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Phonological Awareness among Japanese Senior High School Students of a Japanese High School: Basis for a Proposed Reading Intervention Program

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Abstract

The purpose of this study is to assess the phonological awareness of Japanese senior high school students as a basis for developing a reading intervention program. This study collects data through an interview to determine the participants' demographic profile as well as to conduct the phonological awareness test adopted from Hastings and Prince Edwards District School Board which consists of ten parts to assess the phonological awareness skills of the students. The participants in this study are ten (10) Japanese senior high school students from Japanese High School. The researchers also had an adult translator for participants who did not fully understand English, and the participants were able to understand the test through the translator. All of the participants demonstrated different phonological awareness skills as they responded to the activities. The researchers found that Japanese students struggled with phonological awareness skills such as initial, medial, and final sound identification, sound segmentation, and syllable awareness. Apart from the phonological awareness skills mentioned, the participants also had difficulty pronouncing some English words and producing rhymes. The researchers discovered that orthographic influence is the main factor affecting their ability to recognize, produce and manipulate sounds. Based on the findings, the researchers proposed a reading intervention program. This program addressed the problem identified in the findings.

Keywords: Japanese, phonological awareness, orthographic influence, reading intervention program

Introduction

In Japan, the leading foreign language being taught in schools from fifth grade onwards is English. However, Japanese English education places a greater emphasis on the English structure than on speaking and producing sounds. This causes Japanese people to be afraid and hesitant when speaking the language orally. Despite the fact that Japanese students begin learning English starting fifth grade up to college, many of them are still unable to communicate in even basic English (Barret, 2015). As a result, Japan dropped to 53rd in the world in terms of English proficiency in a 2019 survey, placing it squarely in the "low proficiency" category (Margolis, 2020).

As the world becomes more globalized, a growing number of events aimed at encouraging Japanese people to learn English emerge. One of these series of events is the Tokyo Olympics, which aims to attract more people and boost economy in the city. Due to this event, the Japanese government has pushed for an increase in English proficiency in the country (Ong, 2016).

Despite the government's efforts to improve the English educational curriculum in Japan, students continue to struggle. One issue is that English teachers are unprepared, unsupported, unqualified and lack of unnecessary skills to teach the language to their students. Another issue that contributes to the difficulties of learning and understanding English in Japan is the inconsistencies in phonetic sound. These discrepancies are likely to have influenced the sound shift of the learning

product which result Japanese speakers tend to produce sounds that are different from what should be produced when speaking English (Yolanda, 2018).

Since Japanese has a different writing system than English, learning English takes longer for them where they have to first learn English alphabets before learning the language. According to Yolanda (2018), the differences in phonetic systems between English and Japanese are due to differences in writing systems. It was discovered that native speakers of the Japanese language paid the most attention to speech sound, and that the writing system and orthography dominate the phonological representations of the Japanese language at the meta phonological level. The findings show that kana, the Japanese native language, has a strong universal influence based on orthographic knowledge such as syllabic phonograms.

When students have complications with their phonological awareness, they will struggle with reading skills at an earlier stage, affecting their ability to learn a new language. Moats and Tolman (2009) demonstrate that phonological awareness is necessary to be able to read any writing system of alphabet. It is also applicable to countries such as Japan when they are studying English. For the English as a foreign language (EFL) learner, including Japanese students, learning the English language is a difficulty. According to Gunderson (2014), in most EFL environments oral and written language exposure is low. Therefore, it constrained the progress of oral language in English and EFL students' learning skills. to Frith (1985), the logographic phase of reading ability is brief for mother tongue speakers, that move past the initial stage after starting formal schooling, although it may remain longer in EFL students.

Numerous studies have revealed that phonological awareness in the English language is correlated to early spelling and reading success in earlier years. Japanese learners, on the other hand, employed mora instead of English syllables to separate or create English words. In countries where English is their first language, studies revealed that phonological awareness is an essential element of accomplishment attaining an alphabetic language in spelling and reading (Rouse, 2006; Stanovich, 1994).

