



Characteristics of Japanese junior high school English textbooks : from the viewpoint of vocabulary and readability

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Characteristics of Japanese Junior High School English Textbooks

—From the Viewpoint of Vocabulary and Readability—

Kenji Kitao and Shosaku Tanaka

This paper reports on a study of the characteristics of Japanese junior high school English textbooks (from the 2002 to 2005 academic years) with a focus on vocabulary and readability. First, to investigate the vocabulary in English instruction in Japan, we analyze not only basic information such as word frequency but also the relation between grades and the common vocabulary lists in use. The results revealed that there is almost no correlation between grades and the level in vocabulary lists employed for teaching English in Japan. Second, this research provides information on factors related to readability and estimates the readability of the textbooks. Since previous research has already dealt with the fundamental information on textbooks, this research could be significant as an auxiliary and advanced investigation.

1 Introduction

Japanese seventh, eighth, and ninth grade students have been studying English language in public junior high school since the postwar education started. The basics of English are taught in junior high schools. Almost all Japanese students study it, since junior high school education is compulsory. English language programs are strictly controlled by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) through the Course of Study, and all English language textbooks for junior high school students are authorized and distributed free by MEXT. (Kitao & Kitao, 1985)

Junior high school English textbooks are written and published based on THE COURSE OF STUDY FOR LOWER SECONDARY SCHOOL: FOREIGN

LANGUAGES, and they are given to students free. All junior high school English language textbooks are similar in content, length, and difficulty. English is taught using these textbooks, and it is possible to deduce what is taught in junior high school by examining them, for example, by looking at vocabulary, grammar items, and difficulty levels (Kitao & Kitao, 1985).

The purpose of this study is to analyze seven series (i.e., 7th, 8th, and 9th grades) of junior high school English language textbooks (21 books) used from the 2002 to 2005 academic years and determine the readability, vocabulary, and difficulty levels.

2 Review of Literature

Isobe (2006) summarized the changes of the Course of Study and English textbooks in junior high schools. As for the vocabulary, only the range of words and compulsory words to be taught in junior

high schools were set as shown in Table 1.

Table 1: Range of Words and No. of Compulsory Words

| year (from) | range (no. of words) | compulsory (no. of words) |
|----------------|-------------------------|------------------------------|
| 1949 | NA | NA |
| 1952 | 1200-2300 | NA |
| 1962 | 1100-1300 | 520 |
| 1972 | 950-1100 | 610 |
| 1981 | 950-1050 | 490 |
| 1993 | More than 1000 | 507 |
| 2002 | More than 900 | 100 |

Until 1962, the Course of Study was just a guideline, but since 1962 it has been compulsory. The number of words to be taught has been decreased, and the number of words to be taught compulsorily has been decreased sharply. This required junior high school students to study fewer words, and the words they study in different textbook series have less common ground.

Hasegawa and Chujo (2004) reviewed the Course of Study in the 1980s, 1990s, and 2000s. They summarized the vocabulary for junior high school English textbooks.

They point out that the number of words taught in junior high schools has been reduced as well as in senior high schools (Hasegawa & Chujo, 2004). They actually reviewed a junior high school English textbook series, and they found that vocabulary had been reduced in terms of both types and tokens in 2000s. They reviewed senior high school textbooks, and they concluded that the vocabulary is insufficient for 95% coverage of texts for any purpose other than survival English.

Hasegawa, Chujo and Nishigaki (2008) reviewed junior high school English textbooks and claim that the number of vocabulary in terms of both types and tokens has been reduced over the past two decades.

Chujo, Nishigaki, Nishioka, Yamazaki, and Shirai (2006) reviewed the primary school English textbooks which are used in informal English instruction, since there is no formal English instruction in

primary schools, and there is no Course of Study for teaching English there. They found that in *Let's Have Fun* (Kairyudo) and the teachers' guides, 311 new types were introduced in the first grade, 138 words in the 2nd grade, 138 words in the 3rd grade, 178 words in the 4th grade, 104 words in the 5th grade, and 124 words in the 6th grade. That is a total of 993 words (types) that are potentially taught in a primary school.

