

Introduction of Phonological Awareness to Japanese Elementary School Students (2)

— The explicit instructions in syllable awareness and its achievement after a year —

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Key Words: elementary school English, phonological awareness, syllable awareness, early literacy

Abstract

The purpose of this study is to capture the general level of Japanese elementary school students' English phonological awareness and to verify the effectiveness of the explicit instructions in phonological awareness. This is the second-year interim report of the evaluation over a three-year period which has been conducted on the students of a public elementary school in Japan. We have given phonological awareness instructions with both a pre-test (henceforth Test1) and a post-test (henceforth Test2) to students in the 2nd grade of 2015. Having compared the results of two tests, we confirmed the students' remarkable growth and improvement through the instructions. (Murakami, Miyatani, and Cheang, 2017) In this study, we conducted the same test (henceforth Test3) in March, 2017 on the same students in order to measure how much they had retained the phonological awareness skills developed through 2015. The results showed the improvement in almost all tasks in Test3 as compared with Test1 and Test2. On the other hand, the scores of at-risk students (9% of the lowest) declined in Test3 as compared with Test2. We designed the phonological awareness instructions with various multisensory activities for the students in order to stimulate their *awareness* of internal structure of English words. The results of this study indicate that phonological awareness can be developed through instructions, retained and further enhanced, while the individual differences should be taken into consideration in the teaching methods and conditions.

1. Introduction

Since 2011, Improvement of Academic Abilities determined by Ministry of Education, Culture, Sports, Science and Technology-Japan (MEXT) has been endorsed, in which it stated that the students in the 5th and the 6th grades in all public elementary schools in Japan should learn English compulsory at school. According to MEXT (2011), an overall objective is; “to form the foundation of pupils' communication abilities through foreign languages while developing the understanding of languages and cultures through various experiences, fostering a positive attitude toward communication, and familiarizing pupils with the sounds and basic expressions of foreign languages.”

On the other hand, the content of Education Ministry guidelines is to be revised in 2020, and all public elementary schools are going to teach English as one of the academic subjects which involves grades and evaluation. English as a subject includes the alphabet letters, reading skills, and spelling skills

which are not included in the current syllabus (MEXT, 2013).

In recent years, numerous studies have evidenced that English phonological awareness is related to early reading and spelling success. However, in terms of segmenting or constructing English words, Japanese learners use the mora instead of English syllables. It is not easy for Japanese learners to naturally develop English phonological awareness. In English speaking countries, researches have shown that phonemic awareness is a crucial determinant of success in reading and spelling attainment of an alphabetic language (Rose, 2006; Stanovich, 1994).

A letter is a unit of phoneme of the language. In the early stages of learning to read and spell words, it is necessary to learn how to correspond a letter or combination of letters (graphemes) in a word roughly with the speech sounds in order to read the word (decoding). On the other hand, in order to spell a word, the skill of segmenting the word we hear into the separable sound units and corresponding them roughly with individual letters (encoding) is required. For example, to read the word ‘dog’ consists of three separate sounds, combining the consonant sound /d/ in the beginning letter ‘d’, the vowel sound /o/ in the middle letter ‘o’, and another consonant sound /g/ in the ending letter ‘g’ to form a meaningful set of sounds for the word ‘dog’. To spell the word ‘dog’ we hear, separating the word sound into three phoneme sounds and apply the letter ‘d’ for the first consonant sound, the letter ‘o’ for the middle vowel sound, and the letter ‘g’ for the ending sound to spell the word ‘dog’. Thus, the smooth correspondence between speech sounds and the individual letters of the alphabetic writing system is both a basic as well as a critical step, which is necessary in order to read and spell English words. However, both English phonological structure and the spelling structure are different from those of Japanese, and their complexity remarkably increases the rate of people with dyslexia in English speaking countries who have difficulty in learning to read or interpret words and letters. Therefore, the introduction of English letters and sounds of the alphabet system as a basic skill for reading and spelling at elementary schools in Japan is significantly important. This requires much careful, structural, as well as step-by-step learning methods and plans.