The study aims to narrow the gap by using a quantitative approach to accurately determine Japanese students' phonological awareness in the English language. Even though there have been few studies on non-English speaking countries' phonological awareness, the researcher chose to perform this study to expand their understanding about phonological awareness. The study will also focus on the factors that are most common among Japanese students, as well as the difficulties they face when speaking English as a foreign language. Following the collection of data, the researchers propose a reading intervention program that addresses the difficulties encountered by the participants in their phonological awareness. This proposal aims to assist Japanese senior high school students in improving their phonological awareness in English.

Methodology

This study attempted to answer the following questions. First, what is the profile of participants in terms of age, year and level, sex, number of years using English language, places where the English language is used, available reading materials written in English language (at home, at school and media). Second, to what extent do the participants exemplify phonological awareness in terms of the following, rhyming recognition, rhyming production, word awareness, syllable awareness, initial sound identification, final sound identification, sound segmentation, sound blending, medial sound identification and deletion task. Third, which among the phonological awareness skill are found to be the most challenging among the participants. Last, what reading intervention activities

may be propose out of the data that have been gathered about the participants' phonological awareness.

The researchers used two theories, namely Clay's Emergent Literacy theory (1960) and Stampe's Natural Phonology theory (1969), to provide sufficient theoretical bases for the study. Clay's Emergent Literacy theory (1960) is based on an assumption that a student acquires some knowledge about language, reading, and writing even before attending any formal education (Montejo, 2016). She claimed that literacy development begins at a young age and continues throughout one's life. This theory illustrates the developmental process by concentrating on how children improve during their early years. The study is related to Clay's Emergent Literacy theory as it focuses on the development of students when it comes to reading and identifying sounds. These early skills, known as Emergent Literacy, also include knowledge and abilities related to the alphabet, phonological awareness, symbolic representation, and communication.

Stampe's Natural Phonology theory (1969) is based on two fundamental assumptions. The first is that phonemes are mental images of sound language, and the second is that phonological processes are subconscious mental substitutions of one sound or class of sounds for another that occur as a natural response to the relative difficulties of sound production (Nathan, 1982). It claimed that difficulties encountered during first and second language learning appear to support the natural phonology theory. According to Natural Phonology, language learners will substitute easier sounds for those that do not exist in their native language, they will treat similar sounds as if they were the same as those in their native language, and some errors cannot be attributed to interference because they are caused by the operation of universal phonological processes (Nathan, 1982).

The study is made to assess the phonological awareness of the students. It will also examine the factors that students have and the difficulties they encounter with their phonological awareness skills. The participants of this study are composed of ten (10) Japanese high school students who are currently enrolled in the Academic Year 2021-2022. All necessary data will be gathered through in-depth structured one-on-one interviews and the use of adopted standardized questionnaire from Hastings and Prince Edward District School Board. Each participant was interviewed about their profile. A translator assisted the researchers in translating the information about these profiles.

After obtaining the profile of the participants, the researchers began the second part of the interview. To address the second and third statements of the problem, the researchers used a PowerPoint presentation based on the research questionnaire. The PowerPoint presentation includes a standardized questionnaire which contains of ten parts that were scored based on the responses of the participants. The first to ninth parts each have five items, while the last part has twenty-one items to answer. The interview was conducted via Zoom video call as it is more convenient and accessible for the Japanese students. When the data was collected, the researchers compiled the interview results and began tallying the responses of the participants.

All activities within the phonological awareness test were assessed as excellent, fair, or poor. Each phonological awareness activities score (range 0–5) including Deletion task score (range 0-21) were derived from participants' responses to a 61-item phonological awareness assessment tool which comprises of ten parts from Hasting and Prince Edward District School Board entitled "Quick Phonological Awareness Screening (QPAS).

Result and Discussion

After careful analysis and consideration of the participants' perspectives on their various phonological awareness, the researcher is able to provide the following responses to the objective of the study.

Profile of the Participants

The researchers understand the importance of maintaining the anonymity and confidentiality of the participants' personal information, so they are given code names for this study in order to protect their privacy.

