A Study of the Error Analysis on English Pronunciation for Japanese Junior College Students in English Communication Ⅱ Classes

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英語の発音指導向上を目的としたエラー分析

－英語コミュニケーションⅡの受講生を対象に－

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Abstract

The aim of this paper is to examine common errors on pronunciation in English reading and speaking among the Japanese students in the author's course, English Communication II, and to discover teaching practices for improving the teaching of English pronunciation to the Japanese students in the class as well as improving the students' pronunciation. The results indicated that ①Japanese language itself has given the participants major issues with phonological errors, ②English consonants seem to present greater difficulties for Japanese students than vowel sounds, ③The participants in the low proficiency group have more phonological problems than the ones in the high proficiency group, ④The influence of the syllable-timed language seems to cause the problems in lack of smoothness in their reading.

Key words：pronunciation, error analysis, teaching method

1. Introduction

English Communication Ⅰ and English Communication Ⅱ are required classes necessary to obtain a Preschool Teacher Level 2 Regular License and a qualification of a Nursery Teacher given by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Ministry of Health, Labor and Welfare.

In recent years there has been a rapid increase in the number of the foreign nationality parents in Japan who are enrolling their children in the kindergartens and the nursery schools every year. Kanazawa (2017, 2018) investigated the rate of the kindergartens and the nursery schools, where the first year and the second year students had student teaching, had English lessons in 2016 and 2017. According to the result, 42 kindergartens out of 93 (45.2%) and 21 nursery schools out of 71 (29.6%) offered the English classes in 2017 while 40 kindergartens out of 90 (44.4%) and 16 nursery schools out of 86 (18.6%) in 2016. Though the number of the kindergartens and the nursery schools was limited the result shows that there was a noticeable tendency of gradual increase in performance.

To meet the needs of English in such places

where the students in the department of Early Childhood Care and Education plan to work after the graduation, the author who is in charge of the English Communication Ⅰ and Ⅱ provide lessons from best practices and meaningful teaching materials. The English Communication Ⅰ program offered in the first semester, focuses on improving the students' English conversation skills. The English Communication Ⅱ program offered in the second semester focuses on the usage of English picture books, English songs and games & activities. The students will be able to use the English materials for the children after graduation at work. Therefore, the acceptable level of English pronunciation should be taught to the future teachers by using active learning methods such as singing English songs, playing English games and activities and reading English picture books to the children.

For the improvement of the students' English pronunciation, a survey was given to find common errors among the Japanese students in the author's English Communication II. The error analysis data indicated that there was a tendency of errors on pronunciation in reading and speaking. The findings will give the author some clues for improving the teaching of English pronunciation to the Japanese students in the class.

２. Literature Review

2.1. The study of Japanese student's English pronunciation

There are many studies on listening, however there are only a few in the study of Japanese students learning English pronunciation.

The study on Japanese's English Pronunciation by K. Ono (2012) tells that Japanese pronounces English at the level of the phoneme clarifies it as sounds appears in various features such as division sound, the syllable, the word, the phrase, and the sentence and a lot of problems are especially seen in the pronunciation at the level of the division sound. He suggests that it is necessary to devise the action method which produces immediate re-enforcement on how the pronunciation is correctly rewarded for children who study English for the first time is important in this respect.

Yamami (2014) examined English pronunciation features and problems of Japanese elementary school students. The result suggested that English sounds which are not present in Japanese are consonants of /l//r//θ//ð//f//v/, aspiration for /p//t//k/, consonant clusters some vowels such as /ɑ/ which sound similar to Japanese /ɑ/, and diphthongs. She suggested phonics combined with pronunciation practice of sounds which don't exist in Japanese would be effectual and also suggested the importance of establishment of effective teaching methods and to ensure substantial training for elementary school teachers.

2.2. The study of Chinese student's English pronunciation

Through the experience of teaching English to Chinese students, Fangzhi (1998) suggested the use of songs, games and tongue twisters to increase student's motivation in a pronunciation class.

