

Dyslexia In Japan: Clues for Better English Language Learning Strategies

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Abstract

When healthy Japanese students of normal intelligence try but fail to learn English, could it be because of undiagnosed learning disorders such as dyslexia? Snowling (2010) states that dyslexia occurs across the range of intellectual abilities. Though there is debate about the percentage of students in Japan with dyslexia, evidence shows that the twenty percent that Shaywitz (2010) estimates for native English populations may be true in any population studying English. The Japanese government has set aside a large budget to introduce support for the students with disabilities, but teachers do not seem to know when to ask for support or even that support exists. If children with dyslexia are identified and given support in the form of one-on-one tutoring for an extended period, their condition can be ameliorated. Using a multi-intelligence approach to education with ample tactile stimulation, children are able to slowly grasp the relationship between symbols and the sounds they represent. These learning strategies may also be applicable to non-dyslexic students to increase their English language ability.

In a report by the Ministry of Internal Affairs and Communications, the number of children as a percentage of the population in Japan has dropped for the 36th consecutive year (“Japan’s Child Population” 2010). More than ever we need each child to be a confident, educated member of society to secure a bright future for Japan. However, in order to continue education past high school, every student in Japan must have at least a basic understanding of English language. This is because English is a major part of every university entrance exam and a requirement for graduation even for science and engineering programs—faculties where students who “hate” English tend to apply should they make it that far in their education.

Unfortunately, whether we look in the sciences or in the arts, we will find students who, after six years of compulsory English education (three years in junior high and three years in high school), are

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still struggling to read and write simple English sentences. Why do these students fail to succeed? Some claim it is the exam-oriented nature of English in Japan, others the large class sizes. However, after working with a number of students who are failing to improve in English even though they seem to have the intelligence and desire to learn, I believe that some of these students may have undiagnosed learning disorders (LD) such as dyslexia. To see if my theory was correct, I went on a quest to find out more about dyslexia in Japan.

What is Dyslexia?

A basic definition is surprisingly difficult to find for the term dyslexia. This seems to be because the term itself can be used to describe any number of LD that involve difficulty in decoding writing. Also, several forms of dyslexia have been identified. For the purposes of this paper, note that the word dyslexia is referring to developmental dyslexia—a condition a child is born with, not acquired dyslexia, which is caused by a trauma to the brain.

Experts do agree on several points regarding dyslexia.

- ✓ It is neurological in origin. Dyslexics use a different part of their brain for language processing than non-dyslexics.
- ✓ It is a permanent condition, but problems can be ameliorated with proper training.
- ✓ It is often accompanied by poor short-term memory.

The final point on which the experts agree is that dyslexia most commonly manifests itself as a difficulty with accurate and/or fluent word recognition and with poor spelling and decoding abilities.

For this paper, however, a definition for dyslexia by Temple et al. (2003) will be used. Dyslexia is “a difficulty in reading in people who have the intelligence, motivation, and education necessary for successful reading.” (p. 2860)

Snowling states that dyslexia occurs across the range of intellectual abilities (Snowling 2010). What one must keep in mind is that the borders of dyslexia are not well defined. Snowling explains that there is no definitive point at which we can diagnose a person with dyslexia. Indeed, dyslexia seems to range from different levels of severe to mild with no criteria for distinguishing at what point a person with reading/writing problems should be labeled as dyslexic.

Tomlinson (1995) lists different criteria for different levels of dyslexia from mirror writing of severe dyslexics to failure to grasp the conventions in English of phoneme-grapheme correspondence for mild dyslexics. The more minor the dyslexia, the less likely that it will be recognized and that the child will receive professional support.

According to Shaywitz (2010), a professor of pediatric neurology at Yale University who has dedicated her life to helping children overcome reading difficulties, if we include all dyslexics from mild to

severe, up to twenty percent of the people who speak English as their mother tongue could have dyslexia. Helmuth (2001) points out that this is most likely because of the difficulty of encoding and decoding English. She notes, “English consists of just 40 sounds, but these phonemes can be spelled, by one count, in 1120 different ways.”

Dyslexia in Japan

In one of the earliest studies on dyslexia in Japan, Makita (1968) found that “the prevalence of dyslexia in Japan (0.98%) is some ten times lower than in Western countries.”