Table 1. Profile of the Participants

Codename of the Participants	Age	Grade Level	Sex	Number of years using English language	Places where the English language is used	Available reading materials written in English language
Participant 1	17	Grade 11	Female	7	Home, School	Books, Youtube, Online Reading Materials
Participant 2	17	Grade 11	Female	7	Home, School	Books
Participant 3	18	Grade 12	Male	8	Home, School	Books
Participant 4	17	Grade 12	Male	8	School, Store	Books, Youtube
Participant 5	18	Grade 11	Male	7	School	Books, Youtube
Participant 6	18	Grade 12	Male	8	Home, School	Books, Youtube
Participant 7	18	Grade 12	Male	8	Home, School	Books, Youtube
Participant 8	18	Grade 12	Male	8	Home, School	Books, Youtube
Participant 9	17	Grade 12	Female	8	Home, School	Books, Movies
Participant 10	18	Grade 12	Male	8	School	Books, Movies

Three out of ten participants are females, and the rest are male. Three of them are 17 years old while the others are 18 years of age. All participants have seven or more years speaking English. The ninth and tenth participants answered movie as an available reading material because of the English subtitles. The ten participants have been studying English as a foreign language subject in school. Despite their years of schooling, they still have a long way to go before they can fully comprehend and learn the English language. Even though English is a required subject in junior and senior high school in Japan, the Japanese still find it difficult to communicate in that language on a daily basis.

Phonological Awareness Skills of the Participants

Table 2 shows that there are similarities and differences in participants performances in their phonological awareness skills. Out of ten participants, ten of them garnered excellent scores in phonological activities such as Rhyming Recognition, Word Awareness, Sound Blending and Deletion Task. However, the result reveals that the three of them evidently shown difficulty in Rhyming Production and those three scored fairly. This could be explained further by differences in Japanese orthographic, which have a strong influence on the participants familiarization of sounds. According

to Cayman Islands Department of Education Services (2018), allowing students to come up with words that rhyme with the given words on their own results in nonsense words that don't match. Students who are familiar with the sound patterns have a better chance of correctly identifying the word that rhymes with the given word. It is vital for students to have a broad variety of knowledge when it comes to sound familiarization.

Table 2.Matrix

	Rhyming Recognition	**Rhyming Production**	**Word Awareness**	**Syllable Awareness**	**Initial Sound Identification**	**Final Sound Identification**	**Sound Segmentation**	**Sound blending**	**Medial Sound Identification**	**Deletion task**
PARTICIPANT 1										
Score	5/5	5/5	5/5	5/5	0/5	1/5	5/5	5/5	2/5	21/21
Interpretation	Excellent	Excellent	Excellent	Excellent	Poor	Poor	Excellent	Excellent	Fair	Excellent
PARTICIPANT 2										
Score	5/5	4/5	5/5	5/5	0/5	0/5	5/5	5/5	2/5	21/21
Interpretation	Excellent	Excellent	Excellent	Excellent	Poor	Poor	Excellent	Excellent	Fair	Excellent
PARTICIPANT 3										
Score	5/5	3/5	5/5	2/5	4/5	5/5	3/5	5/5	5/5	21/21
Interpretation	Excellent	Fair	Excellent	Fair	Excellent	Excellent	Fair	Excellent	Excellent	Excellent
PARTICIPANT 4										
Score	5/5	4/5	5/5	3/5	2/5	5/5	4/5	5/5	5/5	21/21
Interpretation	Excellent	Excellent	Excellent	Fair	Fair	Excellent	Excellent	Excellent	Excellent	Excellent
PARTICIPANT 5										
Score	5/5	3/5	5/5	4/5	1/5	3/5	2/5	5/5	4/5	21/21
Interpretation	Excellent	Fair	Excellent	Excellent	Poor	Fair	Fair	Excellent	Excellent	Excellent
PARTICIPANT 6										
Score	5/5	4/5	5/5	4/5	1/5	5/5	3/5	4/5	3/5	20/21
Interpretation	Excellent	Excellent	Excellent	Excellent	Poor	Excellent	Fair	Excellent	Fair	Excellent
PARTICIPANT 7										
Score	5/5	3/5	5/5	4/5	2/5	5/5	2/5	5/5	4/5	20/21
Inter-	Excel-	Fair	Excel-	Excel-	Fair	Excel-	Fair	Ex-	Excel-	Excel-

