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**An Exploratory Study of Japanese Children Learning  
Circle Sounds: A Phonics to Whole Word Scaffolding System**

While teaching English as a Foreign Language (EFL) to young learners in Japan, I was required to teach a synthetic phonics approach to literacy, *Zoo-phonics* (Bradshaw, Clark & Wrighton, 1999), concurrently with a whole word English language textbook, *Hip Hip Hooray* (Eisele, Eisele, Hanlon & Hanlon, 2004). *Zoo-phonics* was developed in the U.S.A. for native English speaking children. Through the use of songs, chants, and actions, children were taught the most basic, transparent sound-letter correspondences of the alphabet. When the children could blend sounds to spell and read three-letter consonant-vowel-consonant (CVC) words, the whole word textbook was introduced. *Hip Hip Hooray* was story-based and the language in the textbook was not restricted to simple three-letter-words that the children had learned to code and decode.

Since the phonics program, and the whole word textbook were not harmonized, teaching them concurrently was nearly impossible. Students and teachers alike were baffled as to how to deal with the explosion of spelling irregularities they faced when the textbook was added. Phonics no longer worked and there was no way for the children I taught to deal with all the rules, exceptions and explanations needed to make sense of the words they found in the textbook. It was clear that the two approaches needed to be integrated, however, I saw no easy way to accomplish that. That realization was the inspiration for this study, the search for a way to bridge the gap between phonics practice and processing whole words presented in the textbook. My response was the development and piloting of a scaffolding system which I call *Circle Sounds* (CS): the use of colored circles to help my students deal with English spelling.

How children learn, how they learn language and literacy and how this happens in a new language were all intertwined in their relevance to this challenge. This is a report on a one-year pilot study of CS, conducted with young learners, between April 2010 and March 2011, in Hiroshima Prefecture, Japan.

## 1. Literature Review

### 1.1 How Children Learn

My starting point was to consider how children learn. I relied on handbooks on teaching foreign languages to young learners and overviews on classroom research discussing how children learn and develop in interaction with their teachers and more capable peers (e.g., Cameron, 2001; Curtain & Dahlberg, 2010; Lightbown & Spada, 2006; Nikolov, 2000). The main points I had to bear in mind when developing a scaffolding system included the following:

- (1) Piaget described four stages of cognitive development in children (Cameron, 2001). Two of Piaget's four shifts in developmental stage, the shift from preoperational thought, age 2 to 7 years, to the stage of concrete operations at age 7 to 11 years; and the shift from the concrete operational stage to the stage of formal operations at 11 to 15 years of age (Piaget, 1963), normally happen during elementary school. Teachers need to keep these cognitive stages in mind when developing materials for young learners (Curtain & Dahlberg, 2010).
- (2) Most famous for his *zone of proximal development* (ZPD), Vygotsky believed that the child learns through social interaction with an adult or more capable peers (Cameron, 2001). Vygotsky himself described the ZPD as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (as cited in Lantolf and Thorne, 2006, p. 206).
- (3) Scaffolding has to be tuned to children's ZPD in order to help them develop; what we teach must be teachable (Cameron, 2001).
- (4) The more senses scaffolding involves (e.g., visual, kinesthetic), the more likely children benefit from it. Nunan and Bailey (2008) see scaffolding as an important concept not just for the purpose of getting the answer but in helping students to arrive at the answer themselves in the future.
- (5) Children focus on meaning and patterns in input and not form; therefore meaning in context must come first (Cameron, 2001; Curtain & Dahlberg, 2010).
- (6) Young learners benefit from cognitively challenging and intrinsically motivating tasks (Nikolov, 1999).

- (7) Children learn best in low anxiety activities (Lightbown & Spada, 2006; Mihaljevic Djigunovic, 2009).
- (8) Children learn their first language without formal instruction: oral language is a first order, contextualized and meaning-based exercise. Reading and writing, however, are once-removed or second-order exercises (Vygotsky, 1978 cited in Cameron, 2001, p.126) that must be taught. Spoken language comes first and provides the foundation for written language.
- (9) To become successful readers, learners must be aware of the sounds of their language and how they map onto the letters in written language.

## **1.2 The Challenge Japanese EFL Learners Face**

Learners who are literate in their first language “have already made the connection between meaning and symbols in their first language” (Curtain & Dahlberg, 2010, p. 133). Although some things can transfer in second language reading, deriving meaning from text depends on the development of schema and background knowledge (Curtain and Dahlberg, 2010).

