

A Case Study of a Dyslexic Japanese Elementary Schoolboy and its Implications for Teaching English in Japan

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Abstract

A case study of a dyslexic elementary school student at a private English school and a remedial programme which was introduced to help him.

Keywords: dyslexia, English education, Japanese elementary school

1. Introduction

Dyslexia is a relatively new field in neurology and linguistics. In its narrowest definition, dyslexia refers to cognitive disabilities in learning to read. This manifests itself in different ways, but essentially the brain is unable to correctly decode the symbols and phonemes of written text.

Genetic scientists believe that dyslexia is highly hereditary and have identified a number of genes which might lead to dyslexia. A recent study found that up to 15% of the population carry one of these "dyslexic genes".¹

Ever greater resources are being directed to spotting the problem in young children. In the UK, for example, teachers in elementary schools now receive training on how to recognise dyslexia, and most English education authorities have trained staff who visit schools and provide dedicated remedial tuition for dyslexic-sufferers.

By contrast, very little research is available on the subject in Japan and the problem is either ignored or simply goes

unrecognised.

This may partly be because of the nature of the written scripts in Japan, which are either entirely phonetic (hiragana and katakana) or symbolic (the simplified Chinese character system).

Wydell and Butterworth presented a unique case of a bilingual boy with British and Australian parents who was brought up in Japan and who was dyslexic in English but who was above average ability in reading Japanese.²

Wydell and Butterworth's study seems to underscore the prevalent view in Japan that, because the Japanese writing system is encoded in a completely different way from the Roman alphabet, dyslexia does not occur in Japanese.

On the other hand, a 2003 study by Akira Uno estimated that about 1 percent of children had difficulties in reading kana characters. The figure climbed to about 5 or 6 percent for reading kanji, which are not phonetic.³

This paper is not concerned with a cross-language analysis of dyslexia, except insofar

as the relative ignorance of dyslexia in Japan poses serious implications for the teaching of English, particularly since the introduction in 2009 of English as a formal part of the curriculum in most elementary schools.

This paper will present a case of a Japanese boy who displayed acute symptoms of dyslexia in English, even though he had few problems with reading and writing Japanese.

The boy's self-esteem and confidence and motivation were all heavily affected by his reading difficulties.

2. Case Background

Koki (not his real name) is a student at Windsor English School, a private language school in Yurihonjo city in Akita Prefecture. He joined in July 2007 as a 3rd grade student and studied in a class of between 4 and 6 students of the same age for one hour a week.

In the first year there was little outward sign of Koki's problems with reading the English alphabet. At this time, classroom instruction was mainly spent on identifying each letter and recognizing and reproducing the sounds at the start of words, for example the 'a' sound in 'apple' or the 'b' sound in 'bed'.

However, as the class progressed to more difficult "phonics" exercises, it became apparent that Koki was having great difficulty with deciphering English text. For example, whenever the lesson moved to phonics, he suddenly became tense and lost all confidence. Often, when called on to read a word, his eyes welled up and it was clear that he was undergoing enormous stress.

It should be emphasised here that phonics was only one component of the weekly class, taking up about 10 minutes of the 60-minute lesson. In all other aspects (listening, speaking, pairwork activities etc.), Koki took an active part in the lesson and was highly

motivated.

No test was conducted of Koki's Japanese ability. Informal feedback from Koki and his parent showed that he had no problems in Japanese writing and reading.

3. Diagnosis

Diagnosing dyslexia is extremely problematic, particularly with children whose native language does not use the Roman alphabet.

A common diagnosis for young children in the US, for example, is the following⁴:-

- does s/he have particular difficulty with reading or spelling?
- does s/he put figures or letters the wrong way e.g. 15 for 51, 6 for 9, b for d, was for saw?
- does s/he read a word then fail to recognise it further down the page?
- does s/he spell a word several different ways without recognising the correct version?
- does s/he have a poor concentration span for reading and writing?
- does s/he answer questions orally but have difficulty writing the answer?
- is s/he unusually clumsy?
- does s/he have trouble with sounds in words, e.g. poor sense of rhyme?
- does s/he have difficulty distinguishing between similar sounds in words; mixing up sounds in multisyllable words (for example, "aminal" for animal, "bisghetti" for spaghetti)

These diagnostic points are intended for 'natives' who use the roman alphabet as their primary source of communication.

In Japan, however, care needs to be taken as many students of English might display some of the 'symptoms' in this list simply as a result of unfamiliarity or lack of regular exposure to the English writing system. For

example, a student might regularly put the letters 'b' and 'd' the wrong way round because they only encounter the Roman alphabet once or twice a week, when in class, and is therefore not accustomed to the script or has no great motivation to 'memorise' the difference.