However, Hirose and Hatta (1988) found Makita’s (1968) claim to be incorrect. After testing 5th grade children on reading ability and intelligence, they found that 18.7% of children have a one year delay, and 10.9% of children have a two or more years delay in reading ability. This is much closer to the twenty percent of the population diagnosed with dyslexia in English speaking countries.

The difference in the results may be due to the age of the subjects. As long as the children are dealing with Japanese kana, the reading is fairly straightforward. As Japanese children advance in education and begin using more Chinese characters, the difficulty of equating sound to character increases, as do the number of dyslexics (Kuromaru & Okada 1961; Nishimura 2008).

Japanese kana make Japanese a transparent language. Each symbol represents one sound only. There are, however, a few exceptions that can be read two ways (を (read “wo” or “o”), へ (read “he” or “e”), and は (read “ha” or “wa”). The difficulty with hiragana arises in words that incorporate the large and small kana like とつとり (tottori), which dyslexics may write as とつとり (totsutori); or しゃちょう (shachou) which they may write as しゃちょう (shiyachiyou). The difference in size is not obvious to dyslexics (Todo 2010).

Despite these similar percentages for the occurrence of dyslexia in the population of English speaking countries and Japan, the number of people who know about dyslexia in Japan is still quite limited. Hiroshima (2007) polled teachers to test their knowledge of dyslexia. The results showed that 68% of the respondents had not heard of the word dyslexia. Of the 31% who had heard of the word (1% did not respond), 45% did not understand what it meant.

The Developmental Disabilities Support Act and EDGE

In 2001, in Minato-ku, Tokyo, Eiko Todo established the NPO EDGE (which stands for Extraordinary, Dyslexic, Gifted, and Eclectic) and is also known as the Japan Dyslexia Society, one of just a few places dyslexics can go for assistance in Japan. Todo established EDGE at the request of her son. At the age of 15, Todo’s son went to study in England because of his discomfort with the rigid Japanese education system. At the age of 16, while studying in the U.K. he was diagnosed with dyslexia. After being diagnosed he asked his mother to do something so that dyslexics could receive the same

kind of support and social recognition in Japan that he was receiving in the U.K., and she established EDGE.

EDGE's mission is three pronged. They (1) offer support in the forms of educational assistance and career counseling to dyslexics, (2) promote public awareness of dyslexia, and (3) collaborate with the board of education to train "Learning Support Assistants" (LSAs) who go to schools when requested to work with children under the Developmental Disabilities Support Act. To date 232 LSAs have been trained and registered through EDGE.

Japan passed the Developmental Disabilities Support Act (発達障害支援法) (DDSA) in 2004. The law went into effect on April 1, 2005 (Nishimura 2008). Todo explained that the DDSA has a budget of 43 billion yen for 2010 alone. That money can be used to set up and manage programs, hire and train tutors, call in medical specialists, and give parent and teacher support in each municipality in Japan. Under this law it is hoped that there will be a community-wide support system for and a better understanding of developmental disabilities (DD), including Learning Disabilities (LD) (like dyslexia), Attention Deficit Hyperactivity Disorder (ADHD) and different forms of autism. Todo said:

Thanks to the DDSA all the ... difficulties that children and people with developmental disabilities face are starting to change. In the field of education, with the change of Education Law and other related laws, children in the regular classes can ... get [assistance]. One [type of assistance] is [an] LSA.

Unfortunately, there are several barriers to the DDSA that keep the support from the children who need it. Japan's Ministry of Health, Labour and Welfare (2005) outlines the current system as a process that relies on the teacher to arrange for the school to make a request to the government for the additional support. However, as Hiroshima (2007) found through his research, teachers are often unaware of the existence of dyslexia and therefore would not think to ask for help. Todo explained that teachers really have no clue as to what to look for in dyslexic children. Teachers believe that LD students, including those with dyslexia, will have behavioral problems that will bring them to the teacher's attention. However, dyslexics, especially in the first few year of elementary education often have no behavioral or social problems. Todo continued by adding that teachers "will think a child does not have dyslexia because they have friends and are well adjusted." In fact, dyslexics learn tricks to bypass parts they cannot read, or they play to the audience by acting out or making them laugh. The class clown may be dyslexic.