The character of Japanese, the first language of the young learners in my classes, was an important consideration when planning CS. Japanese is a mix of three separate writing systems but based on a syllabic system in which symbols represent syllables and sound units are composed of two sounds called diphones. English is an alphabetical writing system where letters and groups of letters represent the phonemes (sounds) of the language. Japanese orthography maintains relative transparency (McGuinness, 1997): English orthography on the other hand is extremely opaque (Katz & Frost, 1992) since there is not a consistent one-for-one correspondence between symbols and sounds. In addition to learning a completely different writing system, Japanese learners of English must also contend with a much larger set of phonemes. Varieties of English differ in the exact number of phonemes but all have over 40 while Japanese has 21 sounds (*International Phonetic Association, 1999*).

## **1.3 Recognized Approaches to Teaching Reading**

For decades, English-speaking countries have been locked in a debate over how to teach reading to children. See, for example, Chall (1996). The opposition has often been between the

advocates of *whole-word-recognition* (or *Look and Say*) approaches and the *phonics approach* advocates, although for a time the more global, top-down *RealBooks/Whole Language* approach was in vogue in the USA and the UK (Hempenstall 1997). The whole word and whole language advocates do not believe in decoding and breaking language down into letter combinations. McGuinness (1997) asserts that the whole language and phonics approaches contradict each other; yet, Cameron believes that those who insist on the exclusive use of one or other approach when teaching reading “do a disservice to learners, who need it all” (2001, p.124). In other words, learners need to be given several different ‘ways in’ to reading.

#### **1.4 One Grand-Scale Effort to Make English More Transparent and Accessible for Young Learners.**

A lengthy discussion of the character of English spelling and the difficulty it poses for young learners would be out of place in this study. It is, however, important to note that in 1964, the *Initial Teaching Alphabet* (ITA), a starting alphabet for young learners, was developed in England and piloted for a 6-year period in America and the UK (Warburton & Southgate, 1969). Despite relative success, the ITA was eventually abandoned and teaching of reading and writing defaulted to traditional orthography. Of significance, after the ITA study, practicing teachers called for a “large-scale experiment in which a number of different approaches to beginning reading are compared” including “a variety of simplified spelling systems and signaling systems, including color codes and systems of diacritical marks (Warburton & Southgate, 1969, p.283). Perhaps CS has a role to play in exploring these recommendations.

## **2. Development of the CS Scaffolding System**

### **2.1 Founding Principles**

For children to learn through a combined literacy program of phonics and other approaches, English must be made more transparent. When teaching young EFL learners, practice must be meaningful, with simple guidelines and explanations that are within the cognitive, developmental and linguistic capabilities of the students. Children need to know that there are multiple spellings for many English sounds and that letters or *graphemes* represent sounds or *phonemes*, not the other way around (McGuinness, 1997). CS uses colored circles to show how English phonemes

map onto the 26 letters of the alphabet. In CS, when a new sound is taught, the allographs, or range of spelling patterns, are taught simultaneously. Students learn that a circle represents one sound. It may appear around just one letter where there is a simple sound-to-spelling pattern or around more than one letter in complex spelling patterns. Circles impose order on English spelling to reveal spelling patterns and children can apply sound blending skills learned in phonics, on the language they find in the textbook.

## 2.2 CS Design

The description of CS that I give here is based on a 44-phoneme model of English which I speak and call *AmeriCan* (American + Canadian) English, although the system can be adapted to fit other accents of English. Different from British English Received Pronunciation, *AmeriCan* English is a *rhotic* accent, where /r/ is pronounced where it appears in spelling. Also, *AmeriCan* English subscribes to the *cot-caught merger* where *o* in *cot* and the *au* in *caught* are both pronounced as /a/ (Tabbert, 1974).

CS recognizes the importance of individual differences in how children learn and develop (Curtain & Dahlberg, 2010; Lightbown & Spada, 2006; Moon, 2000). With CS, as students internalize the phoneme-grapheme correspondences of English they can phase out the circle scaffolds. Young EFL learners find spelling rules difficult to understand. The younger the EFL learners are, the more they rely on memory rather than analytical skills (Nikolov & Mihaljevic Djigunovic, 2006). However, certain tools can help them. Colored circles can quietly and consistently scaffold learners to hear and react to authentic language heard around them and to process actual spelling patterns from the start. Importantly, circles never corrupt spelling and can be used with any text.

### 2.2.1 The Basic Code. Many English phonemes are reliably represented by single letters of the alphabet.

In the CS System these letter/sound correspondences are referred to as the *basic code*. For example, with little or no variation, phonemes such as /b/, and /m/ are represented by the consonants <b> and <m> and phonemes /ε / and / I / are usually represented by the vowels <e> and <i >. The basic code is virtually transparent, so circles are rarely required.

**2.2.2 The Advanced Code.** This is where code overlaps, r-controlled vowels and most multiple spellings for vowel sounds begin and where certain consonants combine to form new sounds. To illustrate these irregularities, circles are applied to graphemes to bind the letters and show which letters are associated with each phoneme. (See Figure 2 for a full representation of the Basic and Advanced Codes).