2. Previous Research

2.1 The research and the teaching of phonological awareness

Numerous studies on teaching phonological awareness have been conducted in English speaking countries, and most of them proved the importance of introducing phonological awareness in the early education. In the United Kingdom, phonological awareness is included in the school curriculum and phonics is employed to develop the acquisition of children’s decoding skill. The rules of phonics help the children to make connections between written letters/letter combinations and word sounds. It also encourages the children to read the words that they have not learned yet. The effects of the direct and structural phonics teaching with multisensory activities have been widely supported as stated in the *Final Report of Rose*, UK, (Rose, 2006) or *National Reading Panel*, USA (National Institute for Literacy,

2001). In addition, the phonics learning requires not only the skill of recognizing letters but also the acquisition of the phonological awareness, as explained below;

‘If children are to benefit from phonics instruction, they need phonemic awareness. The reason is obvious: children who cannot hear and work with the phonemes of spoken words will have a difficult time learning how to relate these phonemes to the graphemes when they see them in written words.’ (NIFL, 2001, p.1)

If phonological awareness can be regarded as a predictive factor of successful reading, does phonological awareness improve reading among those learners with less literacy-rich backgrounds, too? If so, is it also possible to develop reading ability through instructional supports of phonological awareness? In answer to these questions, the National Reading Panel (2000) conducted the Meta-analysis of phonological awareness research and proved that the teaching of phonological awareness improved phonemic awareness, which enhanced the reading skills. In England, as the results of these surveys are reflected on the national language curriculum issued by Department for Education, which includes the instruction of the skills and activities for each phonological unit (DfES, 2007a), a gradual and structural stimulation based on phonological steps is taken into consideration for effective learning (Murakami, 2015). In English speaking countries, various games and activities for each phonological unit are introduced to stimulate the students’ *awareness* of internal structure of words. Many of them are multisensory and designed around physical activities without using the letters or scripts of the alphabet (Ecenbarger, 2006; Lane & Pullen, 2004). We expect that it is important as well as possible to introduce phonological awareness in Japan which is the essential foundation of successful reading and writing.

Considering the possible influence of the first language characteristics on foreign or second language, Japanese students might show a different tendency in terms of developing English phonological awareness. Several previous studies conducted on Japanese students reported that in the case of English word segmentation, they employ the mora instead of the syllable (see Allen, 2010; Tsuda and Takahashi, 2014; Ikeda, 2016). These results indicate the importance and the necessity of some degree of explicit instruction of phonological awareness in teaching English to Japanese students.

In this study, we designed the phonological awareness instructions in the following manners;

1. using the words that the students are familiar with,
2. instructing the students explicitly to some degree without using printed letters,
3. using multisensory activities to stimulate the students’ awareness of internal structure of words.

2.2 The research result of the previous year

In 20XX (The program year-1), we conducted the direct structural instructions focused on the rhyming and syllable awareness on 101 students in the 2nd grade of one of the public elementary schools in Japan. The program followed the accepted teaching methodology of introducing, practicing, extending,

and revising in the various activities. On top of that, We designed the program very carefully so that students not only are aware of English phonological units but also are able to manipulate them through various activities. We assessed the students' general level of phonological awareness before and after the instructions and the activities in the class in order to verify their effects (Murakami, Miyatani, and Cheang, 2017). The instructions were given to the children 6 times in total between June and November by Cheang, the co-author of the present study who has knowledge and experience in teaching phonological awareness and phonics.

The result of the post test showed a remarkable growth in both rhyming and syllable tests (rhyming; 12.7% to 52.4%, syllable; 8.4% to 70.9%). The result also indicated that they had some degree of difficulties in recognizing the medial vowels, and in separating the initial consonant from the medial vowel which are co-articulated in speech. There are no cases of previous studies on the progress of phonological awareness carried out over a year for Japanese elementary school students. We are interested in the students' progress status and change over years in their phonological awareness.

2.3 Research objectives

The explicit phonological awareness instructions were carried out as part of foreign language activities to signify the following;

1. To capture the students' general level of English phonological awareness
2. To verify the effectiveness of the previously conducted instructions in syllable awareness

3. Methods

3.1 Participants

Eighty students in the 3rd grade participated in the English phonological awareness assessment, Test3. They took Test1 and Test2 in program year-1. In the program year-2, the students did not receive any phonological awareness instructions, except for a one-time 15minute syllable segmentation game in November. Test3 was conducted in March, at the very end of the program year-2, after 15-month blank period.