It is this ability to become an integral part of the class which causes the second barrier. A typical Japanese elementary school class has one teacher and about 40 students, so a manageable class is a necessity. When a class does have professionals come in to assess problem students, the students who stand out as needing assistance are those with behavioral problems. As Shinagawa (2010) explained this

means that if a child suspected of being a dyslexic is observed in a class with an autistic child and a child with ADHD, the child with the dyslexia will garner the least amount of attention and could easily be overlooked.

The third barrier is that teachers seem to be oblivious to the fact that funding for help with developmentally disabled students exists. Miho Nishihira, an English teacher at Junior High School of Ochanomizu University, is acutely aware of dyslexia. She has identified and worked with a number of severely dyslexic students from her class. She does this after school, on her own time, so that she and the student can work one on one. She has also written up a list of example spelling mistakes that other teachers can use to help identify dyslexics.¹⁾ When asked if she had ever worked with an LSA, she was unaware of what an LSA is and that assistants like that were even available for use in the school.

However, no matter what the barriers are, according to Todo (2010) the new in-school, LSA supported system is much better than the older system of student support known as *tsukyu* (通級). In the *tsukyu* system some 300 schools nationwide were established for special needs children. Unfortunately, these schools are often far from the child's home. Children who commute to the schools are separated from their friends and communities. And, as Todo pointed out, teachers at these schools have no special dyslexia training. The new system allows children with LD and DD to stay with their friends while they work with an LSA.

In the cases that Todo has witnessed, the LSA starts by spending six hours per day with a student five days a week. This tutoring is always one on one. The LSA will continue the program until the student is doing well and the child specifically tells the LSA that he/she does not need any more help. A typical length of helping a dyslexic child is two to three years (Todo 2010). Todo stated that the goal is "to have independence for the child". To date 150 students have gone through the program and they are reportedly doing well with no truancy problems or other secondary disabilities. (Todo 2010)

Todo remarked that she wished schools in Japan were more like those in the U.S. where schools are scored according to student ability. She believes that this score obligates schools to help students with problems so that they do not pull the total score down. If the child is not helped in the U.S. the teachers and administrators will be penalized for their low school score. In Japan, Todo pointed out, there are no penalties for allowing a dyslexic child to slip through the system undiagnosed.

English Education and Dyslexia in Japan

No matter how many dyslexics are identified in elementary school in Japan, it does not prepare teachers for what happens when English enters the curriculum in the first year of junior high school. Suddenly the number of identifiable dyslexics jumps five-fold. (Todo 2010; Nishihira 2010) Both Todo and Nishihira attribute this jump in numbers to the way English is taught. Students who have little or no vocabulary or phonics training are suddenly asked to start memorizing English vocabulary and grammar.

Add to this the fact that this onslaught of L2 information is at the age of 12 or 13, past the widely accepted critical period for language acquisition, and we can begin to understand the Japanese students' difficulties with English.

In his presentation this June, Hulme (2010) explained that, "learning to read builds upon a child's oral language skills." He elaborated that native English speakers have five to six years to acquire vocabulary before going to school to learn how to read and write the words they already know how to use in conversation, and still there is an estimated twenty percent of the population that is considered dyslexic. It seems that the Japanese population of dyslexic English readers should be equally as high, if not higher.

Nishihira (2010) believes that the new controversial elementary school English program that will begin in Japan from April 2011 will have a positive impact on English education in Japan. She believes that students will have more of an opportunity to accustom themselves to common vocabulary words before reading and writing become a necessity.

Secondary Disabilities

One fact that experts seem to agree on is that the sooner a child gets some one-on-one attention in the form of reading intervention and/or behavioral remediation, the more quickly the child will be able to overcome their decoding difficulties (Temple 2003, Todo 2010). Additionally, the more quickly the child is helped, the fewer secondary disabilities they will develop.

EDGE founder, Todo, pointed out one of the central problems that causes dyslexics to form secondary disabilities: low self-esteem. "These children suffer from low self-esteem as they believe their difficulties in studying lie in a lack of ability," she said (2010). Shaywitz (2010) describes interviews with dyslexic adults about their childhood.