3. Method

3.1. Research questions

(1) What features and problems do the students of English Communication Ⅱ have on English pronunciation?

(2)　What kind of differences are there between the upper and lower proficiency level students have on English pronunciation?

3.2. Participants and procedure

A survey was given on September 25th in 2018 in the three English Communication Ⅱ classes. 108 students in total of three classes are taking the English Communication Ⅱ classes. Among the students, using the results of a placement test given in April, 2018, ten in the highest proficiency group and other ten in the lowest proficiency group were chosen as the participants for this study. They are freshman women at the women's junior college in the department of Early Childhood Care and Education.

3.3 Materials

For the data collection, the practice interview for the Pre-2nd level English proficiency test known as Eiken was employed. The Eiken interview test was used as a tool for collecting data on errors in pronunciation that learners may make under a variety of factors. For example, the learners may make errors in speaking, but may not in reading. This test can provide us with errors in both reading and speaking (See Appendix 2). During an Eiken interview test, an informal short conversation is used to promote a more comfortable setting for the examinee before starting the actual interview. However due to constraints, an informal interview for each candidate in the classroom situation was not included in the survey.

3.4. Procedure

The procedure conducted in the class was follows.

① Students read the passage silently for 20 seconds.
② Students read the passage orally while recording it with their mobile devices.
③ After the reading, a set questions on the passage were read by the author and had the students record the answers.
④ Students sent the recorded data to the author.
⑤ The author listened and checked each data and sent the comment and recommendations back to each student.
⑥ The recorded data of ten students in the highest proficiency group and other ten students in the lowest proficiency group were taken and the errors were categorized.

3.5. Data Analysis

The analysis was done not with the number of errors but the number of correct answers. When the participant pronounced correctly, it was counted as one-point. It is because the usage of both t-test and the correlative analysis may present broader use for the analysis. The analysis used for the paper are as follows.
①The analysis of difference in mean score between upper and lower groups
②Correlative analysis is between each item and placement test
③Correlative analysis is between items on pronunciation

4. The results and analysis

To find out the kinds of errors the participants produced during the survey, the results of the following data were analysed:
① Segmental errors found in reading and speaking
② Suprasegmental errors found in reading

and speaking

③ Errors on distinguishing synforms found in reading

The original survey plan had a focus on both reading and speaking. However the most recorded data had been sent from the participants didn't have the latter part. In other words, the answers of the questions related to the passage were either not recorded at all or recorded "I don't know." Therefore, the results were only focused on reading.

4.1. Segmental Errors

4.1.1. Errors on simple vowels:

There are 11 simple vowels in English. However, in Japanese there are only 5 simple vowels which are /ɑ/ /e/ /i/ /o/ and /u/. The result shows that there is the appearance of the problem caused by the lack of vowel sounds in Japanese system.

The passage has only long vowel /i:/ and /u:/, and /ɚ/, so the results focus only the three vowels.

There is no distinction between long vowels and short vowels such as /i:/ and /i/, /u:/ and /u/ so the participants tended to pronounce long vowels as Japanese /i/ which is shorter and weaker than the English long vowel /i:/ but a bit longer and stronger than English short vowel /i/. Since among Japanese vowels there is a very similar vowel, the substitution occurs. Such substitution was recognized not only among the low proficiency participants but also among the high proficiency ones in their pronouncing of "even". Two out of ten high proficiency students pronounced with /i/ instead of /i:/ and six out of ten low ones while none of high proficiency students made an error in the long vowels /u:/ in "school" and "students" but one of the low proficiency students pronounced with /u/ in "school", and two pronounced /u/ in "students".

The error on the distinction of the long vowel /i:/ and the short vowel /i/ seems to be more serious than the one of /u:/ and /u/, since the distinction is crucial for numbers. In the classrooms, both in speaking and reading, it is quite noticeable when the students say," The painter was born in 9052." or " I'm 80 years old."

