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# The Introduction of Explicit, Systematic Phonics Instruction into Japanese Junior High School Classes

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While researchers and educators in America have started to reach a consensus on the most effective way to teach reading (National Institute of Child Health and Human Development 2000), very few studies have looked at how well these methods work for students learning English as a second language (L2) for the first time in Junior High School (JHS). This study considers one recommendation of the National Reading Panel—the implementation of explicit, systematic phonics instruction—and applies it to a Japanese Junior High School classroom. This paper reviews the literature in the field, and then discusses a study done in a Japanese JHS classroom and the results of that study. It then considers the implications for researchers, policy makers, and teachers.

研究者と教育者が適切なリーディング指導法について合意に達し始めている一方(National Institute of Child Health and Human Development 2000)、これらの指導法が第2言語として英語を学ぶ生徒に対してどのように作用するかということについては、これまであまり研究がなされてこなかった。この研究は National Reading Panel に系統立ったフォニックスの指導を日本の中学校の授業に適応すること勧めることについて考察した。この論文は、この指導法が効果的であることの証拠をあげることや、系統立った初期段階におけるフォニックスの指導から始まり、文字との関係について再考していく。その後、日本の中学校において実際に指導したことに基づく研究とその結果について検討する。そして、研究者と政策決定者と小・中学校の教員の関わり合いについて考察をする。

## Introduction

The role of phonics in American classrooms has been at the center of an intense debate, one so fierce and so drawn out that it earned the name "the reading wars." While many studies have weighed the pros and cons of phonics-based classrooms versus whole-language classrooms, little research has been done to consider the exact role of phonics for students learning English as a foreign language (EFL). These students have already obtained reading fluency in their native languages, but for most EFL students, the phonemic and graphemic system of English is largely different from that of their native language.

Though actual teaching practices may lag behind the research, most scholars would agree that the reading wars are finished and that we are moving toward a consensus on the effective way to teach reading of English. In 2000, The National Reading Panel reviewed thousands of studies on reading instruction. The panel critically screened those studies for methodological soundness and drew conclusions based on the research that passed the rigorous screening process. They grouped research into five categories: alphabetics (including phonemic awareness instruction and phonics instruction), fluency, comprehension (including vocabulary instruction), teacher education, and computer technology. Among their many findings, the panel concluded that phonemic awareness, or the ability to hear individual sounds in words, is important for emerging readers; the panel also stated that systematic phonics instruction is beneficial for all students in Kindergarten though sixth grade, especially those struggling with reading. The panel went on to recommend specific types of reading instruction and certain reading programs (National Institute of Child Health and Human Development 2000).

## Purpose of the Study

While progress is being made in the English reading instruction of first language (L1) classrooms, there has been little research on the effectiveness of these programs in second language (L2) classrooms, and the role of phonics instruction in EFL classrooms remains unclear. Although phonics has been shown to be the largest source of failure for Japanese JHS students studying English (Inagaki, 1988), it is largely left out of the classroom. Corroborating this was an informal survey that I conducted in which I interviewed twenty-one English teachers in Japan. According to these interviews, the most popular method of reading instruction is the "look-say" method. With the "look-say" method, students are shown whole words and asked to repeat them until they have been memorized. Students are not asked to sound out or decode words—they must learn each new word through sheer repetition. The "look-say" method was popular in America from the beginning of the 20th century until the 1950s, when it was phased out. It has since been called an "educational disaster" (McGuiness 1997, p.73).

When Japanese students start to study English in the first-year of JHS, there is some time for reading instruction, but it is largely left to the teachers' discretion. The interviews shed some light on what happens during the months that reading is taught. Rather than explicitly teaching the phonetic system, most teachers use supplementary worksheets or workbooks that they purchase on their own. Teachers often introduce the alphabet first with letter names, followed by the sounds for the twenty-six letters, then "the magic 'e" in the word-final position (which makes short vowels long), and then a few consonant digraphs (such as sh, ch, and th). Vowel digraphs (such as oa, igh, ou) are almost never taught. Rather than starting slowly and learning to blend sounds, students are given complex words from the start, and phonics instruction is usually dropped after a few weeks of basic instruction.

