSL2 $=$ the second most frequent 1,000 -word band, AWL = the Academic Word List.

### 4.3. Listing Common Vocabulary Items

The following three tables show the frequencies of corpus vocabulary items found in the CEFR-J level A1 wordlist that also appeared in GSL level 1 (Table 8), GSL level 2 (Table 9), and AWL (Table 10). Table 7 shows the frequencies of CEFR-J A1 vocabulary items belonging to GSL Level 1 that were observed in classes. A total of 244 word types were included in this table, meaning that only 244 words out of 1,000 words of level 1 GSL were used in these classes.

Table 7. Frequencies of CEFR-J A1 Vocabulary Items Belonging to GSL Level 1 Observed in Classes

| Word Type | $\begin{gathered} \hline \text { Class } \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Class } \\ 2 \end{gathered}$ | Class | $\begin{gathered} \hline \text { Class } \\ 4 \end{gathered}$ | Word Type | $\begin{gathered} \hline \text { Class } \\ 1 \end{gathered}$ | $\begin{gathered} \text { Class } \\ 2 \end{gathered}$ | Class | $\begin{gathered} \hline \text { Class } \\ 4 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 5 | 0 | 18 | 26 | different | 0 | 0 | 1 | 0 |
| ABOUT | 0 | 0 | 1 | 0 | DO | 5 | 6 | 0 | 0 |
| AFTER | 0 | 1 | 3 | 0 | DOG | 0 | 0 | 2 | 4 |
| afternoon | 0 | 0 | 0 | 13 | DOWN | 1 | 0 | 0 | 3 |
| ALL | 0 | 0 | 1 | 0 | DRAMA | 0 | 6 | 0 | 0 |
| ALMOST | 4 | 1 | 0 | 0 | DREAM | 0 | 2 | 0 | 0 |
| ALSO | 1 | 1 | 0 | 0 | EACH | 1 | 0 | 0 | 0 |
| AM | 0 | 0 | 2 | 28 | EASY | 0 | 0 | 0 | 1 |
| AN | 0 | 0 | 2 | 0 | EGG | 0 | 0 | 0 | 3 |
| AND | 13 | 18 | 16 | 40 | EIGHT | 1 | 1 | 0 | 0 |
| ANIMAL | 0 | 0 | 0 | 0 | eighteen | 1 | 1 | 0 | 0 |
| ANOTHER | 0 | 0 | 0 | 0 | $\begin{aligned} & \text { ELEMENT- } \\ & \text { ARY } \end{aligned}$ | 6 | 4 | 0 | 0 |
| ANSWER | 0 | 0 | 0 | 0 | ELEVEN | 2 | 1 | 0 | 0 |
| ANY | 1 | 0 | 0 | 0 | END | 0 | 1 | 0 | 1 |
| ARE | 10 | 2 | 74 | 54 | Everybody | 0 | 0 | 0 | 1 |
| ART | 0 | 9 | 0 | 0 | EVERYDAY | 0 | 1 | 5 | 49 |
| AS | 1 | 0 | 0 | 0 | EVERYONE | 0 | 3 | 0 | 0 |
| AT | 0 | 1 | 0 | 4 | EXAMPLE | 0 | 0 | 0 | 1 |
| BE | 0 | 0 | 1 | 0 | FEBRUARY | 1 | 0 | 0 | 0 |
| BIG | 0 | 0 | 1 | 2 | FIFTEEN | 1 | 1 | 0 | 3 |
| BIRD | 0 | 0 | 3 | 4 | FIFTY | 0 | 0 | 0 | 9 |
| BLUE | 0 | 0 | 0 | 1 | FINE | 3 | 2 | 4 | 4 |
| BOOK | 0 | 0 | 0 | 3 | FIRST | 1 | 0 | 0 | 0 |
| BOY | 0 | 0 | 1 | 18 | FIVE | 7 | 7 | 0 | 2 |
| BREAD | 0 | 0 | 0 | 1 | FLAG | 0 | 0 | 1 | 1 |


| Word | Class | Class | Class | Class | Word | Class | Class | Class | Class |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | 1 | 2 | 3 | 4 | Type | 1 | 2 | 3 | 4 |
| BRING | 0 | 1 | 12 | 0 | FOR | 2 | 0 | 3 | 6 |
| BUT | 4 | 2 | 0 | 0 | FOREIGN | 2 | 0 | 0 | 0 |
| CALL | 0 | 0 | 0 | 7 | FOUR | 3 | 4 | 0 | 0 |
| CAN | 3 | 2 | 0 | 0 | FOURTEEN | 1 | 1 | 0 | 0 |
| CARE | 0 | 0 | 12 | 17 | FRIDAY | 14 | 20 | 0 | 0 |
| CHOOSE | 3 | 0 | 0 | 0 | FRIEND | 0 | 0 | 2 | 12 |
| CIRCLE | 0 | 0 | 0 | 4 | FROM | 0 | 0 | 1 | 1 |
| CLASS | 5 | 2 | 4 | 2 | GARDEN | 0 | 0 | 0 | 6 |
| COLD | 0 | 0 | 1 | 0 | GO | 3 | 4 | 16 | 24 |
| COLOR | 0 | 0 | 0 | 5 | GOAL | 0 | 0 | 0 | 1 |
| COULD | 0 | 0 | 0 | 1 | GOOD | 8 | 5 | 31 | 36 |
| CUTE | 0 | 0 | 1 | 1 | GRANDMA | 0 | 0 | 6 | 1 |
| DANCE | 1 | 3 | 0 | 0 | GRANDPA | 0 | 0 | 3 | 0 |
| DATE | 1 | 1 | 1 | 1 | GREAT | 0 | 0 | 0 | 2 |
| DAY | 1 | 1 | 1 | 0 | GROUP | 0 | 3 | 0 | 0 |
| HAND | 3 | 0 | 0 | 0 | MEAN | 0 | 0 | 3 | 0 |
| HAPPY | 5 | 2 | 10 | 4 | MEETING | 0 | 5 | 0 | 0 |
| HAVE | 5 | 0 | 0 | 1 | MINUTE | 0 | 1 | 0 | 0 |
| HE | 0 | 0 | 0 | 8 | MOM | 0 | 1 | 0 | 0 |
| HELLO | 0 | 4 | 10 | 5 | MONDAY | 13 | 24 | 0 | 0 |
| HERE | 1 | 1 | 32 | 32 | MONKEY | 0 | 0 | 1 | 1 |
| HI | 0 | 0 | 7 | 3 | MORE | 4 | 0 | 7 | 2 |
| HIGH | 3 | 3 | 0 | 0 | MORNING | 8 | 0 | 6 | 0 |
| HIS | 0 | 0 | 0 | 6 | MOST | 0 | 0 | 0 | 1 |
| HOME | 5 | 5 | 4 | 3 | MOUSE | 0 | 2 | 0 | 0 |
| HOW | 4 | 5 | 10 | 8 | MR | 4 | 4 | 4 | 3 |
| HUNGRY | 3 | 3 | 1 | 1 | MUCH | 0 | 0 | 1 | 3 |