Nakamura (2005) made corpora of seven series of junior high school English textbooks and counted the number of types and tokens and calculated the average words per sentences, etc., and compared the seven series. He showed that the seven series differed widely in their average words per sentence, type/token ratios, and vocabulary.

Seya (2004) analyzed seven series of junior high school English textbooks thoroughly. He made corpora of all chapters and analyzed vocabulary by series, grade, and part of speech. By textbook series, tokens ranged from 1189 to 1450. Among those words, 345 words (from 25 to 29 %) were common to all seven series. Between 231 and 367 words (18 to 26 %) were used only in one series. He shows only the raw data of the results. We interpret the results to mean that junior high school English textbooks have relatively few words and few common words.

3 Research Questions

We have four research questions.

- 1 How many tokens (vocabulary quantity) and types (vocabulary variety) are included in each grade's textbooks?
- 2 How many common words are included in each of seven textbooks in each grade?
- 3 How does readability go up as the textbooks progress through the grades?
- 4 What are the relationships between the grade level and levels in vocabulary lists?

4 Methodology

We examined seven series of junior high school

English textbooks (21 books) used from the 2002 to 2005 academic years. (They are listed in Appendix A.) We used corpora compiled by ELPA (Association for English Language Proficiency Assessment) which include only the main texts of each chapter; we did not include the chapters which have only exercises. We lemmatized all the words and counted the number, but we did not consider parts of speech. Therefore “study” is counted the same word whether it is a noun or a verb.

We did not examine exercises, appendices, or inside covers, which students also use to study English.

As the result, our corpora are smaller than those used by Seya (2004), though we used the same seven series of textbooks.

We have used the following tools to measure readability and vocabulary frequency:

- 1 Tests Document Readability And Improve It
http://www.online-utility.org/english/readability_test_and_improve.jsp
- 2 TreeTagger - a language independent part-of-speech tagger
<http://www.ims.uni-stuttgart.de/projekte/complex/TreeTagger/>
- 3 Perl programs made by ourselves

Table 2: Vocabulary Lists

| Vocabulary Lists | Nos. of Words | Nos. of Levels |
|----------------------------|---------------|----------------|
| JACET4000 (J4) | 3987 | 5 |
| JACET8000 (J8) | 8250 | 8 |
| ALC SVL 12000 (SVL) | 12000 | 12 |
| Hokkaido Univ. List (HUL) | 7454 | 5 |
| General Service List (GSL) | 2284 | 1 |
| Academic Word List (AWL) | 570 | 10 |

¹ These vocabulary lists are based on how frequent, important, basic, etc., the words are, and the lists are described as vocabulary frequency lists, important word lists, selected word lists, basic vocabulary lists. We simply call them vocabulary lists in this paper.

We compared the vocabulary frequency we found in those textbooks against vocabulary lists¹ (Table 2) which are often used by English language teaching researchers.

Information about those frequency lists can be found at the web sites in Appendix B.

5 Results

5.1 Vocabulary Frequency

Tokens (total number of words). We counted the number of tokens in each textbook, found the minimum and maximum number of words in the textbooks for each grade. We calculated the means and standard deviations of seven textbooks for each grade. The results are shown in Table 3.

Table 3: Tokens (total number of words)

| Grade | Mean | SD | Min | Max |
|----------------------------------|------|-----|------|------|
| 7 th | 1134 | 145 | 985 | 1330 |
| 8 th | 2020 | 429 | 1568 | 2741 |
| 9 th | 2349 | 376 | 1752 | 2896 |
| 7 th -9 th | 5503 | 823 | 4305 | 6967 |

The seven series of textbooks included an average of 5503 words for the 7th, 8th, and 9th grades combined. Since students study English for about one hundred weeks in junior high school, this indicates that they read only 55 words per week. The amount of English taught is relatively small.

On average, in one week, students read only 34 words in the seventh grade, 61 words in the eighth grade, and 71 words in the ninth grade. As students progress through the grades, they read more words, but the total words they read is low. The textbook which has the most words has about 50% more than the textbook which has the least. However, even the students whose textbooks have the highest number of words do not read many words.