This study will focus on an area where many Japanese ESL students struggle: decoding.

Decoding ability is one of the most important sub-skills for successful English reading, and it is the foundation upon which all higher level reading skills are based (McGuiness 1997). The National Reading Panel has concluded which methods of reading instruction are most effective in L1 classrooms, but few studies have looked at how these methods translate to L2 classrooms. A few studies have suggested that the English words in Japanese JHS textbooks largely follow phonetic rules (Nazumi 1995, Nago 1998, Takeda 2002a), but very little research has been done to link the explicit, systematic teaching of the English phonetic system to an increase in decoding ability. Also, no studies have explored exactly how much phonics instruction is necessary to teach students how to decode at a consistently high level. This paper addresses the lack of research and asks the following questions:

- 1. If students are given advanced phonics instruction, how much will their decoding ability improve compared to students who receive only basic phonics instruction?
- 2. How does the decoding ability of first-year students who have been given explicit, systematic phonics instruction compare to the decoding ability of second-year students who have never received explicit, systematic phonics instruction?

## Review of Literature

Some researchers believe that the English phonetic system has too much "irregularity and inconsistency" to be taught to Japanese students (Janunuzi 2001), but studies of the words in Japanese ESL textbooks contradict this belief. A study by Nazumi of 1000 words in the New Horizon JHS textbook series (first-year through third year) found that 90% of the words could be read with phonics rules (as cited in Takeda 2002a). Nago looked at the 540 words in the first-year New Crown textbook and found that 82.5% of the words could be read with basic phonics and over 90% of the words could be read with more advanced phonics (ibid.). In a more recent study, Takeda examined the

first 1007 words of the One World English Course JHS textbook (first-year through third year) and found that 71.8% of the words could be read with basic phonics rules, and 87.9% of the words could be read with the more advanced rules. A closer examination found that only 3.5% of all words can be read without applying any of the phonics rules, and Takeda concluded that forcing students to memorize large lists of vocabulary (with *katakana* pronunciation) was counterproductive to speaking habits (ibid.).

Another important study on phonics in Japanese JHS classrooms was conducted by Takeda. Takeda gave phonics instruction to a control group for 10 minutes at the beginning of each class, from April until October, and then measured the improvement of the two groups of students. Students who received the phonics instruction showed measured improvement over students who never received phonics instruction, and Takeda recommended that phonics instruction be made compulsory for all first-year students of English and called for more research to be done in the area (2002b). Since Takeda's study, however, little additional research has been conducted on this area.

## Method

## Participants and Setting

The primary participants in this study were first-year JHS students (age 12 to 13) at a rural school in Hyogo prefecture, Japan. Two classes of 35 students each (17 boys and 18 girls) were the control groups who received only basic phonics instruction, and another class of 35 students (16 boys and 19 girls) was the treatment group which received advanced phonics instruction. Academic levels were evenly divided between classes, and the students started learning English for the first time in April.

The study was conducted over the course of 10 weeks. All students received English instruction four times per week for 50 minutes each time. There were three different

English teachers: two Japanese Teachers of English (JTE) and one Assistant Language Teacher (ALT). I was the ALT and the primary instructor in all classes.

In addition to this primary sample of first-year students, a random group of 19 second-year students (age 13 to 14) was given the same assessment as the first-year students. These second-year students never received explicit phonics instruction, so this data was used to gather information on how well Japan's traditional method of rote word repetition has prepared the students to read and decode words.

#### Phonics Materials

The primary method of teaching and practicing phonics was through letter cards, printed in groups of nine and cut out by the students (see Appendix 1). As the teacher, I had a large set of cards to use on the blackboard. Students also used word lists related to the letter cards to practice reading the sounds they learned, and similar word lists were used in phonics games.