| Word | Class | Class | Class | Class | Word | Class | Class | Class | Class |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | 1 | 2 | 3 | 4 | Type | 1 | 2 | 3 | 4 |
| HURRY | 0 | 2 | 0 | 0 | MUSIC | 14 | 16 | 0 | 0 |
| I | 3 | 0 | 26 | 36 | MY | 0 | 0 | 2 | 17 |
| IF | 0 | 0 | 0 | 2 | NAME | 0 | 1 | 0 | 5 |
| important | 0 | 0 | 0 | 1 | NEW | 3 | 3 | 0 | 0 |
| IN | 3 | 4 | 0 | 5 | NICE | 0 | 1 | 0 | 1 |
| introduce | 0 | 0 | 0 | 1 | NINE | 1 | 1 | 0 | 0 |
| IS | 3 | 5 | 7 | 20 | nineteen | 1 | 1 | 0 | 0 |
| IT | 0 | 0 | 0 | 2 | NO | 13 | 4 | 0 | 5 |
| January | 3 | 4 | 2 | 3 | NOT | 4 | 3 | 0 | 5 |
| JOB | 0 | 0 | 0 | 5 | NUMBER | 2 | 2 | 0 | 0 |
| JUST | 0 | 0 | 0 | 1 | OF | 3 | 0 | 1 | 1 |
| KNOW | 0 | 0 | 0 | 2 | OFF | 0 | 1 | 0 | 0 |
| language | 3 | 0 | 0 | 0 | OK | 1 | 47 | 24 | 54 |
| LAST | 0 | 3 | 0 | 3 | OLD | 1 | 2 | 2 | 2 |
| LATER | 0 | 0 | 3 | 35 | ONCE | 2 | 8 | 5 | 0 |
| LET | 1 | 2 | 13 | 28 | ONE | 11 | 2 | 2 | 2 |
| LISTEN | 0 | 2 | 0 | 4 | ONLY | 2 | 2 | 0 | 0 |
| LITTLE | 0 | 0 | 1 | 1 | OPEN | 0 | 0 | 0 | 4 |
| LONG | 0 | 0 | 0 | 2 | OR | 1 | 2 | 0 | 0 |
| LOOK | 0 | 0 | 13 | 3 | OUT | 1 | 0 | 0 | 0 |
| LOVE | 0 | 0 | 1 | 0 | OWN | 0 | 1 | 0 | 0 |
| LUNCH | 0 | 2 | 0 | 0 | PAGE | 0 | 0 | 0 | 7 |
| MAKE | 0 | 2 | 0 | 1 | PAIR | 0 | 2 | 0 | 0 |
| MAN | 0 | 0 | 1 | 1 | PEOPLE | 5 | 0 | 0 | 0 |
| MATH | 18 | 15 | 0 | 0 | PERSON | 0 | 1 | 0 | 0 |
| ME | 0 | 0 | 0 | 6 | PLAY | 1 | 0 | 0 | 0 |
| PLEASE | 4 | 4 | 21 | 12 | TEN | 1 | 1 | 0 | 0 |