Types (unique words). We counted the types in each textbook. The results are shown in Table 4.

Table 4: Types (unique words)

| Grade | Mean | SD | Min | Max |
|----------------------------------|------|----|-----|-----|
| 7 th | 310 | 18 | 271 | 321 |
| 8 th | 491 | 53 | 429 | 571 |
| 9 th | 557 | 56 | 454 | 628 |
| 7 th -9 th | 874 | 52 | 802 | 934 |

The table shows the mean number of types in each grade, that is, each word is counted only once, no matter how many times it occurs.

The seven series of textbooks included an average of 875 unique words for the three grades combined. This indicates that only 9 new words are taught per week. Students study relatively little vocabulary in junior high school English classes.

Common words among the seven series of textbooks. We identified the words that the seven textbooks in each grade had in common. In this paper, the expression “common word w for grade g ” means that w is used in every textbook by grade g . For example, “happy” is used in many seventh grade textbooks. However, the word is not considered a common word for grade seven because there are some seventh grade textbooks in which “happy” is not used. In every series of textbooks, “happy” is used by eighth grade. Hence, “happy” is a common word for grade eight. The number of words are shown in Table 5 and the actual words in Appendix C.

Table 5: Common Words in All Textbooks

| Grade | Common Words |
|-----------------|--------------|
| 7 th | 69 |
| 8 th | 92 |
| 9 th | 91 |

Words in common that had been taught in previous grades were not counted in subsequent grades. Therefore, there are only 252 (=69+92+91) common words among seven series for all three grades. That means that junior high school students have studied only 252 common words plus about 600 (875–252) additional words which the textbooks do not have in common.

Surprisingly 252 common words do not include 100 words which all textbooks must include. As shown in Appendix C, 15 words do not appear in the main texts of 21 textbooks. There are only 100 very basic words which have to be taught in junior high schools, but they are not treated as basic words and do not appear frequently.

As we have shown, relatively few words are taught in junior high schools, and relatively few words (only 252 words) are used in all seven series of textbooks. About 600 more words taught through different series are entirely different. Since the seventh grade is the very beginning of formal English language instruction for most students, the gap between the seventh grade and the eighth grade is much larger than differences between eighth grade and ninth grade.

5.2 Readability

Readability is a measure of how easy a passage is to read. It is usually calculated based on the degree of difficulty of words and syntactic complexity of sentences. Some typical calculating methods such as Flesch-Kincaid Grade Level approximated the degree of difficulty of a word using word length and the syntactic complexity of a sentence using sentence length. Therefore, if a passage has longer words and/or longer sentences, it is considered more difficult to read, and the measure of readability is higher. Most readability scales use the U.S. grade level or score to be mapped to the grade level.

Number of syllables/word. We calculated the average number of syllables. The mean for the seventh grade is 1.36, and 1.39 for both the eighth grade and the ninth grade as shown in Table 6. They are not long words and are almost the same for three grades.

Table 6: Number of Syllables per Word

| Grade | Mean | SD | Min | Max |
|----------------------------------|------|------|------|------|
| 7 th | 1.36 | 0.04 | 1.30 | 1.42 |
| 8 th | 1.39 | 0.04 | 1.33 | 1.46 |
| 9 th | 1.39 | 0.03 | 1.36 | 1.43 |
| 7 th -9 th | 1.38 | 0.02 | 1.35 | 1.40 |

They use very short words for three grades, and there is not much difference among the grades.

Number of letters/word. We calculated the number of letters per word. The results are shown in Table 7.

Table 7: Average Number of Letters

| Grade | Mean | SD | Min | Max |
|----------------------------------|------|------|------|------|
| 7 th | 3.86 | 0.12 | 3.68 | 4.02 |
| 8 th | 4.06 | 0.10 | 3.91 | 4.21 |
| 9 th | 4.11 | 0.06 | 4.05 | 4.18 |
| 7 th -9 th | 4.04 | 0.03 | 4.01 | 4.08 |

As students progress through the grades, the words become a little longer, but there is not much difference.

Number of words/sentence. We calculated the number of words per sentence. We show the results in Table 8.