	Rhyming Recognition	**Rhyming Production**	**Word Awareness**	**Syllable Awareness**	**Initial Sound Identification**	**Final Sound Identification**	**Sound Segmentation**	**Sound blending**	**Medial Sound Identification**	**Deletion task**
pretation	lent		lent	lent		lent		cellent	lent	lent
PARTICIPANT 8										
Score	5/5	4/5	5/5	2/5	2/5	5/5	3/5	5/5	4/5	21/21
Interpretation	Excellent	Excellent	Excellent	Fair	Fair	Excellent	Fair	Excellent	Excellent	Excellent
PARTICIPANT 9										
Score	5/5	5/5	5/5	3/5	3/5	5/5	4/5	5/5	4/5	20/21
Interpretation	Excellent	Excellent	Excellent	Fair	Fair	Excellent	Excellent	Excellent	Excellent	Excellent
PARTICIPANT 10										
Score	4/5	4/5	4/5	3/5	2/5	3/5	3/5	4/5	3/5	19/21
Interpretation	Excellent	Excellent	Excellent	Fair	Fair	Fair	Fair	Excellent	Fair	Excellent

Five out of ten participants have evidently shown difficulty in Syllable Awareness where all of them scored fairly. This result could be explained in a variety of ways. First is due to the differences in syllable structure between Japanese and English. The participants were not able to recognize syllables in the word due to their lack of knowledge in alphabetic writing system. Japanese syllable structure is more restricted than English in two significant ways. There are only a few cases in Japanese where two consonants can stand next to each other. Many two or three consonant sequences are common in English but are impossible in Japanese. The second factor is the Japanese concept of loanwords, which has an impact on the participants knowledge of English syllables. When two consonants are combined in English, a vowel is added to break them up to make it Japanese and that resulted to English one syllable word to be multisyllable word in Japanese (Lombardi, 2015).

Initial Sound Identification was also a challenge for nine out of ten participants, with five scoring fairly and four scoring poorly. Furthermore, four out of ten participants clearly struggled with Final Sound Identification and Medial Sound Identification, with two scoring fairly and the other two scoring poorly. These results could also be explained further by differences in Japanese orthographic, which have a strong influence on Japanese high school students' speech processing when speaking English. The distinctive writing system of Japanese and English results in the different phonetic systems of both languages (Yolanda, 2018). Japanese has distinct phonetic sounds, place of articulation, and manner of articulation from English. There are only five vowels in Japanese which are /a, I, u, e, o/. These vowels are distinct from the English /a/, /i/, /u/, and /o/ vowels. Japanese also has consonants sounds which are different from English. The Japanese consonants that are different from English consonants /s, z, t, d, ç, j, y, w, r/ and /Φ/ (Suski, 2011) The Japanese

manner of articulation leads to the language's unfamiliarity with consonant clusters. Due to the current simple syllable structure of Japanese, complex consonant clusters are not permitted. Consonant cluster refers to a sequence of adjacent consonants occurring in initial or final in a syllable (Crystal, 2008).

Since there are differences in Japanese and English phonetic sounds, the English words undergo changes when it is spoken by Japanese, which also called phonological process. According to one of the assumptions of Stampe's Natural Phonology theory (1969), it said that phonological processes are subconscious mental substitutions of one sound or class of sounds for another that occur as a natural response to the relative difficulties of sound production (Nathan, 1982) This explains why pronunciation errors made by the students were not a random attempt to produce unfamiliar sounds but rather a reflection of her sound inventory, rules for combining sounds, and stress and intonation patterns in their native language (Swan and Smith, 1987).