| Word | Class | Class | Class | Class | Word | Class | Class | Class | Class |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | 1 | 2 | 3 | 4 | Type | 1 | 2 | 3 | 4 |
| PRACTICE | 3 | 4 | 0 | 0 | THANK | 6 | 7 | 14 | 7 |
| PUT | 1 | 0 | 0 | 0 | THAT | 1 | 1 | 5 | 3 |
| QUESTION | 2 | 1 | 0 | 0 | THE | 8 | 3 | 4 | 14 |
| READ | 0 | 0 | 0 | 2 | THEM | 0 | 1 | 0 | 0 |
| READY | 3 | 2 | 0 | 2 | THEN | 2 | 1 | 0 | 0 |
| REALLY | 1 | 0 | 0 | 0 | THING | 0 | 0 | 0 | 1 |
| RED | 0 | 0 | 0 | 5 | THIRTEEN | 1 | 1 | 0 | 0 |
| REPEAT | 0 | 0 | 3 | 1 | THIRTY | 2 | 2 | 0 | 0 |
| REVIEW | 0 | 0 | 0 | 1 | THIS | 0 | 9 | 3 | 3 |
| RIGHT | 2 | 1 | 0 | 1 | THREE | 10 | 6 | 0 | 2 |
| ROOM | 0 | 0 | 2 | 0 | thursday | 19 | 16 | 0 | 0 |
| SAD | 2 | 2 | 1 | 1 | TIME | 1 | 2 | 0 | 1 |
| SAME | 4 | 1 | 0 | 1 | TIRED | 1 | 3 | 1 | 1 |
| SATURDAY | 3 | 8 | 0 | 0 | TO | 5 | 3 | 10 | 14 |
| SAY | 1 | 4 | 0 | 0 | TODAY | 4 | 3 | 3 | 6 |
| SCHOOL | 3 | 5 | 0 | 0 | TOGETHER | 0 | 0 | 0 | 2 |
| SCIENCE | 12 | 11 | 0 | 0 | TOO | 0 | 0 | 1 | 1 |
| SEAT | 0 | 0 | 0 | 1 | TOPIC | 2 | 0 | 0 | 0 |
| SECOND | 1 | 0 | 0 | 0 | TUESDAY | 14 | 19 | 0 | 0 |
| SEE | 2 | 0 | 7 | 19 | TWELVE | 1 | 1 | 0 | 0 |
| SEVEN | 0 | 1 | 0 | 0 | TWENTY | 1 | 1 | 0 | 0 |
| SEVEN | 1 | 1 | 0 | 0 | TWO | 11 | 7 | 0 | 0 |
| Seventeen | 1 | 1 | 0 | 0 | TYPE | 6 | 0 | 0 | 0 |
| SING | 0 | 0 | 0 | 1 | UP | 1 | 2 | 1 | 6 |
| SIT | 0 | 0 | 0 | 2 | VERY | 0 | 1 | 10 | 10 |
| SIX | 3 | 8 | 0 | 0 | WANT | 2 | 0 | 0 | 0 |
| SIXTEEN | 1 | 1 | 0 | 0 | WARM | 0 | 1 | 0 | 0 |


| Word | Class | Class | Class | Class | Word | Class | Class | Class | Class |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | 1 | 2 | 3 | 4 | Type | 1 | 2 | 3 | 4 |
| so | 14 | 12 | 2 | 3 | WAS | 0 | 0 | 0 | 4 |
| SOCIAL | 10 | 13 | 0 | 0 | WE | 13 | 5 | 42 | 26 |
| SOME- <br> THING | 0 | 0 | 0 | 1 | WEATHER | 1 | 1 | 1 | 0 |
| SONG | 0 | 0 | 0 | 2 | WEDNES- <br> DAY | 21 | 35 | 2 | 1 |
| SOON | 0 | 0 | 1 | 1 | WEEK | 2 | 0 | 0 | 0 |
| SORRY | 0 | 0 | 3 | 3 | welcome | 0 | 0 | 3 | 3 |
| STAND | 0 | 0 | 1 | 3 | WHAT | 1 | 11 | 9 | 5 |
| START | 3 | 3 | 3 | 5 | WHEN | 2 | 0 | 0 | 1 |
| STAY | 0 | 0 | 14 | 16 | WILL <br> (modal auxiliary) | 2 | 0 | 0 | 2 |
| STOP | 0 | 0 | 0 | 3 | WOMAN | 0 | 0 | 1 | 1 |
| STRONG | 0 | 0 | 33 | 36 | WORRY | 0 | 0 | 1 | 1 |
| STUDY | 1 | 13 | 0 | 0 | WOULD (modal auxiliary) |  | 1 | 0 | 0 |
| SUBJECT | 2 | 8 | 0 | 0 | WRITE | 0 | 2 | 0 | 0 |
| SUNDAY | 6 | 4 | 0 | 0 | YES | 0 | 0 | 11 | 15 |
| SUNNY | 1 | 1 | 1 | 2 | YOU | 22 | 17 | 59 | 70 |
| TAKE | 0 | 0 | 12 | 11 | YOUR | 3 | 2 | 0 | 2 |

Tables 8 and 9 indicate the ratios of CEFR-J A1 vocabulary items used in classes, which belong to GSL level 2 and AWL, respectively. Only 24 words out of 1,000 GSL level 2 vocabulary items were used in classes, while the total number of words belonging to AWL used in classes is much lower, with only four words out of 570 vocabulary items. As for other vocabulary items of CEFR-J A2, B1, and B2 used in classes, Appendices A and B show the usage ratios of each level. Table 10 shows frequencies of word types that the GSL and the AWL did not cover.

Table 8. The Frequency of CEFR-J A1 Vocabulary Items Belonging to Level 2 GSL Observed in Classes

| Word type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| AFTERNOON | 0 | 0 | 0 | 13 |
| DANCE | 1 | 3 | 0 | 0 |
| FLAG | 0 | 0 | 1 | 1 |
| GRANDMA | 0 | 0 | 6 | 1 |
| GRANDPA | 0 | 0 | 3 | 0 |
| HELLO | 0 | 4 | 10 | 5 |
| HI | 0 | 0 | 7 | 3 |
| HUNGRY | 3 | 3 | 0 | 1 |
| HURRY | 0 | 2 | 0 | 0 |
| LUNCH | 0 | 2 | 0 | 0 |
| MONKEY | 0 | 1 | 0 | 1 |
| MOUSE | 0 | 2 | 0 | 0 |
| NICE | 0 | 1 | 0 | 1 |
| PAIR | 0 | 2 | 0 | 0 |
| PRACTICE | 3 | 3 | 0 | 0 |
| REPEAT | 0 | 0 | 3 | 1 |
| REVIEW | 0 | 0 | 0 | 1 |
| SAD | 2 | 2 | 1 | 1 |
| SORRY | 0 | 0 | 3 | 14 |
| THANK | 6 | 7 | 1 | 3 |
| TIRED | 1 |  | 0 | 1 |
| WARM | 0 |  |  | 0 |
|  |  |  |  |  |