In the case of Koki, however, the following signs made him stand out as a dyslexic sufferer, besides the points mentioned in the above list:-

- a complete mood swing whenever the lesson shifted towards phonics or reading;
- great stress and tension when called on to read a word or short sentence;
- squinting his eyes at the page and contorting his face as he tried to make sense of the letters immediately before him.

4. Remedial Action

There are numerous materials and teaching methods available which seek to aid dyslexic people in both Europe and the US. Many of them are discussed and introduced on Susan Barton's website 'what is dyslexia?'⁵ However, it was felt that these were either too expensive or inappropriate in the case of Koki.

It was also felt that, in view of the general lack of knowledge about the subject in Japan, prescribing dyslexia might stigmatise Koki and have a detrimental effect on his confidence and enthusiasm towards English.

Above all, it was felt that the size of the class meant that remedial action could be undertaken with minimal disruption to the other students in the class and without the need to inform Koki.

It was therefore decided to try and incorporate a 10-minute activity at the start of each lesson which would directly address Koki's dyslexia.

Koki and all the other students were on 3-month contracts at the school, nevertheless a remedial programme covering an initial period of 6 months was devised. This was later extended for a further 6 months.

5. Remedial Objectives

The general objectives were to focus on each letter of the alphabet as a single entity or unit (rather than syllabic compounds such as 'ai' or 'st' which are often taught in English phonics classes).

In so doing, the aim was to mimic the process of learning kanji. According to this idea, each letter of an English word is not a sound but simply one part of a word. The word has its own sound, but this is not necessarily dependent on the letters which made up the word.

In effect, this process reverses the methodology of teaching phonics.

6. Learning Kanji in Japanese Schools

Japanese schoolchildren undergo a rigorous curriculum of learning up to 2,000 kanji characters and their various compound derivatives in the 6 years of elementary school.

It is important to underscore how the approach to this is very different to learning the English alphabet and reading English, and that, in line with Hyett's study, this might hold some clues for the treatment of dyslexia.

Each kanji is taught in isolation and is treated as a character rather than a sound. Students have to learn the correct order for writing the strokes which make up the character. They then have to learn the various compounds in which the kanji is also used.

In the case of Koki it was decided to try and mimic this to some extent by removing the pressure to produce 'sounds' from

English letters. Instead, the goal was to let him memorise the word and its component parts, the letters.

Rather than the phonics approach of, for example, saying that the word 'train' is made up of 5 letters which produce the sound 't-r-ai-n', the 'kanji' approach called for students to simply learn the word 'train' as one entity which was made up of 5 different letters. The fact that these letters each produce a sound is not important, only that the 5 letters together make the word 'train'.

There were no specific goals in terms of progress, except to try to draw on the memory-based nature of learning kanji and through this to encourage Koki to intuitively recognise patterns in English words.

7. Remedial Programme

The programme comprised of three stages, each lasting about 4 months. They were conducted at the very start of each lesson (after a warm-up activity) and lasted up to 10 minutes.

Stage 1 (duration: 4 months)

Slotter cards were made with three slots into which strips of paper were inserted. On each strip were individual letters (see figure 1 in appendix). The students were then handed pictorial exercises in which they had to produce the words for the pictures with their 'slotters'. They were all three-letter words whose meaning the students already knew. For example, one strip might have the letters b, h, s, w, the middle one might have the vowels a, i and o, and the third strip might have the letters t, p, g. From these set of letters students would have to make the words 'big' 'bat' 'hit' 'hat' 'hop' to match the 10 or 12 pictures on their exercise sheet.

Stage 2 (duration: 4 months)

Following this, a set of weekly exercises

were made in which students had to write 3, 4, and 5 letter words. On their paper they had boxes which represented each letter in the words, so question 1 might have 3 boxes and question 2 might have four boxes (see figure 2 in appendix). In this way, they knew how many letters the word had but not the letters which made up the word. Again, the words chosen were all words which the students were already familiar with.

Stage 3 (duration: 4 months)

The final stage was dictation exercises where students had to write whole sentences but with the same boxes for each word as in stage 2. This was done over 15 weeks and gradually increased in difficulty. An example of one of these sentences is "the boy cleans his room on Friday" and which was depicted on the students' worksheets as a sentence of small boxes, with each box representing one of the letters. Some of the letters in the words were already written in the worksheets.

8. Results

The programme ran for a total of 12 months. The results have been mixed.

Koki still makes basic errors in reading and writing English which are clearly identifiable with dyslexia. He is still extremely reluctant to read aloud and has to pause over each word before enunciation.

