

JALT2024 • MOVING JALT INTO THE FUTURE: OPPORTUNITY, DIVERSITY, AND EXCELLENCE

NOVEMBER 15-18, 2024 • SHIZUOKA GRANSHIP, SHIZUOKA, JAPAN

Implementing a Synthetic Phonics Programme in a Japanese Elementary School

Laura Pratt

British Council, Tokyo

Reference Data:

Pratt, L. (2025). Implementing a synthetic phonics programme in a Japanese elementary school. In B. Lacy, M. Swanson, & P. Lege (Eds.), *Moving JALT Into the Future: Opportunity, Diversity, and Excellence*. JALT. https://doi.org/10.37546/JALTPCP2024-15

In recent decades, the governments of English-speaking countries around the world have reformed the teaching of literacy in schools following reviews of the effectiveness of reading approaches (National Reading Panel 2000; Rose, 2006.). Although much of the reform has centred around the science of reading, debates continue about the effectiveness of various reading approaches. This article will outline an aspect of a curriculum reform project being undertaken by an outside consultant in a rural Japanese town. Students in the elementary schools are taking part in a sixyear literacy programme that complements their regular English lessons. The programme takes students from the beginning of receptive understanding of English sounds and words all the way to being able to read and write sentences and paragraphs independently with their own ideas.

ここ数十年、世界の英語圏政府は、読む指導における有効性の検証結果 (National Reading Panel, 2000; Rose, 2006) に基づき、学校での読み書き指導の改善を進めてきた。改革の多くは読解の科学を中心に進められてきた一方で、様々な読む指導の効果については議論が続いている。本稿では、日本の地方におけるカリキュラム改革プロジェクトの一面について概説する。児童は、通常の英語授業を補完する6年間の読み書き指導を受けている。このプログラムは外部コンサルタントの協力を得て設計され、児童が英語の音を受容的に理解するところから始まり、自分の考えで読み書きができるようになることを目指している。

Researchers have called for greater attention to be paid to phonological awareness (PA) and the links between sounds and spelling when teaching children to read in English (National Reading Panel, 2000; Rose, 2006). Based on these recommendations, a PA curriculum reform project was introduced in a rural Japanese town. Students in the

elementary schools are taking part in a six-year literacy programme that complements their regular English lessons. The programme, designed with the help of an outside consultant, takes students from receptive understanding of English sounds and words all the way to being able to read and write sentences and paragraphs independently with their own ideas. By beginning at the foundations of word reading, students are able to acquire knowledge of the sounds and meanings of English words before moving to reading and writing them independently.

Japanese Context

In Japanese schools, children study English for seven years before the end of compulsory schooling. Traditionally, reading in English has been taught through the process of *yakudoku*, a method of word-for-word translation and parsing of text (Hino,1998) which begins in secondary school. This is sometimes accompanied by transcription of the sounds of the text into Japanese orthography. Individual words are usually taught via whole word rote memorization from translated word lists. This process of learning to read English does not rely on children's ability to link the sounds of English to spelling patterns.

Government policy states that foreign language instruction begins in primary Grade 3. The MEXT (2019) goals for reading in primary school are that:

1. "pupils identify letters of the alphabet written in block letters and pronounce the names of letters."

This is covered in the MEXT-produced Grade 3 and 4 English textbook. And that,

2. "pupils... understand the meanings of simple words and phrases and basic expressions for which they are sufficiently familiar with the sounds."

This point is covered, to some extent, in a number of MEXT-approved commercial textbooks for Grades 5 and 6.



However, teachers need guidance on how children can move from knowing the names of letters to knowing the sounds of the same letters. Guidance is also needed on how children can use their knowledge of the sounds of letters to read words and expressions.

The Challenge

In order to bridge the gap between points 1 and 2 above, children need a foundation of oral language skills before they are asked to read words. This will help them to link the sounds of English to the meaning of English words, building the language pathway. Teacher training on linking the sounds of English to spelling patterns is essential to successfully build a synthetic phonics programme in a Japanese school.

Most research into early literacy focuses on students who are either L1 learners or learning English as an Additional Language. In contrast, students in Japan are usually learning English as a foreign language and have very limited exposure to English outside the classroom. Therefore, they often start school without any foundation of English oral language.

In order to build pathways between phonology, orthography and semantics at a foundational level, Japanese learners first need to build a basic store of oral language. They can use this knowledge when they later begin to read English words following sound-spelling patterns.