Six out of ten participants have evidently shown difficulty in Sound Segmentation where all of them scored fairly. This could also be explained by Japanese orthographic influences, as the writing system influences not only sound production but also the ability of the participants to analyze the sound of the word. According to Ohata (n.d.), Japanese students of English face numerous potentially challenging areas in producing English vowels and consonants due to segmental distinctions between the English and Japanese system of sound. Since the participants were first introduced to Japanese syllabic writing system, the lack of exposure to the English alphabetic writing system caused the participants to unable to recognize syllables in words composed of consonant clusters or vowel-consonant syllable structure. According to Clay's Emergent Literacy theory (1960), students in the early stages of education will do better if they are exposed to books and environments that are suitable for their skill level and understanding (Montejo, 2016). Since the participants have not been exposed to English books or environments in which they can use the English language. Their ability to recognize other syllable sounds in English words is hampered by their inability to produce its sound.

Proposed Reading Intervention Program

Table 3. Reading Intervention Program for Japanese Students

ACTIVITIES/ STRATEGIES	PERSONS INVOLVED	RESOURCES NEEDED	SUCCESS INDICATOR
1. Introduction to phonological awareness	Japanese teachers and Students	English Reading materials, Videos with English language subtitles	- Japanese students can broaden their perspectives on the significance of phonological awareness skills.
2. Overview of exercises and lessons for Japanese students regarding on how they can improve their knowledge when it comes to English language. 2.1. Information dissemination and orientation of students through online video platforms such as Zoom and Google Meet.	Japanese teachers and Students	English Reading Materials, and books written in English	- Rich interaction between the students and other English users.

ACTIVITIES/ STRATEGIES	PERSONS INVOLVED	RESOURCES NEEDED	SUCCESS INDICATOR
READING INTERVENTION ACTIVITIES			
3. CVC Word Work **(identifying Initial, Medial, and Final Sounds)** **- Identifying the initial sound of a given English word** **- Identifying the Medial sound of a given English word** **- Identifying the Final sound of a given English word** For example: **J A M** **_A M** **J _ M** **J A _**	Japanese teachers and Students	Words with simple syllable structures, complex syllable structures, or consonant clusters are represented on the cards.	- Students can identify and produce the initial, medial, and final sounds of a word
4. Letter sound intervention **- Sorting letters written in different fonts in a word**	Japanese teachers and Students	English alphabet charts, letter names	- Students can now analyze the word and determine which parts of it are important for rhyming
5. Diagraphs and blends **- Activity for hearing actual sound of a letter or syllable.**	Japanese teachers and Students	Blends and digraphs chart for writers, letter names	- Students can distinguish the difference between letter and syllable sounds
6. Word patterns **- Give the student a pen to write a word with the same ending.** For example: **HIM** **TRIM** **SLIM**	Japanese teachers and Students	Pen, blank papers, English alphabet charts	- Students can determine which parts of the word are important for rhyming, and it can help them expand their word inventory
7. Vowels **- Tell the students to look at your mouth when you are speaking. Show them the movement of your mouth when you speak.**	Japanese teachers and Students	Vowel chart, word patterns	- Students can read an English word correctly - Students are able to recognize an English word with just listening to it
8. Infected endings **- Show the students a card with a word on it. Allow them to read the word aloud from**	Japanese teachers and Students	CVC practice and cards con-	- Students are not having difficulty distinguishing be-

ACTIVITIES/ STRATEGIES	PERSONS INVOLVED	RE-SOURCES NEEDED	SUCCESS IN-DICATOR
one card at a time. After allowing the students to see the card you showed to them. Let them to notice the similarities between the cards you showed to them.		tain of words	tween initial, medial, and final sound of a given word
9. Evaluation of the students' phonological awareness.	Japanese teachers and Students	Oral reading test	To determine whether the activities provided aided students in improving not only their ability to recognize and produce sounds, but also all other phonological awareness skills that are related to it.

Based on the findings, a reading intervention program should be proposed with an emphasis on activities such as sound recognition and sound production. The majority of the Japanese students interviewed struggled with activities such as initial, medial, and final sound identification, as well as sound segmentation and syllable awareness. All of these phonological awareness skills are related to the concept of sound recognition. The primary reason for this, according to the findings, is orthographic influence and difference in writing system which affects ability of the participants to recognize, produce and manipulate sounds.