**2.2.3 Consonants, silent letters and outliers.** CS does not attempt to *perfect* or account for *every single spelling irregularity* in the English language. The primary goal is to impose order on the vowel sounds, where most code overlaps are found, to reduce the sheer number of “exceptions” young spellers need to contend with. If this is achievable, then the lesser challenge of dealing with outliers, such as the <ph> digraph in “photograph”, could be addressed in teachable moments.

There are comparatively few spelling exceptions associated with consonants consequently they are generally coded in black. Black circles bind consonants as in *little*, *ship* and *catch*, to highlight the spelling and show that letters within a circle make one sound. Figure 1 below, shows how silent letters are circled and crossed out in pink, to indicate that they are silent.

**2.3 Adding rhyming cues creates a double scaffold.** In addition to visual scaffolding through the use of circles, the names of the colors used to make the circles have the same vowel *sound* as the phoneme within the circle. For example, the /e/ sound in ‘bed’ is color-coded with red and the /u/ sound in ‘you’ is coded with blue. Learners, hereby, benefit from a visual scaffold while getting a hint about the pronunciation of the circled phoneme. Employing visual and sound-based (rhyming) scaffolds simultaneously, creates a double scaffold which works as a mnemonic. Stevick (1976) talked about the role of familiar cues and in human memory saying, “things that are stored together tend to be recovered together” (p. 18).

Long vowel sounds, found in the advanced code, can be spelled in approximately 45 ways. With CS, however, learners need only remember five sound-color correspondences to process text. Figure 1 illustrates how long vowels are coded.

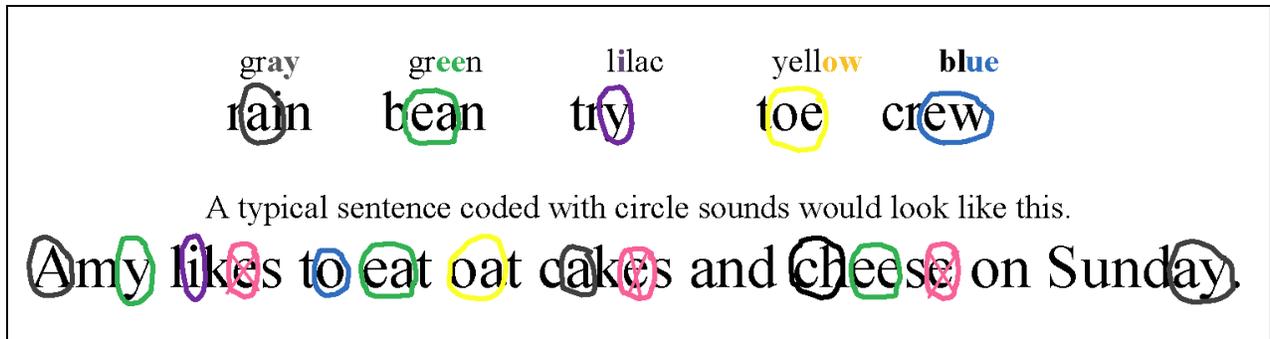


Figure 1. The advance code, long vowels sounds coded with circles.

The letters <ai> in *rain* represent the phoneme /eɪ/ and the letters <ay> in the color *gray* represent the same phoneme /eɪ/. In CS, all graphemes representing the same vowel phoneme are circled in a colour that has that vowel phoneme in the color name, in this case gray. In the sample sentence the <A> in *Amy*, <a> in *cakes* and <ay> in *Sunday* are all circled in gray. In the same way:

- graphemes representing /i/ phonemes, e.g. <ea> in *bean* are circled in *green*. In the sample sentence the <y> in *Amy*, <ea> in *eat* and <ee> in *cheese* are all circled in green.
- graphemes representing /aɪ/ phonemes, e.g. <y> in *try* are circled in *lilac*. In the sample sentence the <i> in *likes* is circled in lilac.
- graphemes representing /oo/ phonemes e.g. <oe> in *toe* are circled in *yellow*. In the sample sentence the <oa> in *oat* is circled in yellow.
- graphemes representing /u/ phonemes e.g. <ew> in *crew* are circled in *blue*. In the sample sentence the <o> in *to* is circled in blue.

Note that the <e> in *likes*, *cakes*, *cheese* are circled in pink and crossed out with an “X” to show that they are silent letters.

The first task was to produce the CS Master Guide as a reference, to plan and orchestrate the data collection.

### 3. The Pilot Study

Framed as a qualitative, longitudinal case study, the pilot study (Thain, 2012) took place under classroom conditions in a small English school in Japan. The original study posed four research questions: This report focusses on only two of those questions.

1. How did Circle Sounds help young Japanese learners of English make connections between sounds and letters in English?
2. How did the use of Circle Sounds impact the motivation of the learners?