L1 children are estimated to learn about 2 new words a day (Biemiller, 2005), culminating in thousands of words learned in elementary school. However, MEXT (2019) expects EFL students in Japan to have a vocabulary of about 600-700 words by the end of Grade 6. This gap between expected vocabulary size of L1 and EFL learners limits the amount of reading children can do independently in an EFL setting.

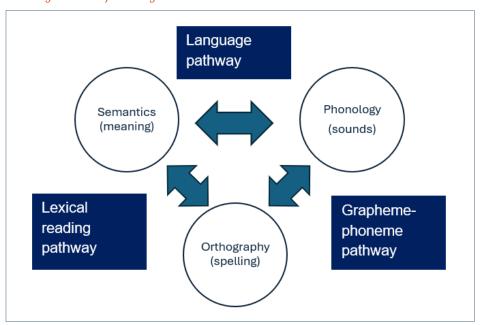
Students' vocabularies can be built through structured classroom interactions including dialogues, songs and stories. Shared book reading has been shown to positively impact children's language development (What Works Clearinghouse, 2015). The language in books is more complex and varied than that which is used in speech (Sénéchal, 2020). Reading books of different genres also exposes children to a wider variety of words.

Building Foundational Reading Skills: an Overview of the Research

Over recent decades, there has been a lot of research into how children build foundational reading skills, although there is less evidence in the case of EFL learners.

When reading words in their first and additional languages, students need to be able to link semantics, phonology, and orthography. The Triangle Model of Reading (Seidenberg & McClelland, 1989) in Figure 1 represents the interaction between aspects of language during the reading process. Reading may begin from any point in the model. For example, readers may begin with the word's spelling, link the spelling patterns to the sound of the word and then access the word's meaning. Likewise, a student may begin with the sounds of the word, match it to the spelling and then check that it matches the word's meaning. This is particularly important in the case of homophones, because while there and they're may have the same sounds, their orthography helps the reader link them to the appropriate meaning.

Figure 1
The Triangle Model of Reading



The language pathway shows the interactions between semantics and phonology. Teachers can build this by creating a rich language environment and building students'



oral language skills. The grapheme-phoneme pathway shows the interactions between phonology and spelling. Teachers can build this by explicitly teaching children about sound-spelling patterns, spelling rules and morphemes in English. The pathway from orthography to semantics, or the lexical reading pathway, will occur when children automatically recognize familiar words without needing to decode the sounds.

Linking semantics, phonology and orthography develops skilled readers. In the EFL context, a lack of oral language input can impede growth of these areas. Gough and Tunmer's Simple View of Reading Theory (Gough & Tunmer, 1986; Hoover & Gough, 1990) (Figure 2) represents skilled reading as a product of both word recognition and comprehension.

Figure 2
The Simple View of Reading

reading	=	decoding	X	comprehension
R	=	D	X	С

Word recognition is a process which begins with PA and moves to decoding and then to sight word recognition. Phonics instruction explicitly builds decoding and PA skills. Because of the Japanese phonological system, students often have trouble with the final sounds of English words. For example, they often add a vowel sound to the end of English words (Murakami, 2017). Segmenting instruction has been shown to be one of the most valuable forms of PA (Ehri, 2022). Helping students to segment final consonant sounds in English words builds their skills to be able to link sounds and spelling patterns in later school grades. Children's decoding skills can be developed through a structured synthetic phonics syllabus (Gonzalez-Frey & Ehri, 2021). Their comprehension of language can begin with building their oral language skills (Castles, et al., 2018).

Structured Synthetic Phonics

Structured synthetic programmes have been recommended for use in schools in English-speaking countries (e.g., Rose, 2006; National Reading Panel, 2000). Structured synthetic phonics programmes meet the definitions below:

Figure 3
Structured Synthetic Phonics

Structured synthetic phonics	Other approaches	
Structured: sound-spelling patterns are taught in a planned sequence.	Sound-spelling patterns are taught as they come up. E.g., patterns from words that	
e.g., s, a, t, i, p, n.	students are reading.	
<i>Synthetic</i> : begin by teaching individual sounds and blending them into words. (Synthetizing is another word for blending).	Starting with whole words and breaking them down into onset and rime, or into individual sounds.	
e.g., c + a + t = cat	e.g., cat = c + at	
<i>Phonics</i> : one sound-spelling pattern represents one sound.		
e.g., $b + a_e + k = bake$,		
f + igh + t = fight		

The scope and sequence of synthetic phonics programmes begins with the simple code: commonly occurring sound-spelling patterns represented by single letters and then commonly used digraphs. This is usually around 42 sound-spelling patterns (simple code). Once students have mastered the simple code, they begin to cover alternative spellings of patterns and practice reading more and more irregular words. The phonics programme in this project follows this approach; however limited chances for language input means the programme takes longer to implement than it would in an L1 setting.