Lastly, /ɚ/ in "university" is another sound which doesn't exist in Japanese sound system. It was replaced with /ɑ:/ by six low proficiency students out of ten in their reading while none of the high ones had a problem. The long vowel such as /ɑ:/ does not exist in the Japanese sound system, however, instead of acquiring the totally new sound of /ɚ/, participants created a new sound adapting from the original Japanese sound of /ɑ/.

There was significant difference between the upper and lower group in the accuracy of vowels, $t(11)=2.82$, $p < .05$. Moderate correlation was found between the accuracy of vowels and placement test ($r=.61$).

4.1.2 Errors on diphthongs:

There are 14 vowels in English, and 11 of them are stressed simple vowels. The remaining three vowels are diphthongs which Japanese sound system does not have at all. The passage only has the diphthong of /ou/, so the results focus only /ou/.

The result shows the participants had a tendency of making up the lack of the diphthongs in the Japanese sound system with making the first part of the diphthong longer in the case of reading. Among the errors found from the survey, none of the lowest group participants could read the word "hold" correctly. The participants assumed a phoneme

equals a letter used in spelling a word. The same can be said about the word "open" and "so" which also were found to be pronounced as /ɔ:pən / instead of /oupən/ by nine out of 10 lowest participants and two out of 10 highest participants and two highest participants, and /sɔ:/ instead of /sou/ by seven out of 10 lowest proficiency participants and none by highest proficiency participants. "Open" is one of the frequent words used for picture books such as flip-up ones and in games & activities daily, there is the need of teaching the appropriate pronunciation of "open" on the spot in the classrooms.

There was no significant difference between the upper and lower group in the accuracy of diphthongs, $t(18) = 6.40$, $p > .05$. Strong correlation was found between the accuracy of diphthongs and placement test (r=.84).

4.1.3. Errors on consonants:

Among the 25 consonants in English, there are some consonants such as /f/ and /v/, /θ/and/ð/, /l/ and /r/ which do not exist in Japanese sound system. The results show that the participants substitute rather predictably known sounds from Japanese for new sounds in English. The low proficiency students fail to produce these sounds and substitute /f/ to /h/, /v/ to /b/, /ð/ to /d/ or /dz/, /θ/ to /s/ during their reading. Only when the "th" appeared at the beginning of a sentence in the reading, all the participants including the low proficiency students produced the sound correctly. This explains that all the participants know how to produce /θ/and/ð/ in the recognition level, however often fail to pronounce it correctly except such a noticeable case as it comes at the beginning of a sentence. On the other hand, none of the high proficiency students failed to

produce these sounds while reading.

There was no significant difference between the upper and lower group in the accuracy of consonants, $t(18) = 6.80$, $p > .05$ Strong correlation was found between the accuracy of consonants and placement test (r=.90).

4.2. Suprasegmental Errors
4.2.1. Errors on consonant clusters

There is a great number of words borrowed directly from English in the Japanese language, which are written in Katakana form. According to Pennington (1987) and Riney and Anderson-Hsieh (1993), Japanese learners have a tendency of pronouncing English lexical items in terms of syllables and words learned in a Japanese phonological context. The result shows that the participants are not exceptions. Among the low proficiency participants almost every single Katakana word is pronounced in a Japanese patterning of C+V+C+V+C+V while high proficiency participants had little problem with this.

There was significant difference between the upper and lower group in the accuracy of C+V, $t(18)=4.15$, $p < .01$. Moderate correlation was found between the accuracy of C+V and placement test (r=.79)

4.2.2. Errors on the stress-timed nature of English:

The result of the reading section shows that creating the rhythm of an English utterance is difficult for the Japanese participants especially the ones in the low proficiency group. Especially the participants in the high proficiency group could carry out the utterance stressing content words, which carry information.