Table 8: Number of Words per Sentence

| grade | Mean | SD | Min | Max |
|----------------------------------|------|------|------|------|
| 7 th | 4.02 | 0.32 | 3.35 | 4.29 |
| 8 th | 5.76 | 0.35 | 5.35 | 6.15 |
| 9 th | 6.70 | 0.77 | 5.79 | 8.02 |
| 7 th -9 th | 5.57 | 0.32 | 5.29 | 6.24 |

The mean of number of words per sentence is very small in every grade. The seventh-grade textbooks have very short sentences, in part, because most of sentences are dialogs.

As students progress through the grades, the sentences naturally got longer.

Number of sentences/textbook. We calculated the number of sentences per textbook. The results are shown in Table 9.

Table 9: Number of Sentences

| Grade | Mean | SD | Min | Max |
|----------------------------------|------|-----|-----|------|
| 7 th | 283 | 39 | 241 | 335 |
| 8 th | 350 | 67 | 270 | 457 |
| 9 th | 352 | 53 | 274 | 430 |
| 7 th -9 th | 985 | 115 | 848 | 1169 |

The mean number of sentences is 283 for the seventh grade, 350 for the eighth grade and 352 for the ninth grade, and the total is less than 1,000. That is fewer than ten sentences covered per week, which is very small amount of English.

Readability scale. We calculated Flesch-Kincaid Grade Levels (FKGL)² using “Tests Document Readability And Improve It”. The results are shown in Table 10.

Table 10: Flesch Kincaid Grade Levels

| Grade | Mean | SD | Min | Max |
|----------------------------------|------|------|------|------|
| 7 th | 2.00 | 0.50 | 1.27 | 2.78 |
| 8 th | 3.05 | 0.55 | 2.17 | 3.98 |
| 9 th | 3.45 | 0.45 | 2.97 | 4.24 |
| 7 th -9 th | 2.89 | 0.29 | 2.45 | 3.19 |

The mean FKGL value increases as the textbooks progress through the grades. These levels are probably easy enough for these students and are appropriate levels of difficulty. All factors of readability increase as students progress through the grades, as shown Table 6 and Table 9. Since the seventh grade is the very beginning of English language instruction for most students, the gap between the seventh and eighth grades is much larger than the differences between the eighth and ninth grades.

5.3 Comparisons between the vocabulary in these series and the popular vocabulary lists in Japan

We compared the vocabulary used in these series with commonly used vocabulary lists both in Japan and abroad: JACET 4000 (J4), JACET 8000 (J8), the ALC Standard Vocabulary List 12000 (SVL), Hokkaido University List (HUL), the General Service List (GSL), and the Academic Word List (AWL). The first four vocabulary lists were specifically developed for English language instruction in Japan, the General Service List included most commonly

² Flesch-Kincaid Grade Level is one of popular readability indices. FKGL is calculated the following expression:

$$FKGL = 0.39 \times ASL + 11.8 \times AWL - 15.59$$

where ASL is the average sentence length and AWL is the average word length in a text.

used words in English. The Academic Word List includes vocabulary which is often used in the academic fields and beyond the General Service List. We used Goodman-Kruskal γ for a rank correlation coefficient³. We included words other than proper nouns, numbers, and compound nouns. We compared types. The results are shown in Table 11.

Table 11: Rank Correlation Coefficient γ between Grades and Vocabulary Levels

| List | J4 | J8 | SVL | HUL | GSL | AWL |
|----------|------|------|------|------|------|-------|
| γ | 0.06 | 0.04 | 0.14 | 0.10 | 0.02 | -0.25 |

Grades and vocabulary levels in type. The results show that there is almost no correlation between the vocabulary used in different grades and vocabulary levels in those vocabulary lists. That means that the vocabulary taught in junior high schools do not correlate the high-frequency of vocabulary which should be taught to students at low levels. Theoretically the correlations should be very high with the first four lists, since they are developed specifically for the English language teaching in Japan, and it should also have high correlations with the General Service List, since that represents easy vocabulary in English. It should have a high negative correlation with the Academic Word List, since junior high school vocabulary should be easy.