Project Description

Since 2021, the British Council Japan has been running a curriculum reform project in a small Japanese town. Working with an outside consultant, a six-year structured synthetic phonics programme has been implemented to improve students' PA and phonics skills. The phonics programme runs alongside regular English lessons and takes students from receptive understanding of English sounds and words all the way to being able to read and write sentences and paragraphs independently with their own ideas. By beginning at the foundations of word reading, students are able to acquire knowledge of the sounds and meanings of English words before moving to reading and writing them independently.

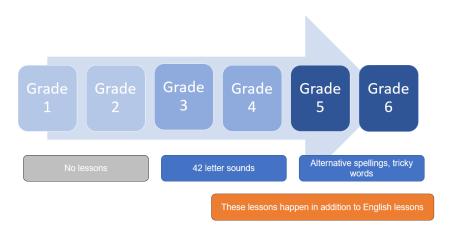


Evolution of the Phonics Lessons

Since its initial implementation, the programme has undergone several changes in its scope and sequence based on student needs. The four-year project (starting in 2021) planned for students to begin lessons on the 42 most common English sound-spelling patterns (simple code) in Grade 3, with no preliminary phonemic awareness lessons (see *Figure 4*).

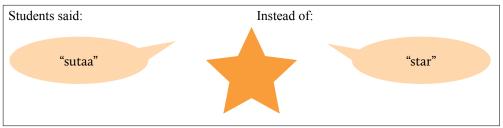
They completed lessons on these sound-spelling patterns by the end of grade 4. Once they had mastered the simple code, it was planned to teach students alternative spelling patterns and irregular or tricky words in Grades 5 and 6.

Figure 4
Scope and Sequence: First Year of the Project



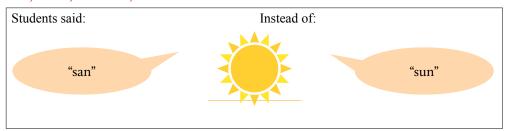
However, it was found that students in Grade 3 were having trouble linking sounds to spelling patterns, because they were not able to segment the sounds in English words. They often articulated single English phonemes as consonant-vowel clusters, as illustrated in Figure 5.

Figure 5
Consonant-vowel Clusters



Grade 3 students were learning *romaji* in other lessons, and there was some interference. For example, many students articulated "u" (i.e., $/\Lambda$ /) as /a/. For example:

Figure 6
Interference from Romaji



In response to these challenges, from year 2, PA activities were added to the Grade 1 & 2 curriculum, in order to help improve acquisition of letter-sounds from Grade 3 onwards.



Figure 7
Scope and Sequence: Second Year of the Project Onwards



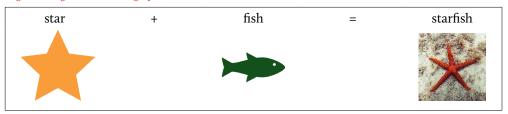
Oral Language Development

Grade 1 and 2 students in this programme focus on building their oral language skills in their regular English lessons. They do so by listening to teachers read picture books to them, by singing songs in English and by doing short role plays. The songs and stories build students' receptive skills and understanding of the vocabulary they will read in phonics lessons from Grade 3. In phonics lessons, students link their existing knowledge of the sound and meaning of English words to their spelling. These songs and stories continue in other grades and the language structures and vocabulary they introduce become increasingly complex.

Phonological Awareness

In the PA lessons, the Grade 1 students begin by learning to separate compound nouns into individual words. This helps students learn how to segment and blend the syllables of English words which are already in their oral vocabularies. Students with these segmentation skills are better able to link sounds to spellings when they begin phonics instruction in grade 3. For example, students segment starfish into star + fish (Figure 7) and pancake into pan + cake. This vocabulary is taught through images as the students have not yet learnt the sound-spelling patterns of English.

Figure 8
Segmenting and Blending Syllables



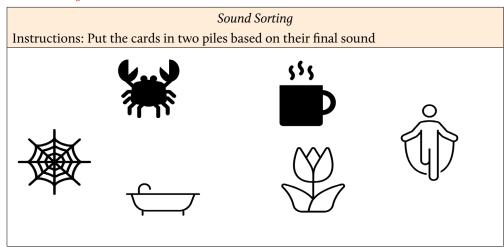
Students move on to segmenting other English words into syllables, and then practice identifying the final sounds in words. Because of the Japanese phonological system, students often have trouble with the final sounds of English words. Practice identifying sounds often happens through sound identification and sorting activities.