## Phonics Instruction

In the beginning, all first-year students, both control and treatment groups, received phonics instruction. For 20-minute sessions twice a week, students practiced making English words with letter cards. Students received nine cards at once and always reviewed the sounds for each letter first. Then students used the cards to create a series of words where each subsequent word had one different sound. The following nine letters provide an example:

Vowels Consonants

a I u b c h p s t

it

sit

hit

hut

hub

cub

cab

cat

bat

but

bit

pit

spit

spat

sat

sap

After creating the words with letter cards, students practiced writing five or six words and practiced reading from word lists. This method was used for six weeks, until the alphabet (using only short vowels) and all consonant digraphs had been covered.

For the following four weeks, the control group stopped phonics instruction and reverted to the rote repetition of textbook words to learn reading. The treatment group continued more advanced phonics instruction, learning the long vowel sounds and spellings using the same method described above, in eight classes of 30 minutes each. At the end of this course, the assessments discussed in the *Data Collection* section were administered to

both first-year and second-year students. Thus the primary difference between the two groups was the length of phonics instruction with the treatment group receiving almost double the amount of time.

#### Data Collection

Students were assessed in two ways. The first method of assessment was conducted simultaneously in the whole class. The teacher read a word, and students selected the word from a group of four words on their worksheets. There were a total of 20 words (see Appendix 2), 10 of which were from the textbook, 10 of which were nonsense words that could be read by applying phonics rules. The second method of the assessment was an individual reading assessment. Students were given a list of 30 words to read (see Appendix 3), 15 of which were from the textbook, 15 of which were nonsense words that could be read by applying phonics rules. Each student was tested individually by me and asked to read the words out loud. The students were given a simple correct/incorrect score for each word—partially correct readings (for example, getting only the first sound correct) were marked as incorrect.

## Data Analysis

Test scores were analyzed statistically to determine if the results were significant. Scores were calculated for nonsense words and textbook words, and an aggregate reading score was given. The treatment group was compared to the control group and the sample of  $2^{nd}$  year students.

#### Results

#### Outcomes

The results of the tests are as follows. Table 1 shows a statistical analysis of scores on the nonsense word reading test, comparing the control group to the treatment group. Scores were compared using a *t*-test with the level of confidence set at .01.

Table 1

Nonsense Word Decoding

	Control Group	Treatment Group	
	1 <sup>st</sup> yr students	$1^{ m st}$ yr students	
N	50	31	
M	10.2	17.71	
SD	3.9	4.95	

p < .01

As Table 1 illustrates, the mean correct score for the control group was 10.2 while and the mean correct score for the treatment group was 17.71. A *t* test showed a significant difference between the nonsense word decoding scores of the two groups.

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Table 2 shows a statistical analysis of scores on the textbook word reading test, comparing the control group to the treatment group:

Table 2
Textbook Word Reading

	Control Group	Treatment Group	
	1 <sup>st</sup> yr students	$1^{ m st}$ yr students	
N	50	31	
M	16.9	20.61	
SD	5.44	4.14	

p < .01

As Table 2 illustrates, the mean score for the control group was 16.9, and the mean score for the treatment group was 20.61. A *t*-test showed a significant difference between the textbook word reading scores of the two groups.

Table 3 shows a statistical analysis of the aggregate reading scores, comparing the control group to the treatment group:

Table 3
Aggregate Reading Score

	Control Group	Treatment Group	
	$1^{ m st}$ yr students	$1^{ m st}$ yr students	
N	50	31	
M	27.1	38.32	
SD	8.54	8.53	

p < .01

As Table 3 illustrates, the mean score for the control group was 27.1, and the mean score for the treatment group was 38.32. A ttest showed an significant difference between the aggregate reading scores of the two groups.