### 3.1 Teaching Context and Curriculum

I taught English to young learners between the ages of 7 and 10 in a branch school of a large International Language School. All schools were required to teach *Zoo-phonics*, a synthetic phonics program designed for native English children, along with *Hip Hip Hooray*, a six-level American EFL textbook. Instruction began with phonics and alphabet letter-sound correspondences from the basic code. For six months there was a focus on sound blending to the point of forming simple words before Level 1 of the textbook was introduced.

In Level 1, Unit 1, in the first 10 pages, the following appeared in the text:

- letters a,b,c,d,e,f,h,i,j,k,l,m,n,o,r,s,t,y,u,y
- capital letters A,H,I,J,L,M,N,O,P,R,S,T,W,Y
- the vowel sounds /ei/ (a), /i/ (ee, y), /ai/ (y, i), /ou/ (o, ow) and /u/ (oo, u)
- vowel digraphs oo, ow, oy
- consonant digraphs wh, ch, th (both the voiced and unvoiced sounds)
- the r-controlled vowels ir, or, er, ur
- the concept of silent <e>

The moment the students opened the book and saw, “What’s your name”, the problems began. When children attempted to apply their phonics knowledge to the text, they were disheartened to find that “what worked in phonics class”, no longer applied.

### 3.2 Participants and the Teaching Schedule

The participants were eight young Japanese learners from my regular English classes. All had been taught the basic sound-letter correspondences of the alphabet with *Zoo-phonics*, in previous classes at this school.

Group 1 consisted of four 7-8-year-olds in grade 2 and Group 2 consisted of four 9-10-year-olds in grade 4 at Japanese public elementary school. Classes were typically taught by a native English speaker and a Japanese partner teacher alternating weekly. However, since there was no Japanese partner teacher available for Group 1, I taught Group 1 alone. All students received one 50-minute lesson per week. I was the only teacher teaching CS, so Group 1 received twice as much CS instruction as Group 2. Having two age groups receiving different

amounts of CS instruction was not intentional: My two classes were different ages and no partner teacher was available for Group 1

Two Japanese women assisted with the CS study: Aki and Keiko (pseudonyms). Aki, was a part-time English teacher at the school and my partner teacher for Group 2. She helped supervise the paper assessments; provided data by doing a recorded interview with Keiko; and led the translation and transcription of the Japanese recordings. Keiko was the branch manager of the school. She co-authorized the research (by signing the *in loco parentis* permission), assisted Aki in supervising the paper assessments and provided data through her participation in the interview with Aki.

Table 1  
*Teaching Pattern and Instructional Time for CS*

	Teaching Pattern	Number of 50 min. weekly lessons taught	Total lesson time in the study	CS instructional time in the study
<b>Group 1</b>	taught by author alone	31	25 hours 45 minutes	8 hours 40 minutes
<b>Group 2</b>	taught by author and partner teacher	15	12 hours 30 minutes	4 hours 12 minutes

There were 40 weekly lessons per year in each English course. Table 1 shows that CS research spanned only 31 of the 40 lessons/weeks. My lessons began with approximately 15 minutes of CS teaching. Therefore, over 31 lessons, Group 1 received approximately 8 hours and 40 minutes of CS instruction and Group 2 received only about 4 hours and 12 minutes.

### 3.3 Classroom Procedure and Teaching Materials

Since there were not enough teachers in our branch school trained to teach Zoo-phonics, the complete Zoo-phonics program, *Zoo-phonics* (Bradshaw, Clark & Wrighton, 1999), was removed from the curriculum. At that point I was granted permission to pilot CS in the phonics portion of my lessons. I taught CS for the first 15 minutes of each lesson and then switched to the textbook. Lessons began at the blackboard where we talked in English about CS and practiced circling phonemes with colored chalk. Students then moved to tables to do worksheets. There were three worksheet designs, an authentic short poem or story to read; a song lyric to read, sing

or chant; and a color-and-code worksheet. First, I modeled the worksheet then students read, sang or chanted along listening for the target sounds. Next, they searched for and circled target sounds in the text with colored pencils.