Figure 9
Sound Identification Activities

Sound identification Instructions: Look at the pictures and listen to the words. What is the final sound?			
		555	
/b/ (crab)	/b/ (tub)	/p/ (cup)	
/p/ (tulip)	/p/ (skip)	/b/ web	



Figure 10
Sound Sorting Activities



In Grade 2, students continue to practice and build on their skills to identify the final sounds in words. They then work on identifying initial sounds. By the end of the year, students' understanding of the difference between the sound systems of English and Japanese has built a solid foundation for their English learning throughout the rest of their schooling.

Introducing Sound-spelling Patterns

Students have been found to acquire PA skills better with letter shapes than without (Ehri, 2022). However, in this programme we do not systematically introduce letter shapes to students until Grade 3. This will allow time in grades 1 and 2 to focus on learning three Japanese orthographies (*hiragana*, *katakana*, and *kanji*). In addition, introducing the shapes of English letters around the same time as romaji letter shapes in Grade 3 may reduce cognitive load.

In Grade 3, students begin learning to link the individual sounds of English words to spelling patterns. These patterns are introduced one lesson at a time, beginning with sounds which are most closely matched in Japanese and English. These 42 sound-spelling patterns are taught in groups of approximately six and are covered in Grades 3 and 4.

Phonics lessons begin with the letter sound being introduced in a bilingual story. The sound is isolated, and students learn to pair it with a gesture. The sound is linked to a letter shape and students practice forming the shape while saying the individual sound. They then identify and segment the sound from words which are already in their oral vocabularies before listening to and writing words using the new sound-spelling pattern and sound-spelling they have already acquired.

Grade 3 lessons start by introducing sounds which are most closely matched in the English and Japanese sound systems. Sounds such as /s/, /i/ and /n/ are similar in both languages and are included in the first group. Two of these sounds, /s/ and /n/ are continuous sounds, which when used at the start of the word, make it easier for students to blend sounds together.

Commonly confused sounds are also separated into different groups. Japanese learners commonly confuse these English phonemes:

Figure 11
Commonly Confused Phonemes

1.	2.	3.	4.	5.
/m/ & /n/	/1/ & /1/	/v/ &/b/	/æ/ & /ʌ/	/e/ and /ɪ/

In Grade 4, further sound-spelling patterns are introduced including common digraphs. After each group of sounds, students complete 'phonics checks' and any students who are identified as needing extra support are provided with it.

Beyond the 42 Letter Sounds

Once students have had sufficient practice with the 42 letter sounds, they learn about alternative spelling patterns for the same sounds in grade 5 and 6. For example, they learn that the /ei/ sound in 'sail' is can also be spelt as <ay> in 'day' or <a_e> in 'cake'. Students in these grades also learn very irregular, or 'tricky', words as whole words. By learning to read high frequency tricky words such as 'l', 'she', 'what' and 'friend' at this stage, students are able to read short English texts independently.



Challenges

While designing and teaching the scope and sequence for phonics lessons on this project, a number of challenges arose. These challenges are outlined below.

1. Finding time for lessons.

Phonics is most effective when taught in regular, short lessons. Finding time for this in the schedule for a public elementary school is challenging, so most of the phonics lessons happen in a fifteen-minute lesson at the start of the school day. Content of the phonics lessons is also consolidated during regular English lessons.

Figure 12
Lesson Schedule

Grade 1 and 2	Grade 3 and 4	Grade 5 and 6
Two lessons per month	One lesson per week	Two lessons per week

- 2. Training teachers to deliver the lessons.
 - All teachers in the elementary schools receive training, feedback and support from a *Jolly Phonics* trainer. This is delivered in Japanese to make it accessible to all staff. In addition to this, further feedback and support is provided by an outside trainer and English leaders within schools.
- 3. Adapting existing materials to fit the needs of Japanese speakers of English. Teachers use a translated version of the *Jolly Phonics* book1 Teacher's Book for reference. However, the worksheets used in lessons have been adapted from the contents of the book to meet the needs of Japanese students. For example, some vocabulary has been changed to more culturally appropriate words.
- 4. Identifying and helping weaker students.

In addition to phonics checks at the end of each group of letters, individual checks are administered twice a year. Special Educational Needs (SEN) students are integrated into lessons and provided with support from SEN teachers. These teachers also receive phonics teaching training.

Any non-SEN students in need of support are helped by team teachers during lessons.

Outcomes

Although the project is still ongoing, data collected so far from phonics checks done up until this point show that students are remembering and using the sound-spelling patterns.