Table 9. The Frequency of CEFR-J A1 Vocabulary Items Belonging to AWL Observed in Classes

| Word type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| DRAMA | 0 | 6 | 0 | 0 |
| GOAL | 0 | 0 | 0 | 1 |
| JOB | 0 | 0 | 0 | 5 |
| TOPIC | 2 | 0 | 0 | 0 |

Table 10. The Frequency of CEFR-J A1 Vocabulary Items Observed in Classes out of GSL or AWL

| Word type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| CUTE | 0 | 0 | 1 | 1 |
| ELEMENTARY | 6 | 4 | 0 | 0 |
| MATH | 18 | 15 | 0 | 0 |
| OK | 66 | 81 | 24 | 54 |

No CEFR-J wordlist levels covered word types concerning country names or cross-cultural materials in the elementary school English class corpus. For example, class 1 showed calligraphy ( 12 times) and Japanese (10), while class 2 showed art (9), Friday (20), Wednesday (35), subject (8), and Monday (24) in Bingo games.

The vocabulary items frequently observed in Classes 3 and 4 were all included in the story-telling of folklore, "Momotaro" (see Table 1); for example, the CEFR-J level A1 frequently observed such word types as strong (33 times), boy (12), good (31), happy (10), go (16 ) in Class 4, and brave (A2_34 times) and strong (A1_36 times) in Class 3. Classes 3 and 4 also used an English song, the vocabulary items of which frequently appeared in the corpus, such as "every day" (A1_49 times) and "strawberry" (B1_44 times) in class 4.

## 5. Discussion and Conclusions

The first research question focused on the ratios of vocabulary usage of all levels of the CEFR-J wordlist compared with the usage of the GSL and AWL vocabulary items. Chi-squared test results (Tables 4) showed no variation in usage ratios among classes. The average ratios of each level are: $\mathrm{Al}, 10.9 \%, \mathrm{~A} 2,1.8 \%, \mathrm{~B} 1,0.13 \%$, and $\mathrm{B} 2,0.13 \%$. We randomly extracted these four classes from the elementary school corpus and determined that the ratios, as well as the tendency of vocabulary usage, have less significant differences.

The second research question was related to whether or not the usage ratio of vocabulary items of CEFR-J wordlist level A1 is reasonable in Japanese elementary schools. The CEFR-J level A1
wordlist consists of essential vocabulary items for teaching elementary school English. However, observing the vocabulary usage in Table 4, the ratios of level Al are lower than $15 \%$ in each class, which implies that the elementary school corpus did not include all the essential vocabulary items that the teachers needed to teach. The tendency was revealed that the total numbers of types in each class are small compared to the ones of total tokens, especially in A1 (shown in table 4). The reason is that teachers are likely to repeatedly use the same vocabulary items, contributing to the small ratios observed in Table 4. Observing that the total numbers of vocabulary types used in each class are small and teachers are likely to use the same vocabulary items repeatedly, students are less exposed to grammatically well-structured sentences with an abundance of vocabulary items.

The results of this study suggest that the ratios of the usage of vocabulary items in the CEFR-J level A1 are comparatively low. Thus, elementary school English teachers should consider teaching more variety of the level A1vocabulary items in elementary English classes. A lack of English utterances compared to the Japanese also contributes to the small ratios of vocabulary usage. The challenges that Ohashi and Katagiri (2016) pointed out correspond to the limited vocabulary usage shown in Table 4.

These findings suggest that elementary school English teachers should use a broader range of vocabulary items belonging to the CEFR-J wordlist level Al and should make an effort to increase English statements instead of using Japanese. If teachers use more English utterances intentionally with a variety of level A1 vocabulary items, the students can learn more vocabulary items belonging to the level A1 in CEFR-J wordlist.

The activities facilitating the vocabulary usage observed in the four classes are a) Bingo games, b) watching videos about school routines in New Zealand, and, c) listening to stories of Momotaro. These activities involved interactions not only between the teachers and students but also the ones among students alone. In classes 1 and 2 alike, students started with Bingo games followed by watching a video and learning about school life in New Zealand. Vocabulary
items in the Bingo game focused on the subjects in school and each student made an imaginary curriculum. The words frequently used in Class 1, such as science (12 times, B1 level) and economics (6 times, B1 level), were all observed through the Bingo game, which can be considered one of the activities that would elicit active, spontaneous utterances from students. As each student stated one word while taking turns in Bingo games, we saw many occurrences of the word "next" belonging to level A2 (for example, 23 times in Class 2).

In Classes 3 and 4, students sang a song and listened to Japanese folklore, Momotaro, in English, repeating some sentences stated by characters in the story. Students were learning with a textbook with repeated exposure to the same vocabulary items so that the students gradually learned those words. Below is an excerpt from the textbook.

I am Momotaro, strong and brave.
I am a dog, strong and brave.
I am a monkey, strong and brave.
I am a bird, strong and brave.
We are strong and brave.

After repeating the above sentences in a story, students practiced playing the main character, Momotaro, a brave boy, ending with an active pair practice. Observing some students continuing to practice even after class, having students state some essential vocabulary items through playing English drama leads students to make more spontaneous English utterances.