4.2.3 Errors on the use of linking and elision

People say that Japanese speak choppy English. The result shows the participants in the high proficiency group have few problems with linking and elision compared to the ones in the other group. This seems to be related to the speed of the speech and the influence of the open syllable, which does not end with a consonant but a vowel. According to the data, which is on the speed of reading the passage, the fastest reader took 21 seconds while the slowest one took 38 seconds. The model reading of the passage recorded by the native speaker of English took 18 seconds in a careful colloquial style. All participants in the high proficiency group could read the passage within 25 seconds while the ones in the other group took too much longer time (32, 35 and 38 seconds). The failure of the use of linking and elision among the low proficiency group seems to be caused by the reading speed since linking and elision appear often in a rapid colloquial style and the addition of a vowel at the end of each word which makes it impossible to do.

4.2.4. Errors on intonation patterns

The result in their reading shows that the participants in both groups had a tendency of reading flatly without inflection. This seems to be the influence of the feature of Japanese language, which has a narrower pitch range of intonation. The result of the reading in particular shows there is the tendency shared in both groups that their reading sounds disinterested and bored.

5. Findings from the results

① Through the results of the reading Japanese language, which is the participants' first language, has given them a major problem with phonological errors.

The participants in the low proficiency group have more phonological problems than the ones in the high proficiency group. Therefore, the use of the placement test in general is to group the students according to the proficiency level and would also be useful to better address needs to the students.

② English consonants seem to give greater difficulty to Japanese students than vowel sounds.

③ The participants in the low proficiency group have a tendency of trying to pronounce each individual word so clearly that they fail to blend words within a single thought group smoothly.

④ The suprasegmental features of a language are not "visible" to the learner than the segmental features as Marianne Celce-Murcia (1996) mentions, so the teachers should make students aware of them. Because of the prosodics of their speech, very often non-native speakers are misinterpreted as unfriendly or ill mannered.

⑤ The influence of the syllable-timed language seems to cause the problems in lack of smoothness in their reading.

⑥ The usefulness of video aids as well as audio recording are recognized both for the teacher and the students.

V. Conclusion

Current thoughts of teaching English as the means of communication has gained more acceptance and the MEXT in Japan has adopted the emphasis on teaching communicative English in their recommendations. Many English textbooks approved by the MEXT as the use in junior and high schools now have

sections in lessons on the articulatory phonetics of certain English vowels and consonants. However, according to the participants such pronunciation sections have not been effectively used. Since the time is limited and teachers must cover from the first to the last page in the year, such sections are often paid little attention. According to the findings by Y.S. Jolly (2000), who has conducted a special intensive in-service training program every summer for about 15 years for English language instructors in prefectural junior and senior high schools, a number of teachers in high schools have not had any phonetics training or very limited exposure. She adds that even the assistance of native English-speaking ALTs cannot be effective if the teacher cannot guide the students in creating the sounds correctly. Phonetic training for English teachers would serve to improve students' pronunciation through practical phonetic production skills.

Another suggestion encountered during this survey is the use of English to understand. loanwords for developing the students' pronunciation. Spoken loanwords by Japanese speakers are difficult for the native speakers of English. Yamanouchi and Lambacher suggest to develop a database of English loanwords for Japanese learners of English. As they say if a student can distinguish the sound differences between the original English and Japanese version of the words and can implement words as part of his/her vocabulary, his or her English proficiency can be improved.

Lastly, the importance of suprasegmental phonemes has to be introduced in the English Communication Ⅱ classes using such activities and drills as Prominence (pp. 343, 354 and 358), Reduced speech (pp. 354) in Marianne Celce-Murcia's book. It is impossible for non-native speakers to master both the segmental and suprasegmental of the target language, however, if the students can improve their intonation, pitch and rhythm of English, they could sound acceptable to native speakers of English, even though some of the sounds are not pronounced exactly right. This will improve the pronunciation of the students in English Communication Ⅱ classes that will be helpful for them to read English picture books, sing English songs, and play games and activities in English with the young children when they start working at kindergartens and nursery schools as teachers after graduation.