Feedback from teachers, in particular from SEN teachers, has been very positive about the impact on both students' reading skills and confidence in learning English.

Students entering Junior High School in the town are able to read their textbooks independently. When they come across new words in their books, they first attempt to use their phonics skills to decode the words before checking the meaning with their teacher.

The impact on students' general English comprehension is still being monitored, but we hope to present the outcomes in the future.

Conclusion

In response to the lack of PA instruction in English lessons in Japanese schools, a curriculum reform project was introduced in a Japanese town. The author of this article reported on the project's status in year three of a four-year project. Structured synthetic phonics can be successfully adapted for use in Japanese public schools with adaptations of existing materials. The project takes students from receptive understanding of English sounds and words through being able to read and write sentences and paragraphs independently with their own ideas. By beginning at the foundations of word reading and considering the needs of EFL learners in Japan, students were able to acquire the key foundational reading skills they need to successfully begin to learn to read and write in English independently. It is essential that students' foundational reading skills are strengthened by the addition of PA activities in Grades 1 and 2, along with planned oral language input. Structured synthetic phonics instruction that has been modified for the EFL context and integrated into the regular school schedule can play a valuable role in reforming English literacy instruction in Japanese schools. Although the long-term impacts of this project are still being evaluated, the initial outcomes observed in year three are promising.



Bio Data

Laura Pratt is a teacher trainer for the British Council in Tokyo. Since 2004, she has taught English and trained teachers in nine countries. She holds a Graduate Diploma in Education (Secondary), specialising in second language learning, and is also a postgraduate student of literacy at the Australian Catholic University. Her interests include literacy, curriculum development, and teaching young learners. <a href="mailto: claura.pratt@britishcouncil.org>

References

- Biemiller, A. (2005). Size and sequence in vocabulary development: Implications for choosing words for primary grade vocabulary instruction. In E. H. Hiebert & M. L. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp. 223–242). Routledge.
- Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, *19*(1), 5–51. https://doi.org/10.1177/1529100618772271
- Ehri, L. C. (2022). What teachers need to know and do to teach letter–sounds, phonemic awareness, word reading, and phonics. *The Reading Teacher, 76*(1), 53–61. https://doi.org/10.1002/trtr.2095
- Gonzalez-Frey, S. M. & Ehri, L. C. (2021) Connected phonation is more effective than segmented phonation for teaching beginning readers to decode unfamiliar words, *Scientific Studies of Reading*, *25*(3), 272–285. https://doi.org/10.1080/10888438.2020.1776290
- Gough, P. B., & Tunmer, W. E. (1986) Decoding, reading, and reading disability. *RASE: Remedial and Special Education*, *7*(1), 6–10. http://dx.doi.org/10.1177/074193258600700104
- Hino, N. (1988). Yakudoku: Japan's dominant tradition in foreign language learning. *JALT Journal*, *10*(1), 45–55.
- Hoover, W.A. & Gough, P.B. (1990) The simple view of reading. *Reading and Writing*, *2*(2), 127–160. https://doi.org/10.1007/BF00401799
- Jolly Learning (ed.), (2021) Yamashita, K (trans.), Jolly Phonics Teacher's Book (はじめてのジョリーフォニックス), 6th edition, Tokyo Shoseki.
- Ministry of Education, Culture, Sports, Science, and Technology (MEXT) (2019), Elementary school course of study: general provisions (小学校学習指導要領). https://www.mext.go.jp/content/20201008-mext_kyoiku02-000005241_1.pdf
- Murakami, K., & Cheang, A. (2017), Introduction of phonological awareness to Japanese elementary school students (2): The explicit instructions in syllable awareness and its achievement after a year, *Kobe Yamate College Journal* (神戸山手短期大学紀要), *60*, 57–68.

- National Institute of Child Health and Human Development (NICHD). (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. http://www.nichd.nih.gov/publications/nrp/report.htm
- Rose, J. (2006). *Independent review of the teaching of early reading: Interim report.* London: Department for Education and Skills.
- Seidenberg, M. S., & McClelland, J. L. (1989). A distributed, developmental model of word recognition and naming. *Psychological review*, 96(4), 523–568. https://psycnet.apa.org/ doi/10.1037/0033-295X.96.4.523
- Sénéchal, M. (2017) Shared Book Reading, *The Routledge international handbook of early literacy education, A contemporary guide to literacy teaching and interventions in a global context*, Routledge. https://www.routledgehandbooks.com/doi/10.4324/9781315766027.ch22
- U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2015, April). Early Childhood Education intervention report: Shared book reading. http://whatworks.ed.gov