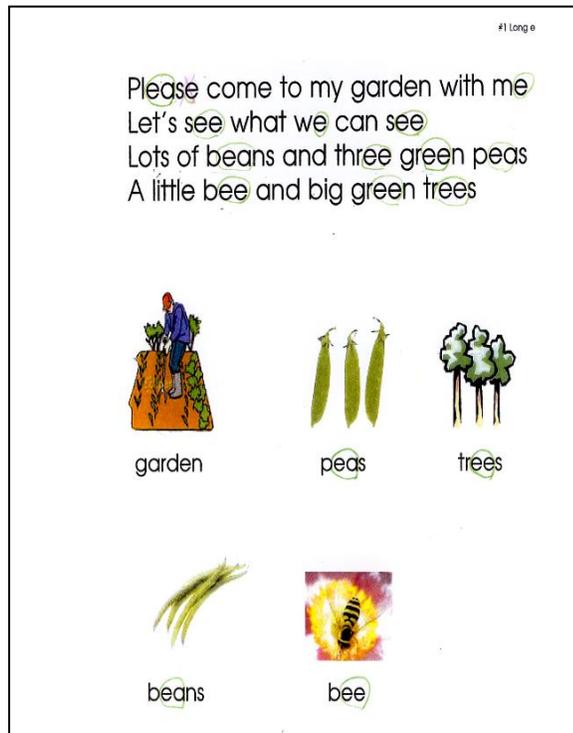


Figure 2. A sample classroom worksheet for the phoneme /i/, (all circled in green)

CS instruction involved searching posters and texts on the wall, the textbook and storybooks for words containing target phonemes. Newly discovered words were coded with circles, entered into the wordlist portfolio and kept as a reference. The wordlist portfolio page for the digraph <ch>, /tʃ/ is shown below as Figure 3.

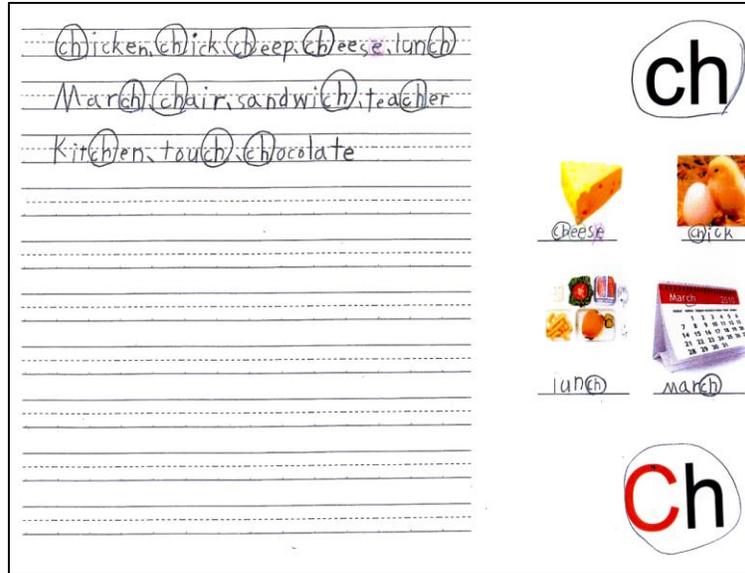


Figure 3. A sample page from the wordlist portfolio for the digraph <ch>, /tʃ/

Teaching materials included a blackboard, colored chalk, colored pencils, classroom worksheets, individual wordlist portfolios, hand-made flashcards and assessment sheets. Teaching materials were developed and piloted along with CS as a system.

As the content of the phonics program and the textbook were not harmonized, incidences of CS being used to scaffold reading in the textbook were coincidental. A classroom note for Group 1 on May 19, 2010 acknowledges that alignment between CS and the textbook was rare and random, “It was convenient that we were working on the unit that has lots of long e’s . . . Family, who is she, he?”

### 3.4 Data Collection

Data were collected using five instruments: (1) hand-written classroom notes, (2) classroom worksheets completed by the children, (3) final assessment tasks, (4) audio recordings of students doing their final assessments and (5) an audio recording of a semi-structured interview with the two adults.

Classroom notes, documenting my reflections along with various comments made by Aki and Keiko, were hand-written during and immediately following each CS class. An average of 250 words was written per day, resulting in a corpus in the order of 7,800 words.

The worksheets allowed students to apply and practice what they learned. Completed worksheets were saved in wordlist portfolios as data for each child. At the end of the study, both groups were given the same three paper assessment tasks and completed them in separate sessions. The tasks were based on familiar worksheet formats. By design, I was not present during the assessments.

Aki and Keiko's participation in CS was mainly at the end of the research. Since neither of them taught CS there was no reason for me to teach them about how CS worked. Aki and Keiko conducted the assessments. As the children worked in groups on the assessments, Aki and Keiko questioned the children about why they were circling some letters and not others, choosing certain colors etc. It was their role to ask questions to solicit answers which might unveil the children's understanding of CS as a system. I intentionally did not teach Aki and Keiko the workings of CS so that they would ask honest, authentic questions of the children.

Immediately following the final assessments, an impromptu, semi-structured recorded interview with Aki and Keiko was done. The interview was 19:47 minutes long, conducted in English and grew out of spontaneous questions I asked as the interview progressed. Some questions and answers can be found in the results below.