3.2 Procedures

In Test1 and Test2, we assessed the rhyming and the syllable awareness. In Test3, we only conducted the syllable awareness assessment which was assessed by syllable segmenting tasks. Students were asked to listen to the word presented orally, then answer the number of the syllables. For example, the examiner repeats the word 'lemon' twice and asks the students how many separable sound units there are in the word 'lemon'. The students mark the circles as many numbers as they perceived as syllables. The test was carried out as a part of the foreign language activities in November, 2015.

4. Results and Consideration

4.1 Results

The correct answer rate of Test3 improved in almost all the tasks in comparison with the rate of Test1 and Test2, which shows that the students' phonological awareness was enhanced even after a 15-month blank period. (Table1) The highest correct answer rate was recorded in the questions which included 2-syllable words and 3-syllable words (92%), and followed by monosyllabic words, the lowest rate was recorded in the tasks which included 4-syllable words (73%).

Table2 shows the test results of seven at-risk students (9% of the lowest) by indicating the correct answer rate in each task. The results showed that the score of Test3 had marked lower than Test2.

Table1 The Changes of the Correct Answer Rate by Numbers of Syllables (n = 80)

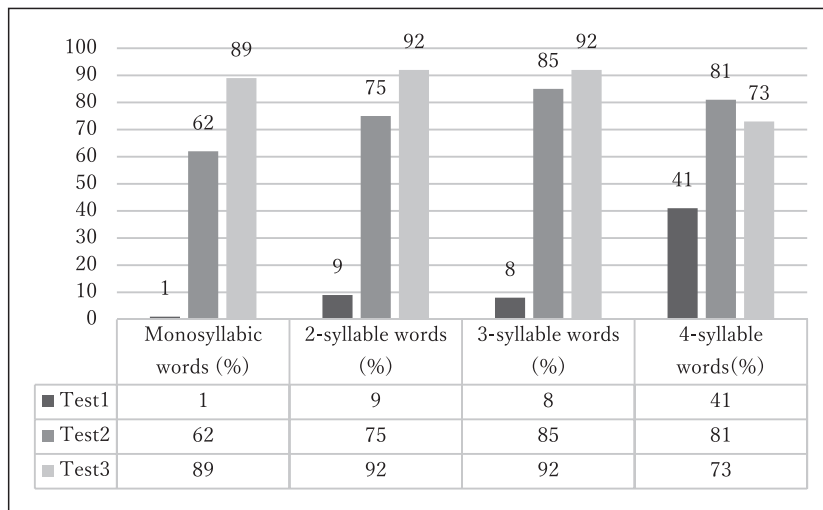
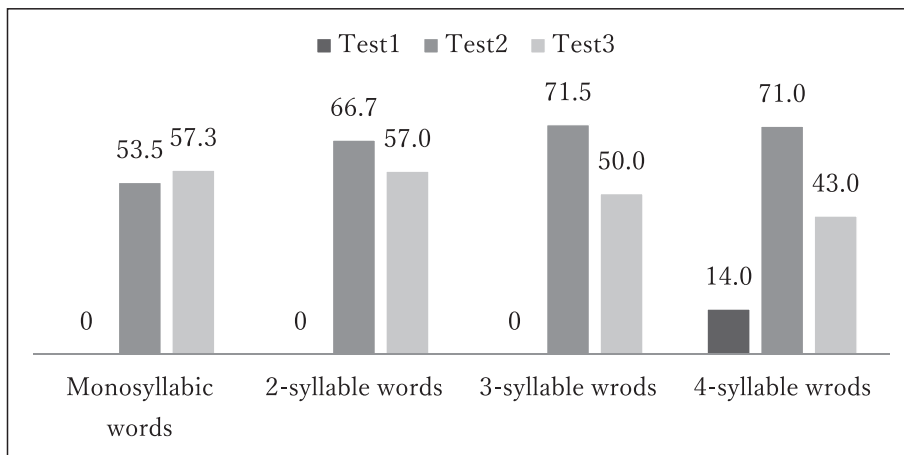