The researchers' reading intervention program aims to improve the phonological awareness skills of the Japanese students while also enriching their knowledge of the English language because the instruments used in exercises and activities are all written in English. The researchers begin the reading intervention program by introducing the importance of phonological awareness to the students before presenting them with an overview of exercises and lessons that will help them in improving their phonological awareness skills. **The researchers believe that it is preferable to give students exercises and activities so that they can easily relate to and experience the task.** Therefore, after information dissemination and orientation of students, the researchers state a number of activities that can help students with their problems particularly with sound recognition. Among the activities proposed by the researchers are connected to the letter sounds, CVC words, digraphs and blends, word families/word patterns, vowels and infected endings. The researcher focuses on activities related to sound recognition because it is clear that Japanese students struggle with these skills.

The primary persons involved in this reading intervention program are the teachers of English language and Japanese students. Since this intervention program is only proposed and has not yet been proven to be effective, it is up to the teachers to decide whether or not to use it. The goal of this reading intervention program is to address the issue identified in the findings. If the teacher decides to use it, all of these exercises can be assigned to the students. Since activities dedicated for those difficulties can be helpful to improve the student's phonological awareness

Conclusions

The conclusions are presented based on the findings in the study. Most of the participants' profile are grade 12 students aged 17 to 18 both male and female. Many of the participants used English Language at home for seven to eight years. Majority of them uses books, YouTube, and some stated to used English movies pertaining to the English subtitles. In the first results of Rhyming Recognition, majority of the participants scored fair to excellent while few has difficulty dealing with the skill. Second, Rhyming Production, majority of the participants excelled in this skill, while few have problems dealing with it. Third, Word Awareness, majority of the participants scored excellent in this skill. Fourth, Syllable Awareness, half of the participants scored excellent, while half scored fair to poor. Fifth, Initial Sound Identification, majority of the participants have scored poor in this skill and failed in this part. Sixth, Medial Sound Identification, half of the participants scored excellent, and half scored fair in this skill. Seventh, Final Sound Identification, half of the participants scored excellent while half scored fair. Eighth, Sound Segmentation, all the participants scored excellent in this part. After gathering and tallying the data from all of the participants, it was discovered that the phonological awareness skills such as Initial, Medial, and Final Sound Identification, as well as Sound Segmentation and Syllable Awareness, were the most challenging for them. The study shows that the senior high school students' participants have difficulties dealing with phonological awareness skills. In the overall results, the majority of them seems to have excellent to fair ratings in the seven phonological awareness skills.

Recommendation

Based on the findings, the majority of the participants scored poorly in phonological awareness skills such as initial, medial, and final sound identification, as well as sound segmentation and syllable awareness. Under this program, the researchers recommend a number of activities to help students improve their phonological awareness skills. These activities can help students improve their overall phonological awareness skills as well as specific phonological awareness skills with which they have struggled. Activities and lessons that focus on sound identification and sound production, such as letter sounds, CVC words, digraphs and blends, word families/word patterns, vowels, and infected endings, will be extremely beneficial in improving their phonological awareness skills. After completing all of the assigned activities, teachers can evaluate the improvements of the students. It is critical for the teacher to focus on the response in order to identify the students' weak and strong points. All of the recommendations made, including the proposed reading intervention program and its activities, can help a student who is struggling with specific phonological awareness skills.

References

Alhumsi, M.H., & Affendi, A. (2016). The Relationship Between Phonemic Segmentation Skill and EFL Word Recognition: A Review of Literature. Psychology. International Journal Linguistics.