Tables 4-6 compare the scores of the treatment group to a sample of  $2^{nd}$  year students. Table 4 shows a statistical analysis of scores on the nonsense word reading test, comparing the sample of  $2^{nd}$  year students to the treatment group:

Table 4

Nonsense Word Decoding

	Sample	Treatment Group	
	2 <sup>nd</sup> yr students	$1^{ m st}$ yr students	
N	19	31	
M	14.11	17.71	
SD	5.28	4.95	

p < .05

As Table 4 illustrates, the mean score for the sample of 2<sup>nd</sup> year students was 14.11, and the mean score for the treatment group was 17.71. A *t*-test showed a significant difference between the nonsense word decoding scores of the two groups.

Table 5
Textbook Word Reading

	Sample	Treatment Group	
	2 <sup>nd</sup> yr students	1st yr students	
N	19	31	
M	20.84	20.61	
SD	3.13	4.14	

p = .83

As Table 5 illustrates, the mean score for the sample of 2<sup>nd</sup> year students was 20.84, and the mean score for the treatment group was 20.61. A *t*-test showed no significant difference between the textbook word reading scores of the two groups.

Table 6
Aggregate Reading Score

	Sample	Treatment Group	
	$2^{ m nd}$ yr students	$1^{ m st}$ yr students	
N	19	31	
M	34.95	38.32	
SD	7.85	8.53	

p = .16

As Table 6 illustrates, the mean score for the sample of 2<sup>nd</sup> year students was 34.95, and the mean score for the treatment group was 38.32. A *t* test showed no significant difference between the aggregate reading scores of the two groups.

## Discussion

Comparison of the Treatment Group to the Control Group (Question One)

According to the data in Tables 1-3, the treatment group demonstrated significantly higher reading ability than students in the control group. This was true for both pure decoding ability (measured by the reading of nonsense words) as well as reading textbook words, even though the control group spent more time practicing those words (via the "look-say" method) while the treatment group learned phonics instead.

The results of this study give us evidence of the efficacy of teaching phonics to beginning L2 readers. Teaching basic phonics is a start, but it is not enough for children to be able to decode. Only eight hours of advanced phonics instruction (over four weeks) was enough to produce considerable improvement in decoding ability for the treatment groups, and the extra time for "look-say" reading practice given to the control group did not lead to higher scores when reading the textbook words.

Comparison of the Treatment Group to the Sample of Second-year Students (Question Two)

Tables 4-6 compare first-year students who received advanced phonics instruction to second-year students who never received phonics instruction. The data give us more evidence supporting explicit, systematic phonics instruction. The first-year students who had only studied English for three months scored significantly higher on the nonsense word decoding test than second-year students who had studied English for 15 months. When reading words from a first-year textbook, the second-year students did not score significantly higher than the first-year treatment group. While the second-year students had much greater ability in grammar, vocabulary, and conversation, their decoding ability was lagging behind students with a year less instruction. This shows us that even after 15 months of English instruction, students will not learn to decode implicitly—the skills need to be taught explicitly.

#### Importance of Findings

The results of the present study suggest that a shift from the "look-say" method of teaching currently used in Japanese JHS classrooms to phonics based instruction would lead to considerable, across-the-board improvements in students' reading ability. A shift in teaching methods, however, would require additional training for pre-service teachers. Before students can learn the English phonetic system, teachers need extensive training on the system and how to teach it.

## Limitations and Summary

This preliminary study comparing small numbers of students presents evidence that further research is needed to confirm whether a phonics-focused approach to decoding replicates the results of this study. A larger scale study complete with control and treatment groups would benefit by having multiple raters to negate any observer bias that may have existed in the present study.

In most Japanese JHSs today, students are never taught *how* to decode. This is a serious problem on its own, and it is compounded by the fact that teachers do things that affect students' English ability in a negative way. Instead of learning English sounds and phonemic awareness, students learn to pronounce English words with Japanese *katakana*. Instead of learning the English letter-sound relationships, students are taught letter names. And instead of learning how to decode, students are shown whole words and asked to repeat them until they have been memorized. While effective decoding instruction to is not a panacea for Japan's English problems, it is an important first step to establishing a foundation for incipient readers.