Table2 The Changes of the Correct Answer Rate by Numbers of Syllables of At-risk Students (n = 7)



4.2 Consideration

By studying the results of Test1 and Test2 conducted in the program year-1, it was clearly shown that the correct answer rate of the tasks which included monosyllabic words was the lowest of all in both tests. This rate however, increased to 62% in Test2, and furthermore, it was improved remarkably in Test3 in which 90% of students answered them correctly. In Test1, the students recognized the same tasks using the Japanese syllable (the mora), however, through explicit instructions, they became aware of and developed English syllable awareness. It is notable that their awareness was retained and even enhanced after the 15-month blank period. The same tendency was observed in the tasks for 2-syllable or 3-syllable words, and the correct answer rate gradually improved.

Regarding as the correct answer rate for the 4-syllable word task, however, it dropped in Test3. We considered that reliability of the task was not high enough since there had been only one 4-syllable word task included in the assessment test. Therefore, this study does not assure that 4-syllable words are difficult for the students to segment over years or to retain their awareness.

As previous studies have shown, Japanese students use Japanese syllable structures to segment English words. Yuzawa (2015) conducted the experiments on the children at kindergarten to see how the children segment English words into the smaller units. The result shows that Japanese children tend to segment English words into smaller units than English syllables. The present study requires the students to segment English words they hear into English syllables and answer the number of syllables in each word. From these facts shown in the previous studies, we predicted that the students in the current study also used Japanese syllable structures to segment English words and counted more numbers than the number of English syllables in the word.

The following Tables indicate the students' answers to the tasks arranged by the numbers of syllables (1-4), and we attempted to verify the changes in three assessments (Test1, Test2 and Test3) conducted in three different periods. We also attempted to clarify the possible influences of Japanese syllable structures which may be found in the test results.

The result of monosyllabic word segmentation is summarized in Table3. In Japanese language structure, both words, 'cat' and 'dog' have 3 moras (kya/tt/to; do/gg/gu), the word 'brown' has 4 moras (bu/ra/u/n), and the word 'spring' has 5 moras (su/pu/ri/n/g). In Test1, which was conducted before the syllable awareness instructions, 67students (83.75%) segmented the word 'cat' into 2 or 3 syllables, and 62 students (77.5%) segmented the word 'dog' in the same way, into 2 or 3 syllables. This would be the evidence of the students' employing the mora as a single syllable unit to segment the words 'cat' and 'dog'. The same applies to the other 2 monosyllabic words. The students who segmented the word 'brown' into 4 syllables were the most (44 students), 66 students in total (82.5%) counted 3 or 4 syllables in the word 'brown'. The pattern of counting 3 syllables in the word 'brown' is also considered as possible since the vowel before nasal consonant is assimilated into the following consonant in speech. As for the word 'spring', none of the students parsed this monosyllabic word as a single syllable, while 75

students (93.8%) which was the majority of the participants segmented it into more than 3 syllables. In Test3, however, not only did the correct answer rate raise remarkably, the numbers of units the students perceived as syllables were also observed to be much closer to the correct numbers of English syllables in the word. 79 students (98.8%) counted 1 or 2 syllables in the word ‘brown’, and 78 students (97.5%) also perceived 1 or 2 syllables in the word ‘spring’, both of which are monosyllabic words.

Table3 The students’ answers for monosyllabic tasks (n = 80)

Tasks	Tests	Correct Rates (%)	1	2	3	4~	NA
cat	Test1	1	1	30	37	8	4
	Test2	74	59	15	5	0	1
	Test3	99	79	1	0	0	0
dog	Test1	1	1	29	33	14	3
	Test2	89	71	6	1	1	1
	Test3	98	78	1	0	0	1
brown	Test1	1	1	10	22	44	3
	Test2	53	42	30	5	0	3
	Test3	85	68	11	1	0	0
spring	Test1	0	0	1	18	58	3
	Test2	31	25	44	7	3	1
	Test3	74	59	19	2	0	0