Barrett, R. (2015, May 29). What Do Japanese College Students Think of English? Tofugu. https://www.tofugu.com/interviews/japanese-college-student-english/

Cayman Islands Department of Education Services. (2018). Phonological Awareness: Rhyme- Stages of Rhyming. Cayman Islands Government. Retrieved from https://schools.edu.ky/Literacy%20Resources/rhyme%20-%20stages%20of%20rhyming.pdf

Crystal, D. (2008). A Dictionary of Linguistics and Phonetics 6th Edition. https://www.academia.edu/12585111/A_Dictionary_of_Linguistics_and_Phonetics_6th_Edition_David_Crystal_2008_

Frith, U. (1985). Beneath the surface of developmental dyslexia. In K. Patterson, M. Coltheart and J. Marshall (Eds.) Surface Dyslexia. London: Erlbaum.

Gunderson, L. (2014). ESL (ELL) Literacy Instruction A Guidebook to Theory and Practice, 3rd Edn. New York: Routledge.

Hastings and Prince Edward District School Board. (n.d.) Quick Phonological Awareness Screening (QPAS) https://www.uen.org/syc/downloads/Handout6_QPAS.pdf

Light, J., and McNaughton, D. (2019). Phoneme segmentation. https://aacliteracy.psu.edu/index.php/page/show/id/5/index.html

Lombardi, L. (2015, March 13). Japanese Loanword Phonology. Tofugu. https://www.tofugu.com/japanese/japanese-loanword-phonology/

Margolis, E. (2020, May 26). Why Japan Doesn't Learn English. Foreign Policy. https://foreignpolicy.com/2020/05/26/japan-doesnt-want-to-become-another-casualty-of-english/

Moats, L., & Tolman, C. (2009). Excerpted from Language Essentials for Teachers of Reading and Spelling: The Speech Sounds of English: Phonetics, Phonology, and Phoneme Awareness (Module 2). Boston: Sopris West.

Montejo, C. (2016, July 29). Emergent Literacy and Theories of Learning. SlideShare. https://www.slideshare.net/MontecriZz/emergent-literacy-and-theories-of-learning

Nathan, G. (1982, February). Natural Phonology Interference in Second Language Acquisition. In J. Boyd & J. Haskell (Eds.), Selected Papers from the Tenth Illinois TESOL/BE Annual Convention (pp. 118–125). ERIC. https://files.eric.ed.gov/fulltext/ED225362.pdf

Ohata, K. (n.d.). Phonological Differences between Japanese and English: Several Potentially Problematic Areas of Pronunciation for Japanese ESL/EFL Learners. Indiana University of Pennsylvania, p.11

Ong, T. (2016, May 13). Tokyo Olympics: Officials pushing to increase English skills ahead of 2020 Games. ABC News. https://www.abc.net.au/news/2016-05-13/tokyo-officials-pushing-to-increase-english-skills-2020-olympics/7412800

Rouse, H.L., & Fantuzzo, J.W. (2006). Validity of the dynamic indicators for basic early literacy skills as an indicator of early literacy for urban kindergarten children. School Psychology Review, 35, 341-355.

Stanovich, K. E., & Siegel, L. S. (1994). Phenotypic performance profile of children with reading disabilities: A regression-based test of the phonological-core variable-difference model. Journal of Educational Psychology, 86(1), 24–53.

Suski, P. (2011) The Phonetics of Japanese Language. New York: Routlage. https://www.routledge.com/The-Phonetics-of-Japanese-Language-With-Reference-to-Japanese-Script/Suski/p/book/9780415851336#:~:text=There%20are%2015%20Japanese%20consonants,relation%20to%20the%20English%20sounds.

Swan, M. and Smith, B. (Eds.). (1987). Learner English: A Teacher's Guide to Interference and Other Problems. Cambridge: Cambridge University Press. https://www.cambridge.org/core/books/learner-english/AD1F3E59EFD6214E40C8FBCB242C071A

Vazeux, M., Doignon-Camus, N., Bosse, ML. et al. (n.d.) Syllable-first rather than letter-first to improve phonemic awareness. Sci Rep 10, 22130 (2020). https://doi.org/10.1038/s41598-020-79240-y

Yolanda, G. (2018, July 13). Phonological Awareness of Native Japanese Speaker Pronunciation of English Reflected by One Okay Rock's Singer. Core. https://repository.usd.ac.id/32788/2/144214122_full.pdf