Types of vocabulary taught in each grade do not have high correlations with those vocabulary lists.

It would be more appropriate if these textbooks used more high-frequency vocabulary, particularly from the JACET 4000 and JACET 8000.

Grades and vocabulary levels in common words. We compared the common words taught in each grade (Table 5) and the vocabulary lists, and run Goodman-Kruskal γ , and got the following results.

³ Goodman-Kruskal γ is an ordinal measure of correlation which has the range $-1 \leq \gamma \leq 1$ like other correlation coefficients. This correlation coefficient can be applied for $I \times J$ contingency tables where columns are ordered.

Table 12: Rank Correlation Coefficient γ between Grades and Vocabulary Levels in Common Word

| List | J4 | J8 | SVL | HUL | GSL | AWL |
|----------|------|------|------|------|-------|-----|
| γ | 0.29 | 0.45 | 0.13 | 0.05 | -0.36 | NA |

JACET 8000 has the highest correlation, but if we check which levels those common words are, they are either level 1 or 2, which are very basic and important words in that list as shown in Table 13.

Table 13: Distribution of Common Words in JACET 8000

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | over |
|-----------------|----|---|---|---|---|---|---|---|------|
| 7 th | 64 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 th | 88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 th | 87 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

JACET 8000, which is used for teaching English in college, does not show good levels of vocabulary for junior high schools, and the number of words at each level is very large and does not give much important information for English teaching in junior high schools. Because distributions of common words in other vocabulary lists are similar to JACET 8000, these γ are not reliable⁴ and the other vocabulary lists have the same problem.

6 Conclusion

We have investigated vocabulary and readability of the main texts of junior high school English language textbooks and compared vocabulary with the well known vocabulary lists.

Relatively few words (both tokens and types) are included in those textbooks. The average is 875 words (types) for three grades, and among them, only 252 words appear in all textbooks. The total words for three grades is 5503 words. Relatively few words (both types and tokens) are taught in junior high schools. However, as students progress through the grades, more words are taught. The difference be-

⁴ γ is not accurate in the case of data that does not have enough variance.

tween the seventh and eighth grades is particularly large.

Readability of those textbooks is equal to 2nd or 3rd grades for native English speakers, and readings in those textbooks are appropriate for junior high school students. As the grade level goes up, the difficulty of readability goes up. The difference between the seventh and eighth grades is larger, and readings are appropriate.

The correlations between the vocabulary in those textbooks and the lists of vocabulary frequency are very low. That is, vocabulary in those textbooks does not include the vocabulary which those lists suggest to teach to low level students are not necessarily included. Among those lists, the general service list and Alc SVL are most closely correlated with the textbook vocabulary.

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Appendices

Appendix A: Textbook Series Used between 2002 and 2005

1. COLUMBUS 21 (Mitsumura Tosho)
2. NEW CROWN (Sanseido)
3. NEW HORIZON (Tokyo Shoseki)
4. ONE WORLD (Kyoiku Shuppan)
5. SUNSHINE (Kairyudo)
6. TOTAL ACTIVE COMMUNICATION
(Shubunkan)
7. TOTAL ENGLISH (Gakko Tosho)

Appendix B: Web Sites of Vocabulary Frequency Lists

- JACET 4000
<http://members.at.infoseek.co.jp/jacetvoc/4000/4000.html>
- LemmaPlus
http://sato.fm.senshu-u.ac.jp/_web/lemmaF/
- JACET 8000 (first 4250 words)
<http://members.at.infoseek.co.jp/jacetvoc/4250.xls>
- JACET 8000 LEVEL MARKER
<http://www01.tcp-ip.or.jp/~shin/J8LevelMarker/j8lm.cgi>
- ALC Standard Vocabulary List 12000
http://www.alc.co.jp/goi/PW_top_all.htm
- Hokkaido University List
<http://icarus.imc.hokudai.ac.jp/jugyo/huvl/>
- General Service List
<http://jbauman.com/gsl.html>
- Academic Word List
<http://language.massey.ac.nz/staff/awl/headwords.shtml>
- The AWL Highlighter
<http://www.nottingham.ac.uk/~alzsh3/awlhiglighter.thm>