## 4. Results

### 4.1 How did CS Help Young Japanese Learners of English Make Connections between Sounds and Letters in English?

Extract 1 shows excerpts from the transcripts of Group 1 doing the assessment tasks. The transcribed data show how the children explained their own rules for CS to Aki and Keiko in their mother tongue. Student 1 demonstrates an understanding that one circle makes one sound and that letters inside the circle combine to make a single sound. In the next utterance Student 2, shows understanding that different colored circles are used to code different sounds. Student 3 understands that if a letter is NOT circled, it makes a different sound than a circled one.

Extract 1: Students explain how CS works

Student 1      がついてても、なんか、丸が一緒についてたら “oh” になる。  
Even if there are two letters in the circle it says /oo/.

Student 2 色によって音が違う。  
Different circles make different sounds.

Student 3 これ丸つけなかったら 「イツ」。  
If we don't put a circle here it says /i/, like “in”

Extract 2 from the classroom notes shows evidence of Group 1 applying logic to concrete problems. After students had learned how to code vowel phonemes /i/ with green and /eɪ/ with grey, without warning, I circled a word in yellow on the blackboard.

Extract 2: Teacher's reflection on children's reaction to a new color

...they were shocked to see a yellow circle at first and then they worked out what that yellow circle sounded like themselves. I wrote the following: boat, note, wrote, goat (all with yellow circles applied) and they just read them off no problem at all . . . easy.

The data shows that Group 1 took approximately ten lessons to confidently code /i/ phonemes, in green, four lessons to code /eɪ/ phonemes in gray and only minutes to understand how to code /oo/ phonemes in yellow.

Extract 3 shows excerpts from transcripts of Group 2 doing assessment tasks. The students are discussing the placement of the circles and explaining CS to Aki and Keiko. First, we see Student 1 answering Aki's question about why the <ch> digraph was circled in pencil and not a color. Next Students 1, 2 and 3 are talking. Students 2 and 3 were heard on the recording, checking and repeating the sound over and over. They know to code /eɪ/ with “gray”, however, that sound is a diphthong and Student 1, has identified both sounds and wants to isolate and code the second sound in the diphthong green for /i/.

Extract 3: Children in group 2 work together

Student 1 これはひとつひとつ分かれてるんじゃなくて、2つの文字でひとつの音です。  
It's not a divided sound, the two letters make one sound.

Student 2 ウェ イ  
& Student 3 Wei ii {checking the sound}  
Student 1 これはグリーンで ならわかるけど。  
I can hear that this should be green.

Extract 4 from the classroom notes is an example of visual scaffolding helping a student make connections between what he heard and what he saw. The second excerpt is my reflection on the incident.

Extract 4: CS scaffolds a student to read a word

When he was trying to sound out *read*, (in his textbook), I circled *ea* (in green) and he pronounced it as easily as a CVC.

He did it so quickly and naturally that it makes me wonder if I am not getting this backwards (i.e. by) asking them to search, hear and circle (first).

Extract 5 shows excerpts from the interview where I question Aki and Keiko about their experience supervising the assessment tasks for Group 2.

Extract 5: Keiko and Aki respond to the teacher's questions

Teacher: What were some of the things they said to you to help you understand this system?

Aki: When I asked about this sound, what is this sound, uh this pencil sound and he duh some kids said this is the combined (+++) er . . . sound. . . Student 1 said that

Keiko: Mmmm (thinking)

Aki: . . . combined the twooo two sound combined

Keiko: Two letter . . . one sound

Aki: Ah, yah one sound, yah

Keiko: Two letters, one sound that's uh, Student 1 said that

Aki: Like <sh>, <ch>

Teacher: How do you think this (CS) might have helped you or not helped you when you were learning English?

Keiko: Ah it might help – Really help us  
[Un ] . . it's uh, very un so new, to me – new method to me, it's a, it's  
((amused tone)) It's brilliant!

#### 4.2 How did the use of CS Impact the Motivation of the Learners?

Aki reported being very interested in the classroom worksheets the children were doing. At one point, when I was not present, Aki asked Group 1 which they liked better, CS or the textbook. Their answer documented in the classroom notes was, “Of course CS—it's really fun”.

Extract 6 highlights excerpts from the classroom notes for Groups 1 and 2. The first comment for Group 1 shows how enthusiastic the children were after the <ch> digraph lesson. The comment following in capital letters underlines how important the behavior of the children is for learning. The *noticing hypothesis*, according to Schimdt (1990, 2001), suggests that unless something is noticed, nothing is learned (cited in Lightbown & Spada, 2006). In the second note for Group 1, we can see excitement when students found words, identified and circled target phonemes in the words successfully. The Group 2 excerpts show how students liked the colored chalk and pencils.