As students are familiar with the story of Momotaro, they have a full understanding of the story beforehand, such as the scenes in which Momotaro came across some strong and brave animals in his journey. The teachers considered using such famous folklores as Momotaro as one of the advantages because teachers could convey the meanings of some vocabulary items comparatively easily.

About the benefits of using English songs in class, one part of the song, "He eats strawberry every day. Every day, every day, every day, every day," contributed to students' memorizing "every day." Some
students kept singing this phrase in the song with their friends even after class, which implies that repeatedly occurring words could stay in students' memories, leading to spontaneous output. As Rew and Moon (2013) pointed out the efficacy of using English drama for learning target expressions, the present study implied that students are more likely to output and remember some important lexical items introduced in combination with well-known stories. What should be noted is that the target vocabulary items or expressions should be repeatedly used both by teachers and students themselves.

While teachers tend to depend on Japanese, which decreases students' ability to listen to English words, a shared language with students in a classroom helps students build cognitive skills in vocabulary usage. Simple games such as Bingo seem to elicit both Japanese and English interactions among students, leading to scaffolding where more knowledgeable peers support the other students. Such peer support enables all students to learn through the Zone of Proximal Development suggested by Vygotsky (1978). Figure 1 is the excerpt of interactions during the Bingo games, through which students would understand the meaning of specific vocabulary items with peers' assistance and used them. In a series of interactions among students, they asked each other to reach the correct meaning of vocabulary items.

The students in the corpus tried to fully use the English vocabulary items in the Bingo games process. The instructors took advantage of these games through which students could learn more vocabulary items belonging to the A1 level that would have slipped through the textbook materials in a regular English classroom. Such games as Bingo can cover a variety of vocabulary items according to the given theme, and utilizing these activities could be the clue to addressing the problem of teachers' limited use of vocabulary items. Additionally, teachers can also expect supports from peers to facilitate students' learning vocabulary items. This study's implications support the benefits of interactions involving feedback from teachers, pointed out in Ohashi and Katagiri (2016). Bingo games expand a variety of vocabulary usage. However, we need to note that unless elementary school English teachers use each
vocabulary item appropriately, students might wrongly memorize them. For example, some students recognize "physical education" as P. E. without noticing that the latter is an abbreviation of the former, suggesting we should avoid abbreviation when teaching in elementary schools.

Teacher: Ok, subject BINGO, subject BINGO. OK?
Teacher: Okay? Ja, [trans: then.] Number one.
Pupil: Wednesday, science.
Teacher: Wednesday Science.
Pupil: Suiyobi rika desuka? [trans: Wednesday science, ok?]
Teacher: Ok, next, Sho [the pupil's name].
Pupil: P.E.
Teacher: Ok, next.
Pupil: Monday, math.
Pupil: Eh? Nezumi? [trans: What? Mouse?]
Pupil: Chgauyo, mouse wa nezui. Math dayo. Sansu. [trans: No. Mouse is a different word. It is math.]
Figure 1. Untagged Corpus Transcription Sample

As a whole, the ratios of vocabulary items of level A1 CEFR-J wordlist used in the actual English education in elementary school are not sufficient, and this is one of the challenges to be addressed. This study's outcomes include the possibility of initiating more activities involving a variety of vocabulary items that students can intentionally use. The activities covered in this study, such as Bingo or playing roles of familiar characters in folklore, facilitated the usage of some vocabulary items of the CEFR-J wordlist levels A1 and A2, suggesting the efficacy of integrating those activities in the English education curricula of elementary schools. These activities also elicit interactions where students help each other learn vocabulary through scaffolding. Adding activities where teachers can introduce a variety of vocabulary items is recommended to augment a broader range of vocabulary in a classroom. Teachers' efforts to increase English utterances are also supportive. The findings also suggest that the teachers intentionally add vocabulary items that were not observed in tables 7, 8, 9, and 10 in these activities because there are a number of vocabulary items of level

A1 in CEFR-J wordlist that teachers are not likely to use.
Recording the same classes throughout one whole semester will provide more accurate data of vocabulary usage, enabling us to unveil which vocabulary items contained in CEFR-J wordlist level A1 the elementary school English teachers are likely to miss. Creating a wordlist of those vocabulary items-which teachers are unlikely to use in a classroom-may help facilitate a wider variety of vocabulary usage. Data from no more than four classes is not sufficient to create such a large-scale wordlist, which is a limitation of the current study. A full set of data of the same classes during a full semester, which is challenging to gain, might provide more accurate ratios of vocabulary usage. This is what we expect to conduct as further study.

Compiling an elementary school corpus at a larger scale is worth conducting because it enables us to explore the actual vocabulary usage and the efficacy of interactions occurring in a classroom. Integrating the larger-scale elementary school English corpus with corpora of middle school English corpus is also possible in exploring the linkage between the usage of vocabulary items in elementary and middle schools. We hope that the next phase of this study, using a larger-scale elementary school English corpus, will further examine the vocabulary usage in a classroom. With the findings from such a study, teachers would be able to teach their elementary students more vocabulary items corresponding to CEFR-J.