Despite this, his reading comprehension has improved dramatically. He was able to remember words in much the same way as he remembers kanji characters. His scores in the dictation tests showed a marked improvement over the period.

Stage 1

The "slotter" worksheets comprised of 10 words with pictorial clues. Students were

encouraged to use trial and error with their "slotter" cards and to collaborate with each other. They had to show their cards for each word to the teacher, and when everybody had produced the correct answer they wrote the word on their sheet. Essentially, the exercises were fun and no real value was attached to getting the correct answers. Koki was invariably the last student to get the right answer and often he was helped by other students. By the end, most of the other students were starting to recognise and remember patterns in the sounds of some combinations of letters. Koki, however, showed little sign of progress.

Stage 2

The dictation exercises were conducted more formally. Again, there were pictorial clues on the worksheets, which the teacher then read aloud in turn. Students had to complete the task individually. The words were predominantly three- or four-letter words but were selected at random. With no "slotter" cards to act as visual aids, the students had to rely on their memory of the words themselves or the sounds contained within them.

Koki performed much better with these tasks, and by the end his scores were comparable with all the other students in the class. One noticeable difference was that Koki made fewer consistent errors compared to the other students. For example, the other students repeatedly wrote "ai" for words such as "rice" or "time". Koki seemed to unlearn this much quicker.

Stage 3

The method and results from stage 3 were similar to those in stage 2.

9. Recommendations

There are two particular areas which are recommended for future study:-

1) a deeper understanding of dyslexia in Japan.

There is very little knowledge of the extent of dyslexia in Japanese schools. Until now, students started English in junior high school, where the competitive nature of the system entailed that teachers, and also students themselves, had little time to worry about dyslexia. The focus of English education at junior high school, and later in high school, leans heavily towards tests, and there is little incentive for teachers to look into the reasons why students might be falling behind.

The introduction of foreign languages as a compulsory subject in elementary schools presents a great opportunity to investigate the prevalence of dyslexia and to incorporate remedial tuition into the education system. The test-free nature of English at elementary school means that teachers there will have more time and more incentive to help individual students and the problems they have with learning English such as students with dyslexic tendencies.

2) a deeper analysis of memory-based teaching methods in dyslexic children and in general education.

The case study by Wydell and Butterworth holds out a great opportunity for a reappraisal of the treatment of dyslexia, not only in Japan but also in countries using the roman alphabet.

The methods which Japanese adopt for learning their own writing system, based heavily on memory, could be applied in conjunction with phonics-based teaching in formal education, as well as offering benefits in

remedial education for dyslexic children.

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- 3 宇野彰, 春原則子, 金子真人, 新貝尚子, 坂本和哉, 狐塚順子, 加我牧子; 小児失語と言語発達の臨界点. 神経研究の進歩; pp 694-700
- 4 Elizabeth Wadlington, Shirley Jacob, Sandra Bailey; *Childhood Education*, pp 56-67
- 5 (<http://www.dys-add.com>)

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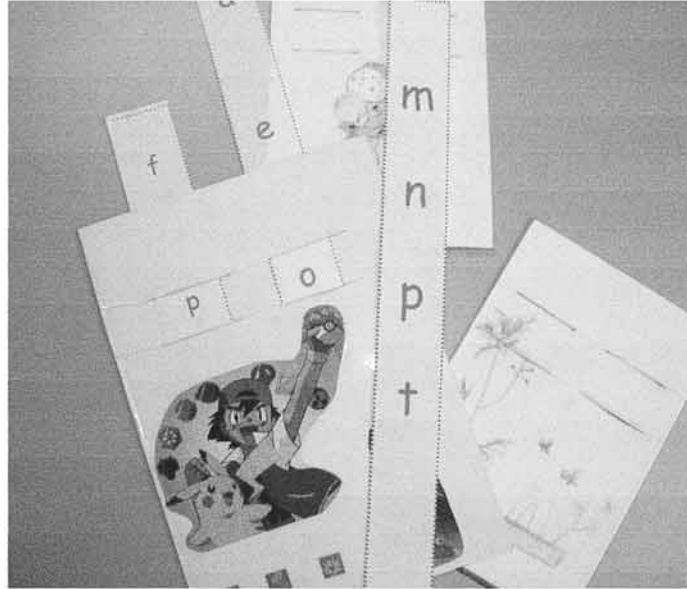
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Appendix

Samples of the dictation exercises:-

Stage 1 dictation "slotter" cards



Stage 2 dictation exercise

1. **r** 
2. 
3. 
4. **w** 
5. 
6. 
7. **e** 
8. 
9. **y** 
10. 
11.
12.

Stage 3 dictation exercise

1. y l
r ry



2. r
l ai



3. v
 r o n k



4. l w
r lv