Extracts 6: Teacher comments on student motivated the during a CS lesson

- |         |   |
|---------|---|
| Group 1 | They took off in hurried excitement to find new words for their <ch> pages in the wordlist portfolios. <b>THIS IS HUGE NOTICING PRACTICE</b> as they look so enthusiastically and carefully.                    |
| Group 1 | Visible excitement when the children understand the concept and are able to apply the pattern to actively constructing their model of vowel behavior.   |
| Group 2 | They were marking the words and remembering to do digraphs and silent letters and fighting for the chance to be the one to use the chalk.   |
| Group 2 | (When finding new words with the /i/ sound on a worksheet and transferring them to the wordlist portfolio) . . . the boys were much slower but they were all really super engaged in it. They love the pencils. |

Extract 7 shows the enthusiasm found in CS lessons. This classroom note follows Assessment Task 3 for Group 1.

Extract 7: Japanese teachers comment on how the children enjoy CS

The teachers were amazed after the session and couldn't believe how much the children had enjoyed it. One said that those children think CS is a game and approach it as such, they don't realize that they are studying and learning about phonics.

Extract 8 shows excerpts from the interview where Aki and Keiko tell about what they experienced during the assessment tasks.

Extract 8: Aki and Keiko answer questions about the assessments

- Q: How did you feel today working with the children?
- Aki: Unn . . . think they got excited about the circle sound and . . .they . . . unn they really enjoyed it.
- Keiko: Unn (-) They understand the method of circle sounds=how to circle=what color does she, does do they have to do uh circle . . . . so . . . I think they are clearly understand the ssss how is the circle sound is
- Q: Did you think that the children were stressed today?
- Keiko: [No, no], [No I don't think so] They really enjoyed . . .

## 5. Discussion

The data generally supported the notion that colored circles could make the relationship between English spelling and pronunciation more accessible. The literature tells us that patterning is central to how children learn. CS offered patterns which learners were able to make sense of and use in forming their own rules to navigate and explain the English spelling system to others. While choosing colors and circling texts with crayons, participants attended to and noticed the way sounds mapped onto letters and groups of letters and by responding kinesthetically, they were deepening their learning.

The use of colors to identify a sound gave me, as the teacher, a special new way of communicating with young learners about sounds and spelling. Extract 4 shows where the visual support of a colored circle enabled a student to quickly read a word that he was not able to read alone.

Students were able to continue employing phonics sound blending techniques by simply substituting circles for single letters. To do this, children had to be in the *concrete operations* stage of cognitive development according to Piaget's developmental stages. This stage is characterized by the ability to apply logical thought to concrete problems. Young EFL learners in the concrete operations stage cannot understand abstract concepts that underlie spelling rules, neither do they have the language skills to understand these concepts in English. The hands-on nature of the teaching materials was a good match for the learners at this stage. The colored crayons interested the learners and offered a simple and affordable way to deal with the code overlaps in English as crayons can be used with any text.

Data show evidence that the students were highly motivated to participate in the CS lessons. “Human behavior has two basic dimensions—direction and magnitude” (Dörnyei, 2001, p.7), meaning that motivation interacts with both and is responsible for determining *why* people choose an activity, *how hard* they will work at it and for *how long*. My observations along with comments made by the Japanese assistants during the interview offered multiple examples of motivation in the CS lessons. Students from Group 1 expressed clear preference for CS over the textbook. We find a most telling piece of data in Extract 7 where one of the Japanese adults commented that the children think that the CS lessons are a kind of game and don’t realize they are studying phonics.

Children were not only initially motivated to apply CS but their motivation was maintained over time. They looked forward to applying their new skills to new words and found pleasure in mastering the CS system and explaining to newcomers how it worked. Their explanations about CS indicated that they were able to scaffold one another’s and the assistants’ understanding of the meaningful application of CS. This new system allowed them to feel successful as they guessed intelligently how to match what they heard with what they saw in print.

## 6. Conclusion

The pilot study showed that EFL learners as young as seven are capable of understanding and applying an innovation to scaffold their understanding of English spelling. The fact that the children were in control of the crayons and were able to hear and code the target phonemes was clearly motivating.

The data illuminated what children heard, how they processed sounds and what modifications were needed in the CS design to accommodate the findings. There were, for example, instances where students heard both sounds in a diphthong and wanted to code them separately: perhaps it is more intuitive for children to apply two circles to a diphthong.

Consideration must be given to how CS would work for non-native teachers of English. Data showed numerous examples of how vowel pronunciation by the Japanese teachers resulted in children coding English words incorrectly. This may result in the children learning accented English over time from their teachers. CS relies on the ability of the teacher to pronounce English phonemes, particularly the vowels, accurately.