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## Appendix

## Appendix A:

The Frequency of CEFR-J A2 Vocabulary Items Belonging to GSL, AWL, and Others Observed in Classes

Appendix A1. The Frequency of CEFR-J A2 Vocabulary Items Belonging to GSL Level 1

| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| AFTER (adverb) | 0 | 1 | 3 | 5 |
| ALL | 0 | 0 | 1 | 0 |
| AS | 1 | 0 | 0 | 0 |
| CITIZEN | 3 | 0 | 0 | 0 |
| CLEAR | 5 | 0 | 0 | 0 |
| COLORFUL | 0 | 0 | 0 | 5 |
| COUNT | 0 | 1 | 0 | 1 |
| COUNTRY | 3 | 0 | 0 | 0 |
| DANGEROUS | 0 | 0 | 2 | 0 |
| DEAD | 4 | 0 | 0 | 0 |
| DONE | 5 | 0 | 0 | 13 |
| DRAW | 1 | 0 | 0 | 3 |
| DREAM | 0 | 2 | 0 | 0 |
| EARLY (adjective) | 1 | 0 | 0 | 29 |
| EFFECT | 0 | 0 | 0 | 5 |
| EITHER | 1 | 0 | 0 | 3 |
| ELSEWHERE | 2 | 0 | 0 | 0 |
| END (verb) | 0 | 1 | 0 | 0 |


| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :---: | :---: | :---: | :---: | :---: |
| ENDING | 0 | 0 | 0 | 1 |
| ENOUGH | 8 | 0 | 0 | 3 |
| EXCEPT | 0 | 0 | 0 | 1 |
| FACE (verb) | 2 | 0 | 0 | 0 |
| FEEL | 1 | 0 | 0 | 0 |
| FIGHTER | 1 | 0 | 0 | 9 |
| FISHERMAN | 3 | 0 | 0 | 4 |
| FIT | 1 | 0 | 0 | 0 |
| FIX | 0 | 0 | 0 | 2 |
| FLIGHT | 7 | 0 | 0 | 0 |
| FORCE | 0 | 0 | 0 | 6 |
| FOREST | 2 | 0 | 0 | 0 |
| FORTUNE | 2 | 0 | 0 | 0 |
| FREEDOM | 3 | 0 | 0 | 0 |
| FRIENDSHIP | 0 | 0 | 0 | 11 |
| FRONT | 0 | 0 | 0 | 1 |
| FULLY | 14 | 0 | 0 | 0 |
| GAME | 0 | 3 | 0 | 0 |
| GAS | 0 | 0 | 0 | 6 |
| GIVEN | 0 | 0 | 0 | 1 |
| GOLD (noun) | 0 | 0 | 0 | 1 |
| GOLDEN | 3 | 0 | 0 | 0 |
| GREATLY | 0 | 0 | 0 | 2 |
| HAPPILY | 2 | 0 | 1 | 0 |
| HAPPINESS | 0 | 0 | 0 | 1 |
| HARDLY | 0 | 0 | 0 | 4 |
| HEAD (verb) | 5 | 0 | 0 | 8 |
| HEATING | 5 | 0 | 0 | 0 |
| HERE | 0 | 1 | 32 | 0 |
| HERSELF | 0 | 0 | 0 | 32 |
| HIGH | 0 | 3 | 0 | 0 |
| HIGHWAY | 1 | 0 | 0 | 0 |
| HOLD | 3 | 0 | 0 | 6 |
| HOME | 0 | 5 | 4 | 0 |


| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :---: | :---: | :---: | :---: | :---: |
| HONOR | 0 | 0 | 0 | 3 |
| HOWEVER | 0 | 0 | 0 | 8 |
| HUNDRED | 4 | 0 | 0 | 0 |
| ILL | 0 | 0 | 0 | 2 |
| IMPORTANTLY | 3 | 0 | 0 | 1 |
| IN (adverb) | 0 | 4 | 0 | 0 |
| INCH | 0 | 0 | 0 | 5 |
| INCREASE | 3 | 0 | 0 | 0 |
| ITSELF | 0 | 0 | 0 | 2 |
| JOY | 0 | 0 | 0 | 3 |
| KILLER | 0 | 0 | 0 | 1 |
| KIND (adjective) | 3 | 0 | 0 | 0 |
| KNOWLEDGE | 0 | 0 | 0 | 2 |
| LATEST | 0 | 0 | 0 | 35 |
| LATTER | 3 | 0 | 0 | 0 |
| LET | 0 | 2 | 13 | 0 |
| LETTER | 0 | 0 | 0 | 28 |
| LIE | 1 | 0 | 0 | 1 |
| LIKELY | 0 | 0 | 0 | 12 |
| LIVELY | 0 | 0 | 0 | 1 |
| LOSE | 0 | 0 | 0 | 3 |
| LOW | 0 | 0 | 0 | 5 |
| MAIN | 0 | 0 | 0 | 2 |
| MAKER | 0 | 0 | 0 | 1 |
| MANNER | 0 | 0 | 0 | 1 |
| MOST | 0 | 0 | 0 | 2 |
| MOSTLY | 0 | 0 | 0 | 1 |
| MOVE | 13 | 0 | 0 | 0 |
| MR | 4 | 4 | 4 | 0 |
| MS | 8 | 5 | 4 | 3 |
| MUSICAL | 0 | 0 | 0 | 3 |
| MYSELF | 0 | 0 | 0 | 17 |
| NATION | 4 | 0 | 0 | 5 |
| NATIONAL | 4 | 0 | 0 | 0 |


| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :---: | :---: | :---: | :---: | :---: |
| NATIVE | 14 | 0 | 0 | 0 |
| NEXT | 0 | 23 | 0 | 0 |
| NOBODY | 3 | 0 | 0 | 5 |
| NORTH | 1 | 0 | 0 | 0 |
| NOTICE | 1 | 0 | 0 | 5 |
| NOWADAYS | 13 | 0 | 0 | 0 |
| OFF | 4 | 1 | 0 | 1 |
| OIL | 2 | 0 | 0 | 4 |
| ON (adverb) | 3 | 0 | 0 | 2 |
| OPERATE | 1 | 0 | 0 | 4 |
| OPPORTUNITY | 1 | 0 | 0 | 0 |
| ORDER | 2 | 0 | 0 | 0 |
| ORGANISE | 11 | 0 | 0 | 0 |
| ORGANISED | 2 | 0 | 0 | 0 |
| OURSELVES | 1 | 0 | 0 | 0 |
| OWN | 0 | 1 | 0 | 0 |
| PAINTER | 0 | 0 | 0 | 7 |
| PARTLY | 1 | 0 | 0 | 0 |
| PLEASANT | 0 | 0 | 0 | 3 |
| PLEASED | 0 | 0 | 0 | 12 |
| POINT | 1 | 0 | 0 | 0 |
| POPULAR | 1 | 0 | 0 | 0 |
| POSITION | 4 | 0 | 0 | 0 |
| RATHER | 1 | 0 | 0 | 0 |
| REALISE | 0 | 0 | 0 | 2 |
| REALIZE | 2 | 0 | 0 | 0 |
| RECENTLY | 3 | 0 | 0 | 0 |
| REMAIN | 1 | 0 | 0 | 5 |
| RIGHT | 0 | 1 | 0 | 0 |
| RING | 0 | 0 | 0 | 1 |
| ROUNDABOUT | 2 | 0 | 0 | 0 |
| SAFE | 0 | 0 | 0 | 36 |
| SCENE | 0 | 0 | 0 | 1 |
| SCIENTIFIC | 3 | 0 | 0 | 0 |


| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :---: | :---: | :---: | :---: | :---: |
| SEASIDE | 1 | 0 | 0 | 0 |
| SECOND | 1 | 0 | 0 | 1 |
| SEEM | 12 | 0 | 0 | 19 |
| SEND | 0 | 0 | 0 | 3 |
| SEPARATE | 1 | 0 | 0 | 0 |
| SET | 2 | 0 | 0 | 0 |
| SHINE | 1 | 0 | 0 | 0 |
| SHOOT | 1 | 0 | 0 | 0 |
| SILENTLY | 1 | 0 | 0 | 0 |
| SINGING | 0 | 0 | 0 | 1 |
| SINGLE | 0 | 0 | 0 | 1 |
| SITUATION | 0 | 0 | 0 | 2 |
| SNOW | 0 | 0 | 0 | 1 |
| SO | 0 | 12 | 0 | 0 |
| SOCIAL | 0 | 13 | 0 | 0 |
| SOCIETY | 3 | 0 | 0 | 3 |
| SOFT | 1 | 0 | 0 | 0 |
| SOLDIER | 2 | 0 | 0 | 0 |
| SOMEWHERE | 14 | 0 | 0 | 1 |
| SOUND | 10 | 0 | 0 | 1 |
| STATE | 0 | 0 | 0 | 5 |
| STEP | 0 | 0 | 0 | 16 |
| STORE | 0 | 0 | 0 | 3 |
| STRANGER | 0 | 0 | 5 | 0 |
| STRENGTH | 3 | 0 | 0 | 0 |
| STRONGLY | 0 | 0 | 0 | 36 |
| SUGGEST | 10 | 0 | 0 | 0 |
| SUNLIGHT | 2 | 0 | 0 | 0 |
| SUPPORT | 0 | 0 | 0 | 2 |
| SWEET | 6 | 0 | 0 | 0 |
| TEAR | 1 | 0 | 0 | 11 |
| THEIRS | 0 | 0 | 0 | 14 |
| THEREFORE | 0 | 0 | 0 | 2 |
| THIRD | 1 | 0 | 0 | 1 |


| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :---: | :---: | :---: | :---: | :---: |
| THOUGH | 0 | 0 | 0 | 3 |
| THOUSAND | 2 | 0 | 0 | 0 |
| TILL | 2 | 0 | 0 | 0 |
| TOWARD | 10 | 0 | 0 | 1 |
| TRADE | 19 | 0 | 0 | 0 |
| TRAINING | 1 | 0 | 0 | 0 |
| TRAVEL | 5 | 0 | 0 | 0 |
| TROUBLE | 4 | 0 | 0 | 0 |
| UNDERSTAND | 14 | 0 | 0 | 0 |
| UNFAIR | 1 | 0 | 0 | 3 |
| UNFORGETTABLE | 1 | 0 | 0 | 0 |
| UNHAPPY | 11 | 0 | 0 | 0 |
| UNIMPORTANT | 6 | 0 | 0 | 0 |
| UNIVERSITY | 1 | 0 | 0 | 0 |
| UP | 0 | 2 | 1 | 0 |
| UPON | 0 | 0 | 0 | 6 |
| VALUE | 1 | 0 | 0 | 0 |
| VIEW | 0 | 0 | 0 | 10 |
| WAVE | 0 | 0 | 0 | 4 |
| WEALTH | 0 | 0 | 0 | 26 |
| WEEKLY | 0 | 0 | 0 | 1 |
| WEST | 2 | 0 | 1 | 3 |
| WHAT | 0 | 11 | 9 | 0 |
| WHATEVER | 13 | 0 | 0 | 5 |
| WHILE | 21 | 0 | 0 | 1 |
| WHOLE | 2 | 0 | 0 | 0 |
| WIDELY | 1 | 0 | 0 | 0 |
| WINDY | 0 | 0 | 0 | 2 |
| WONDER | 0 | 0 | 0 | 1 |
| YOUTH | 0 | 0 | 0 | 2 |