2-syllable words employed in the assessment were ‘snowman’, ‘orange’, and ‘rainbow’ which have respectively 5 moras (su/no/u/ma/n), 4 moras (o/re/n/ji), and 5 moras (re/i/n/bo/u) in Japanese phonological structure. Table4 shows that in Test1 52 students (65%) segmented the word ‘snowman’ into 4 or 5 syllables, 56 students (70%) segmented the word ‘orange’ into 3 or 4 syllables, and the word ‘rainbow’ was broken down to 5 syllables by 57 students (71.3%). In Test3, however, all 2-syllable words were segmented correctly by more than 70% of the students, besides, 30% of the rest counted less syllables in the words than they did in the previous 2 tests. It evidenced that many students had been aware of English syllables which were different from Japanese syllable structures.

Table4 The correct answer rate with the number of students for 2-syllable words tasks (n = 80)

Tasks	Tests	Correct Rates (%)	1	2	3	4	5~	NA
snowman	Test1	6	0	5	20	24	28	3
	Test2	66	2	53	24	0	0	1
	Test3	89	2	71	7	0	0	0
orange	Test1	14	1	11	14	42	9	3
	Test2	86	1	69	7	0	0	3
	Test3	93	1	74	5	0	0	0
rainbow	Test1	8	0	6	12	21	36	5
	Test2	74	0	59	16	2	2	1
	Test3	94	1	75	3	1	0	0

Similarly, the same tendency was observed in 3-syllable words ‘strawberry’, ‘astronaut’ and 4-syllable word, ‘vegetable’. (Table5, Table6)

Table5 The correct answer rate with the number of students for 3-syllable words tasks (n = 80)

Tasks	Tests	Correct Rates (%)	1	2	3	4	5	6~	NA
strawberry	Test1	10	0	2	8	17	25	24	4
	Test2	93	0	4	74	1	0	0	1
	Test3	96	0	2	77	1	0	0	0
astronaut	Test1	6	0	0	5	17	20	34	4
	Test2	80	0	2	64	9	3	1	1
	Test3	88	0	0	70	10	0	0	0

Table6 The correct answer rate with the number of students for 4-syllable word task (n = 80)

Task	Tests	Correct Rates (%)	1	2	3	4	5	6	7~	NA
vegetable	Test1	41	0	2	7	33	25	7	2	4
	Test2	81	0	1	13	65	0	0	0	1
	Test3	73	0	3	18	58	1	0	0	0

4.3 The tendency of the at-risk students

As it is reported that there are great individual differences in phonological awareness, the theory might be applied to Japanese elementary school students, which should be taken into consideration in teaching phonological awareness to them. It is difficult to identify the reason for the low correct answer rate of the at-risk students, however, by observing the student’s individual progress, it is expected to find the further solution to be considered in order to improve the instructions. The test results of monosyllabic words, which most of 7 at-risk students found difficult, were shown in Table 7.

Table7 The correct answer rate with the number of students for monosyllabic tasks (at-risk students)

Tasks	Tests	Correct Rates (%)	1	2	3	4~	NA
cat	Test1	0	0	1	3	2	1
	Test2	57	4	1	2	0	0
	Test3	86	6	1	0	0	0
dog	Test1	0	0	0	6	0	1
	Test2	71	5	0	1	1	0
	Test3	100	7	0	0	0	0
brown	Test1	0	0	0	1	5	1
	Test2	57	4	2	0	0	1
	Test3	43	3	3	1	0	0
spring	Test1	0	0	0	1	5	1
	Test2	29	2	3	2	0	0
	Test3	0	0	6	1	0	0

In Test3, almost all at-risk students segmented the word ‘cat’ and ‘dog’ correctly (cat:6, dog:7). The word ‘brown’ was segmented into 4 syllables by 5 students, 3 syllables by 1 student. We could observe the effect of Japanese mora units on their English word segmentation. In contrast, in Test3, 3 out of 7 students recognized the word ‘brown’ as a monosyllabic word, another 3 students segmented it into 2 syllables, 1 student broke it down further to 3 syllables. The similar tendency was observed in the word ‘spring’. Although the correct answer rate declined in Test3 in comparison with Test2, the test results showed clearly the improvement of students’ syllable awareness by finding them be aware of the existence of different separable unit from Japanese mora in the word. In addition, by observing the students who did not answer to any questions in Test1 has participated in Test3, it is considered that phonological awareness instructions have given not only the motivation to the children to explore the new challenge but also their confidence in the language activities.