#### References

- Fukunishi, L. (2001). Romazi, roomazi, rohmaji, and romaji: psycholinguistic implications of shared L1-L2 orthography in L2 processing. *The Language Teacher*, *25*, (11). Retrieved April 17<sup>th</sup>, 2006, from http://www.jalt-publications.org/tlt/articles/2001/11/fukunishi/.
- Grabes, W & Stoller, F. (2002). *Teaching and researching reading*. Harlow: Pearson Education Limited.
- Inagaki, A. (1988). Making the best use of phonics. *Modern English Education*, 24, 18-19.
- Jannuzi, C., (2001). Do students need katakana eigo to learn and to read English. *The Language Teacher*, *25.* (4). Retrieved March 23<sup>rd</sup>, 2006, from http://www.jalt-publications.org/tlt/articles/2001/04/jannuzi/.
- Juel, C., Griffith, P.L., & Gough, P.B. (1986). Acquisition of literacy: A longitudinal study of children in first and second grade. *Journal of Educational Psychology*, 78, 243-55.
- McGuinness, D. (1997). Why our children can't read: And what we can do about it. New York: Touchstone.
- Muljani, D., Koda, K. and Moates, D.R. (1998) The development of word recognition in a second language. *Applied Psycholinguistics*, *19*, 99-114.
- Nago, T. (1998, August). Nyuumonki eigokyouiku ni okeru oto to moji wo musubitsuketa

yomikaki shidou (Reading and writing instruction associating sounds with letters in the introductory period of English education). Paper presented at the 29th Annual Meeting of the English Education Society in the Chugoku Region, Tottori, Japan.

National Institute of Child Health and Human Development. (2000). Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.

National Institute of Child Health and Human Development. (2000). Report of the National Reading Panel. Teaching children to read: an evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups (NIH Publication No. 00-4754). Washington, DC: U.S. Government Printing Office.

Nazumi, K. (1995). A feasibility study of the use of phonics to teach vocabulary at the junior high school level. Naruto University of Teachers' Education. Unpublished Master's thesis.

Takeda, C. (2002a). A feasibility study for the application of phonics teaching in junior high school English classes in Japan. *The Language Teacher*, *26*. (4). Retrieved on April 7<sup>th</sup>, 2006 from http://www.jalt-publications.org/tlt/articles/2002/04/takeda/.

Takeda, C. (2002b). The application on phonics to the teaching of reading in junior high school English classes in Japan. *TESL Reporter*, *35*, 16-36.

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b	C	h
	S	t

Name: \_\_\_\_\_ Date: \_\_\_\_ Class: \_\_\_\_\_

- 1) map cap tap lap
- 2) big bid bit bin
- 3) bag bugbeg bog
- 4) meet mat met mate
- 5) ran rain run ron
- 6) rip rap rope ripe
- 7) fat fit fight fate
- 8) not nut note nate
- 9) cute cot coat cat
- 10) seed side sad sod

- 1) paf maf gaf raf
- 2) sim sib sid sif
- 3) kas kos kus kes
- 4) pait pote pight pate
- 5) din dane deen dun
- 6) moaf mofmefe mif
- 7) dele del dail dile
- 8) lan leen lin lun
- 9) teep toap tipe tep
- 10) hight hoat heet hait

## Appendix 3—Individual Assessment

- 1. fun
- 2. bag
- 3. hand
- 4. soft
- 5. much
- 6. animal
- 7. day
- 8. game
- 9. bike
- 10. meet
- 11. catch
- 12. right
- 13. kite
- 14. sixteen
- 15. Sunday

- 1. mup
- 2. lan
- 3. flob
- 4. keed
- 5. bope
- 6. shap
- 7. lape
- 8. naid
- 9. bight
- 10. foab
- 11. pime
- 12. fay
- 13. meef
- 14. kine
- 15. jais