Appendix C: Common Words among Seven Textbooks

| 7 th | 8 th | 9 th | | | |
|-----------------|-----------------|-------------------|--------------|--------------|------------------|
| <u>a</u> | <u>after</u> | again | some | next | often |
| <u>about</u> | ago | American | <u>speak</u> | <u>of</u> | open |
| <u>all</u> | also | <u>among</u> | thank | old | <u>other</u> |
| <u>and</u> | <u>an</u> | <u>another</u> | <u>that</u> | <u>one</u> | parent |
| <u>at</u> | any | <u>anyone</u> | <u>the</u> | only | park |
| be | around | <u>anything</u> | there | <u>our</u> | please |
| big | <u>as</u> | away | <u>they</u> | people | put |
| <u>but</u> | ask | back | <u>this</u> | picture | remember |
| <u>can</u> | Australia | become | <u>to</u> | place | room |
| come | beautiful | birthday | too | right | same |
| do | bring | <u>both</u> | very | say | send |
| <u>for</u> | <u>by</u> | buy | <u>we</u> | <u>so</u> | short |
| <u>from</u> | call | car | <u>what</u> | sometimes | <u>should</u> |
| go | child | city | <u>who</u> | sport | show |
| good | country | class | <u>with</u> | stay | <u>since</u> |
| <u>have</u> | day | cold | yes | student | sister |
| <u>he</u> | dear | day | <u>you</u> | sure | small |
| hello | <u>down</u> | different | <u>your</u> | take | <u>someone</u> |
| <u>her</u> | eat | dream | | talk | <u>something</u> |
| here | English | <u>during</u> | | tell | soon |
| hi | enjoy | e-mail | | <u>than</u> | start |
| <u>him</u> | every | <u>each</u> | | <u>their</u> | still |
| home | <u>everyone</u> | earth | | <u>them</u> | strong |
| <u>how</u> | family | easy | | <u>then</u> | study |
| I | first | <u>everything</u> | | <u>these</u> | summer |
| <u>in</u> | friend | farm | | thing | <u>those</u> |
| <u>it</u> | get | father | | think | together |
| know | girl | find | | time | tree |
| let | give | fine | | <u>us</u> | try |
| like | happy | food | | use | up |
| live | hear | game | | walk | useful |
| look | help | great | | want | visit |
| many | high | hard | | watch | volunteer |
| <u>me</u> | <u>his</u> | hope | | well | water |
| meet | house | <u>if</u> | | <u>when</u> | week |
| morning | <u>into</u> | just | | <u>why</u> | welcome |
| much | Japan | keep | | <u>will</u> | <u>which</u> |
| <u>my</u> | Japanese | land | | work | word |
| nice | kind | learn | | world | worry |
| no | last | leave | | write | young |
| not | life | letter | | year | |
| now | little | love | 69 words | 92 words | 91 words |
| oh | long | man | | | |
| <u>on</u> | lot | <u>may</u> | | | |
| <u>or</u> | make | mean | | | |
| <u>over</u> | most | more | | | |
| play | mother | move | | | |
| really | <u>must</u> | music | | | |
| school | <u>name</u> | need | | | |
| see | <u>near</u> | news | | | |
| <u>she</u> | new | <u>off</u> | | | |

Underlined words are required in junior high schools by the Course of Study

Words from 100 required words which are not included in any textbook: across, because, before, between, either, mine, nothing, shall, through, till, under, until, where, whose, without.