5. Phonological awareness instructions conducted in this study

5.1 The design

As the conscious awareness of phonological units should be distinguished from the built-in sensitivity, the sensitivity of the sound of the second language should be stimulated by working on the individual consciousness. In order to develop the students’ ability to be aware of the characteristics of the sound, therefore, the instructions were designed not only to entertain the students, but also to capture their interest and build their positive attitude and confidence towards learning and challenging something new to them. We considered that it should not be trained by repeating the drills.

5.2 The composition of the phonological awareness instructions

The phonological awareness instructions attempted in this study was designed to develop the students’ *awareness* in a gradual, step-by-step progression with three learning steps, which we call ‘3Doors to phonological awareness’ (Image1). The instructions initiated the ‘Door1’ and proceeded gradually to the ‘Door2’ and ‘Door3’ with new challenges introduced on those previous practiced and went back to the previous doors frequently to review repeatedly. At first, in the ‘Door1’, the challenge of listening attentively was introduced to the students. The students were asked with closed eyes to identify and sequence many everyday sounds. As a next step, they were gradually replaced by speech sounds of the meaningful language. In this way, the students naturally mastered how to listen to the sounds attentively and analytically.

‘Door2’ provided the students an opportunity to be aware of the difference in phonological structure between Japanese and English. For example, comparing the Japanese-like speech emphasized on the mora units (strawberry → su/to/ro/be/ri/i), with English speech based on the syllable units (straw/ber/ry), the students were asked to pay attention to the rhythm of the sounds and find the difference. Once the students were familiarized themselves with listening to the rhythm of the English words, they were asked

to listen to the sameness, difference, number and order of speech sounds to discover new and interesting character of the sound.

In ‘Door 3’, the various games and activities of blending (ability of synthesis) and segmenting (ability of analysis) were introduced to the students. They were all simple but enjoyable enough to capture their interest, to motivate the students to learn, remember and repeat. In this way, the learning of phonological awareness was extended beyond the immediate teaching context and acquired firmly by the students themselves.

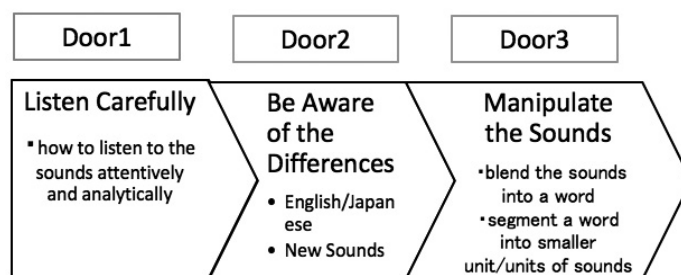


Image1 3 Doors to Phonological Awareness

6. Conclusion and future tasks

The purpose of this study is to capture the general level of Japanese elementary school students' phonological awareness, and to attempt the original teaching method which is applicable in the class of foreign language activities in Japanese elementary schools in order to verify its effectiveness. This is an interim report of the evaluation over a 3-year period, accessing and confirming the students' growth and the way of improvement in syllable awareness.

Regarding the former subject, the remarkable growth in Test3 in comparison with Test2 proves that the students' phonological awareness can be developed through the instructions and furthermore, it is not only retained but also can be enhanced. By analyzing the tendency of the students' answers, although the majority of the students employed Japanese mora to segment English words in Test1, more and more students are however, improved gradually to be aware of the existence of English syllable units in the word. On the other hand, at-risk students (9% of the lowest) still seem to have a difficulty in syllable segmentation tasks in Test3. The analysis of their change in the way of counting syllables in the words (the number recognized as syllables is getting less), however, it shows the evidence of their improvement in syllable awareness.

Regarding the latter subject, in order to retain their phonological awareness, the goal-oriented games sequenced according to the difficulty was carefully introduced and repeated regularly. As the result of Test3 showed, 70% of the students are considered to have acquired English syllable awareness, which is regarded as a certain achievement of our study.