Appendix A2. The Frequency of CEFR-J A2 Vocabulary Items Belonging to GSL Level 2

| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| BRAVE | 0 | 0 | 18 | 34 |


| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| HEY | 1 | 0 | 0 | 0 |
| HURRY | 0 | 2 | 0 | 0 |
| NOON | 0 | 0 | 0 | 2 |
| PERFECT | 0 | 0 | 0 | 1 |
| TITLE | 0 | 0 | 0 | 1 |
| WORRY | 0 | 0 | 1 | 1 |

Appendix A3. The Frequency of CEFR-J A2 Vocabulary Items Belonging to AWL

| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| MILITARY | 0 | 0 | 1 | 0 |
| NEGATIVE | 0 | 0 | 1 | 0 |
| NORMAL | 0 | 0 | 1 | 0 |
| OVERSEAS | 0 | 0 | 1 | 0 |
| PHYSICAL | 0 | 0 | 2 | 0 |
| PLUS | 0 | 0 | 1 | 0 |
| PRECISE | 0 | 0 | 1 | 0 |
| PREDICT | 0 | 0 | 2 | 0 |
| SCHEDULE | 0 | 3 | 0 | 0 |
| TEXT | 0 | 0 | 0 | 3 |

Appendix A4. The Frequency of Other CEFR-J A2 Vocabulary Items

| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| AH | 1 | 2 | 1 | 1 |
| CRAZY | 0 | 0 | 1 | 5 |
| DENTIST | 1 | 0 | 0 | 0 |
| DESSERT | 0 | 0 | 0 | 5 |
| EARRING | 1 | 0 | 0 | 0 |
| ELEMENTARY | 1 | 4 | 0 | 0 |
| ELEVATOR | 6 | 0 | 0 | 0 |
| EMBARRASSING | 1 | 0 | 0 | 0 |
| ENDANGERED | 1 | 0 | 0 | 0 |
| EPISODE | 1 | 0 | 0 | 0 |
| ESCALATOR | 1 | 0 | 0 | 0 |


| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| EURO | 1 | 0 | 0 | 0 |
| EXAM | 1 | 0 | 0 | 0 |
| FARE | 0 | 0 | 8 | 0 |
| FASCINATING | 0 | 0 | 7 | 0 |
| FICTION | 0 | 0 | 3 | 0 |
| FIRST-NAME | 0 | 0 | 7 | 0 |
| FRIDGE | 1 | 0 | 0 | 0 |
| GLOVE | 1 | 0 | 0 | 0 |
| HOCKEY | 9 | 0 | 0 | 0 |
| HUG | 0 | 0 | 1 | 0 |
| INSPIRATION | 4 | 0 | 0 | 0 |
| JELLY | 10 | 0 | 0 | 0 |
| KIT | 0 | 0 | 0 | 0 |
| LEMON | 1 | 0 | 1 | 0 |
| MAGIC | 0 | 0 | 1 | 0 |
| MEDAL | 18 | 0 | 0 | 0 |
| MUG | 0 | 0 | 1 | 0 |
| NOVEL | 1 | 0 | 0 | 0 |
| OLIVE | 0 | 0 | 1 | 0 |
| OLYMPIC | 0 | 0 | 0 | 0 |
| PEPPER | 0 | 0 | 0 | 0 |
| PLANTATION | 0 | 0 | 0 | 0 |
| RAP | 0 | 0 | 0 | 0 |
| ROBIN | 0 | 0 | 0 | 0 |
| SCREAM | 0 | 0 | 0 | 0 |
| SODA | 0 | 0 | 0 | 0 |
| SUNGLASSES | 0 | 0 | 0 | 0 |
| SUPERSTAR | 0 | 0 | 0 | 0 |
| TEXTBOOK | 0 | 0 | 0 | 0 |
| THUNDERSTORM | 0 | 0 | 0 | 0 |
| TIGHTS | 0 | 0 | 0 | 0 |

## Appendix B:

The Frequency of CEFR-J B1 and B2 Vocabulary Items Belonging to GSL, AWL, and Others Observed in Classes
Appendix B1. The Frequency of CEFR-J B1 Vocabulary Items Belonging to GSL Level 1

| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| COUNT (noun) | 3 | 1 | 0 | 0 |
| LITTLE | 0 | 0 | 1 | 1 |
| MORE (adverb) | 4 | 0 | 2 | 2 |
| OWN (verb) | 0 | 1 | 0 | 0 |

Appendix B2. The Frequency of CEFR-J B1 Vocabulary Items Belonging to GSL Level 2

| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| PROUD <br> (adjective) | 0 | 0 | 1 | 1 |

Appendix B3. The Frequency of CEFR-J B1 Vocabulary Items Belonging to AWL

| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| ECONOMICS | 6 | 5 | 0 | 0 |
| INTERMEDIATE | 1 | 0 | 0 | 0 |


| Appendix B4. The Frequency |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Type |  | Other CEFR-J B1 Vocabulary Items |  |  |
| CRAFT | 0 | Class 2 | Class 3 | Class 4 |
| CUCUMBER | 0 | 9 | 0 | 0 |
| TICK | 0 | 2 | 0 | 0 |
| STRAWBERRY | 0 | 1 | 0 | 0 |

Appendix B5. The Frequency of CEFR-J B2 Vocabulary Items Belonging to GSL Level 2 and Others

| Type | Class 1 | Class 2 | Class 3 | Class 4 |
| :--- | :---: | :---: | :---: | :---: |
| BERRY <br> (GSL level 2) | 0 | 0 | 0 | 4 |
| PEACH <br> (not found in GSL or AWL) | 0 | 0 | 5 | 5 |

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