① The use of English picture books and songs in particular in the English communication Ⅱ classes is helpful to the students to learn how to pronounce particular words which have certain segmental and suprasegmental problems many students have.

② The problems on pronunciation differ from not only individually but also from English proficiency levels, therefore, the group settings based on the proficiency levels for the pronunciation practice time should be provided to focus on different problems during the teaching.

The findings of the survey will give the author a clearer direction for developing teaching practices that could increase improved results in the classes.

References

小野浩司（2012）.「日本人英語―英語発音の実態とその矯正法―」『佐賀大学文化教育学部研究論文集』17,1, 57-78.

金澤延美（2017）.「幼稚園、保育園における英語の指導法－楽しく効果的なレッスン案の提案－」『日本保育学会第 70 回大会資料集』

──────（2018）「幼保小連携を視野に入れた幼稚園・保育園における英語活動について：教材と指導内容の提案」『日本保育学会第71回大会資料集』

山見由紀子（2016）．「日本人小学生の英語の発音の特徴と困難点の一考察」『日本児童英語教育学会』36．137-147.

実用英語技能検定協会（2013）．「2012年度第3回二次試験 Grade Pre-2 (Card B) 受験者用問題カードB」日本英語検定協会.

Baker, A. (1982). Ship or Sheep? An intermediate pronunciation course, Cambridege: Cambridge University Press.

Blaiklock, K. E. (2004). The importance of letter knowledge in the relationship between phonological awareness and reading. Journal of Research in Reading, 27, 36-57.

Celce-Murcia M. and Brinton. D and Goodwn J. (1996). Teaching Pronunciation: A

Reference for Teachers of English to Speakers of Other Languages. Cambridge: Cambridge University Press.

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-Analysis. Reading Research Quarterly, 36, 250-287.

Fangzhi, C.(1998). The Teaching of Pronunciation to Chinese Students of English, The English Teaching Forum Vol 36, No.1, Jan-Mar. 37-39.

Goodwin, J. (2001). Teaching pronunciation. In Celece-Murcia, M. (Ed.) Teaching English as a second or foreign language, 3rd edition. Boston, MA: Heinle & Heinle.

Jolly Y.S. (2000). Articulatory Phonetics for In-service Teacher Training. The Language Teacher.

Normile R. (2018). Pronunciation among Japanese learners of English, Shoin English Language Teaching Center, Shoin ELTC Forum Vol. 7, 57-60.

竹内真生子（2012）．「日本人のための英語発音完全教本」アスク出版.

服部節子（2012）．「入門英語音声学」研究社.

松井千枝（1995）．「英語音声学：日本語との比較による」朝日出版.

Yamauchi K. and Lambacher S. (2000). Using English Loanwords to Teach English

Pronunciation to Japanese. The Language Teacher.

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APPENDIX 1

Passage used for the survey

A University Event

In Japan, many universities hold an event called "open campus." During this event, high school students visit universities and talk with the university students there. They can even enter the library and cafeteria. Many universities want to attract as many students as possible, so they offer special classes for high school students.

APPENDIX2 : Categories for the data collection from the passage

(C+V)

event /ib(v)entɔ/, hold /hɔ:ludɔ/, called / kɔ:ludɔ/, campus /kæmpəsu/,

during /duar(l)ingu/, school /suku:lu/, visit /v(b)iziittɔ/, and /ɑndɔ/,

talk /tɔ:ku/, with /uizu/, want /wɔntɔ/, attract /ɑtɔrɑkutɔ/,

special /supeshɑlu/

(Consonants)

/v/ universities, event, visit, even
/f/ offer, for
/ð/ this, with, the, there, the

(Vowels)
/u:/ school, students
/i:/ even

(Diphthongs)
/ou/ hold, open, so

(Glides) with the, want to