The aim of the pilot study was to bridge the gap between phonics and the language of the textbook. There was, however, insufficient time to teach the requisite number of phoneme-grapheme correspondences needed to approach authentic text. Consequently, the research did not test the ability of CS to bridge the phonics/whole language gap. Despite limited teaching time, the small sample and the age difference of the participants, CS shows promise as a way to help young learners make sense of the complex English grapheme/phoneme correspondences.

As the children added pages to their wordlist portfolios and entered newly discovered words, they documented their own understanding of English spelling. The lasting value and legacy of CS instruction may be in illustrating the true nature of English spelling for young learners. Working from a finite number of phonemes to their possible spellings, students can see that the English spelling system is accessible and does not go ‘on into infinity with no end in sight’ (McGuinness, 2004, p.46). The most important findings of this study were that CS is age and developmentally appropriate for the groups studied and that young EFL learners were motivated to participate in the CS instruction.

The complex English spelling system continues to impact the efforts of the English speaking community to teach literacy with any consistency. Researching how native English speaking children respond to the CS system would be a natural next step to build upon the findings of this study.

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## References

- Bradshaw, G. E., Clark, I. M., & Wrighton, C. A. (1999). *The Zoo-phonics language arts manual*. Groveland, CA: Zoo-phonics.
- Cameron, L. (2001). *Teaching languages to young learners*. Cambridge: Cambridge University Press.
- Chall, J. S. (1996). *Learning to read: The great debate*. (3<sup>rd</sup> ed.) Fort Worth: Harcourt Brace College Publishers.
- Curtain, H. A. & C. A. Dahlberg. (2010). *Languages and children: Making the match*. (4<sup>th</sup> ed.). Boston: Allyn & Bacon.
- Dörnyei, Z. (2001). *Motivational strategies in the classroom*. Cambridge, UK: Cambridge University Press.
- Eisele, B., Eisele, C. Y., Hanlon, S. M. & Hanlon, R. Y. (2004). *Hip hip hooray student book* (2<sup>nd</sup> ed.). Quarry Bay: Pearson Longman Asia ELT.
- Hempenstall, K. (1997). The whole language - phonics controversy: A historical perspective. *Educational Psychology*, 17(4), 418. 382.
- International Phonetic Association. (1999). *Handbook of the International Phonetic Association*. Cambridge: Cambridge University Press.
- Katz, L., & Frost, R. (1992). The reading process is different for different orthographies: the orthographic depth hypothesis. In R. Frost, & L. Katz (Eds.), *Orthography, Phonology, Morphology, and Meaning* (pp. 67-84). Amsterdam: Elsevier North Holland Press.
- Lantolf, J. P. & Thorne, S. L. (2006). Sociocultural theory and second language learning. In VanPatten, B. & Williams, J. (Eds.). *Theories in second language acquisition: An introduction* (pp. 201-224) NJ: Lawrence Erlbaum Associates.
- Lightbown, P. M. & Spada, N. (2006). *How languages are learned*. (3<sup>rd</sup> ed.). Oxford, UK: Oxford University Press.
- McGuinness, D. (1997). *Why our children can't read*. New York: Touchstone.
- McGuinness, D. (2004). *Early reading instruction*. Cambridge: MIT Press.
- Mihaljevic Djigunovic, J. (2009). Individual differences in early language programmes. In M. Nikolov (Ed.), *The age factor and early language learning* (pp. 196-223). Berlin & New York: Mouton de Gruyter.

- Moon, J. (2000). *Children learning English*. Oxford, UK: Macmillan Education.
- Nikolov, M. (1999). "Why do you learn English?" "Because the teacher is short": A study of Hungarian children's foreign language learning motivation. *Language Teaching Research*, 3(1), 33-56
- Nikolov, M. (2000). Issues in research into early language programmes. In J. Moon & M. Nikolov, (Eds.), *Research into teaching English to young learners: International perspectives* (pp. 21-48). Pécs, Hungary: University Press Pécs.
- Nikolov, M., & Mihaljevic-Djigunovic, J. (2006). Recent research on age, second language acquisition, and early foreign language learning. *Annual Review of Applied Linguistics*, 26, 234-260.
- Nunan, D., & Bailey, K. M. (2008). *Exploring second language classroom research*. Boston, MA: Cengage Learning.
- Piaget, J. (1963). *The Language and thought of the child*. New York, NY: W.W. Norton.
- Stevick, E. (1976). *Memory, meaning and method*. Cambridge: Newbury House.
- Tabbert, Russell. (1974) Dialect difference and the teaching of reading and spelling. *Elementary English*. Vol. 51, No. 8 (Nov/Dec 1974), pp. 1097-1099
- Thain, L. (2012). A pilot study of Circle Sounds: A system to scaffold young learners of English from basic phonics to whole language competency. Unpublished MSc dissertation, Aston University.
- Warburton, F.W. & Southgate. V. (1969). *I.T.A.: An independent evaluation*. London: Newgate Press.