On the other hand, finding the solution or the way to improve the instructions in order to retain phonological awareness more effectively are the challenges for the future. It is highly suggested to build and introduce a step-by-step learning program of English phonological awareness, before students start learning letter sound correspondences necessary to study about ideal frequency, time period, and at which grade that entire instructions of phonological awareness can be introduced at school.

This study also evidenced that without direct instructional support, the Japanese students employ the embedded Japanese phonological structures in order to capture English speech sounds. Considering that the students' level of phonological awareness is the strongest indication of one's success or failure in learning to read and write, students with less or lack of phonological awareness might have further difficulties in reading and writing as observed in dyslexic children in English speaking countries.

Acknowledgement

We would like to show our deepest gratitude to the students, the homeroom teachers and those who were concerned in the elementary school for the great understanding and cooperation in our study. This study was supported in part by Grants-in-aid for Scientific Research (C) Number 16K02911 from MEXT KAKENHI.

References

- Allen-Tamai, M. (2010). Early Literacy Development of English: Phonological Awareness and its Relationship with Alphabetical Knowledge and Word Knowledge, *ARCLE REVIEW*, 4, 90-102.
- Department for Education and Skills (2007a). *Letters and Sounds: Principles and Practice of High Quality Phonics*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/190599/Letters_and_Sounds_-_DFES-00281-2007.pdf.
- Department for Education and Skills (2007b). *Letters and Sounds: Principles and Practice of High Quality Phonics: Notes of Guidance for Practitioners and Teachers*. <http://www.st-peterscofe.worcs.sch.uk/pdfs/assessment/lettersandsounds.pdf>.
- Ecenbarger, L. (2006). *Method Mania*. Author House.
- Hoover, W. & Gough, P. (1990). The simple view of reading. *Reading and Writing: An Interdisciplinary Journal*, 2, 127-160.
- Ikeda, C. (2016). Phonological Awareness of Japanese-L1 Elementary School Children: The Influence of Japanese Phonological Structure. *JES Journal*, 16, 116-131.
- Lane, H. & Pullen, P. (2004). *Phonological Awareness Assessment and Instruction*. Pearson Education, Inc.
- Ministry of Education, Culture, Sports, Science and Technology-Japan (2011). *Five Suggestions and Priority Policies to Improve English as an International Language*. Retrieved from http://www.mext.go.jp/component/b_menu/toushin_icsFiles/afiedfile/2011/07/13/1308401_1.pdf
- Ministry of Education, Culture, Sports, Science and Technology-Japan (2013) Courses of Study, Chapter 4; http://www.mext.go.jp/a_menu/shotou/new-cs/youryou/eiyaku/gai.pdf
- Murakami, K. (2015). The Review of the Teaching of Reading and Writing in the Early Stages of the Acquisition of Decoding and Phonological Awareness as Basic Skills. *Journal of Kobe Yamate College*, 58, 57-73.
- Murakami, K., Miyatani, M. & Cheang, A. (2017). Developing English Phonological Awareness in Elementary School: Focusing on Rhyme and Syllable. *JASTEC Journal*, 36, 1-14.
- Murakami, K. & Cheang, A. (2017). Introduction of Phonological Awareness to Japanese Elementary School

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Students -The explicit instructions in syllable awareness- *JES 17th Hyogo Conference*, 84.

National Institute for Literacy (2001). *Put Reading First: The Research Building Blocks for Teaching Children to Read*. Retrieved from <https://lincs.ed.gov/publications/pdf/PRFbooklet.pdf>.

Rose, J. (2006). *Independent Review of the Reaching of Early Reading. Final Report*. Retrieved from <http://dera.ioe.ac.uk/5551/2/report.pdf>.

Shaywitz, S. (2003). *Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at Any Level*. New York: Knopf.

Tsuda, C. & Takahashi, N. (2014). The Different Influences of Phoneme-Based and Mora-Based Phonological Awareness on Learning English among Japanese Children. *Japanese Journal of Developmental Psychology*, 25 (1). 95-106.