Appendix D: Raw Data on Readability

| Textbook name & grade | letters | words | types | sentences | letters/words | syl-lables/word | Words/sentence | Readability |
|-----------------------|---------|-------|-------|-----------|---------------|-----------------|----------------|-------------|
| AC_1 | 5213 | 1330 | 317 | 335 | 3.92 | 1.37 | 3.97 | 2.16 |
| AC_2 | 8872 | 2207 | 527 | 381 | 4.02 | 1.38 | 5.79 | 2.94 |
| AC_3 | 9369 | 2302 | 562 | 370 | 4.07 | 1.38 | 6.22 | 3.37 |
| AC_123 | 23472 | 5839 | 926 | 1086 | 4.02 | 1.38 | 5.38 | 2.76 |
| SS_1 | 3794 | 996 | 308 | 241 | 3.81 | 1.38 | 4.13 | 2.26 |
| SS_2 | 6287 | 1568 | 442 | 289 | 4.01 | 1.39 | 5.43 | 2.95 |
| SS_3 | 8851 | 2138 | 534 | 319 | 4.14 | 1.43 | 6.70 | 3.85 |
| SS_123 | 18949 | 4702 | 849 | 848 | 4.03 | 1.40 | 5.54 | 3.14 |
| NH_1 | 3890 | 985 | 320 | 248 | 3.95 | 1.36 | 3.97 | 2.00 |
| NH_2 | 8015 | 2050 | 484 | 383 | 3.91 | 1.33 | 5.35 | 2.17 |
| NH_3 | 7270 | 1752 | 454 | 274 | 4.15 | 1.38 | 6.39 | 3.21 |
| NH_123 | 19195 | 4787 | 802 | 905 | 4.01 | 1.35 | 5.29 | 2.45 |
| NC_1 | 3801 | 1033 | 271 | 247 | 3.68 | 1.36 | 4.18 | 2.04 |
| NC_2 | 6984 | 1659 | 429 | 270 | 4.21 | 1.46 | 6.14 | 3.98 |
| NC_3 | 9522 | 2289 | 574 | 395 | 4.16 | 1.39 | 5.79 | 3.05 |
| NC_123 | 20322 | 4981 | 865 | 912 | 4.08 | 1.40 | 5.46 | 3.10 |
| CO_1 | 4212 | 1083 | 319 | 323 | 3.89 | 1.32 | 3.35 | 1.27 |
| CO_2 | 6609 | 1636 | 457 | 300 | 4.04 | 1.38 | 5.45 | 2.83 |
| CO_3 | 9485 | 2342 | 540 | 315 | 4.05 | 1.37 | 7.43 | 3.48 |
| CO_123 | 20294 | 5061 | 828 | 938 | 4.01 | 1.36 | 5.40 | 2.59 |
| OW_1 | 4873 | 1303 | 321 | 307 | 3.74 | 1.30 | 4.24 | 1.46 |
| OW_2 | 9283 | 2281 | 529 | 371 | 4.07 | 1.39 | 6.15 | 3.26 |
| OW_3 | 12105 | 2896 | 628 | 361 | 4.18 | 1.42 | 8.02 | 4.24 |
| OW_123 | 26244 | 6480 | 934 | 1039 | 4.05 | 1.39 | 6.24 | 3.19 |
| TL_1 | 5213 | 1330 | 316 | 335 | 3.92 | 1.37 | 3.97 | 2.16 |
| TL_2 | 8872 | 2207 | 571 | 381 | 4.02 | 1.38 | 5.79 | 2.94 |
| TL_3 | 9369 | 2302 | 604 | 370 | 4.07 | 1.38 | 6.22 | 3.10 |
| TL_123 | 23472 | 5839 | 919 | 1086 | 4.02 | 1.38 | 5.38 | 2.76 |
| ALL | 128355 | 31850 | 2452 | 5728 | 4.03 | 1.38 | 5.56 | 2.88 |
| 1_all | 25775 | 6730 | 964 | 1701 | 3.83 | 1.35 | 3.96 | 1.85 |
| 2_all | 46060 | 11401 | 1492 | 1993 | 4.04 | 1.39 | 5.72 | 2.99 |
| 3_all | 56659 | 13719 | 1639 | 2034 | 4.13 | 1.39 | 6.74 | 3.49 |

AC TOTAL ACTIVE COMMUNICATION (Shubunkan)

CO COLUMBUS 21 (Mitsumura Toshō) NC NEW CROWN
(Sanseido) NH NEW HORIZON (Tokyo Shoseki) OW ONE
WORLD (Kyoiku Shuppan) SS SUNSHINE (Kairyudo) TOTAL
ENGLISH (Gakko Toshō)