...if you speak to them, as I have, and you ask them: "Well, what was it like for you when you were a child, particularly, what was school like?" And you see this terrible look on their face. Particularly they recall the really horrible experience of being called upon to read aloud in class, in front of everyone when they couldn't do it.

Todo (2010) explains that the trauma of having a reading problem, if left untreated, will cause the child to develop more visible characteristics. These characteristics include muscle ticks, a tendency for truancy, and behavioral problems at home or school or both. These characteristics can vary from day-to-day or minute-to-minute. As the Davis Dyslexia Association International points out, "The most consistent thing about dyslexics is their inconsistency." (1992).

Once the dyslexic has been identified and assistance is at hand, the next step is patience. Dyslexics must be given time. Once a dyslexic is rushed, all of their reading problems seem to intensify. (Shaywitz 2010). They need extra time to decode, encode and process language.

Todo mentioned a desire for changes in the National Center Test (a nationwide college entrance exam in Japan) that would accommodate dyslexics. If dyslexics were given additional time to complete the exam, and if the exam problems could be listened to and answered orally, it would give dyslexics an equal chance to get into prestigious universities.

Conclusion

On my quest to find out more about dyslexia in Japan, I found out that there is little that is black and white about this situation. The only certainties seems to be that Shaywitz's estimate of twenty percent of the population having some form of language encoding/decoding problem may be the same in all cultures, especially if the subjects are working with the English language.

The other reality is that there are people, methods and means for helping dyslexics, or anyone with a language encoding/decoding problem. Moreover, these methods may be useful for everyone, not only dyslexics.

But what are these methods? Most researchers agree that dyslexics do best with a hands on approach to language learning that allows them to feel and touch language. Todo recommends the use of computers, typewriters and even cell phones to assist in the writing process. I believe that many of the methods that work for dyslexics could also help slow learners of English who do not necessarily have what could be labeled a learning disorder, to make improvements in their overall L2 language abilities.

Unfortunately, most of the high-profile support methods for teaching dyslexics are difficult to access without a sizeable investment in educator's packages. At the dyslexia symposium held in Yokohama in June, where educators and parents had gathered from all over Japan to get some clues as to how to help the dyslexic children in their lives, no actual usable methods were introduced. Hulme (2010), for example, kept repeating the word "methods" in his presentation. He talked about at what age "methods" should be introduced and how "methods" should be introduced, but he carefully avoided saying exactly what "methods" he was referring to. When asked for more details, he admitted that a description of the methods and materials he uses would be available for purchase soon.

It is my hope to continue my quest by discovering more about the learning strategies taught to dyslexic students so that they might be applied more generally to the L2 English students, but in particular to low-level students who still have difficulty reading simple sentences after completing junior high and high school English.²⁾ Certainly there must be some ideas that will be effective for these students. In the meantime, the key strategies to help with students that do have difficulties seem to be patience, persistence and working one-on-one or in small groups. Perhaps the best "methods" are just more of what we have been using all along.

References Cited

- Davis Dyslexia Association International. (1992) “37 Common Characteristics of Dyslexia”, *Dyslexia the Gift Website*. Retrieved Sept. 01, 2010. <http://www.dyslexia.com/library/symptoms.htm>
- Hellal, P. (2009, May 20) “The Early History of Dyslexia Research.” *Suite 101.com*. Retrieved April 20, 2010. <http://www.suite101.com/content/the-early-history-of-dyslexia-research-a119002>
- Helmuth, L. (2001, Mar. 16) “Dyslexia: Same Brains”, Different Languages. *Science*. Vol. 291. No. 5511, pp. 2064-2065.
- Hirose, T., Hatta, T. (1988, Sept.) “Reading Disabilities in Modern Japanese Children”, *Journal of Research in Reading*. Vol. 11, Issue 2, pp. 152-160.
- Hiroshima, S. (2007) “Analysis of Knowledge of Dyslexia and Dyslexic Children Among School Teachers.” *Gifu University Faculty of Education Research Report*, Vol. 56, No.1 (岐阜大学教育学部研究報告、人文科学、第56巻、第1号), pp. 205-214.
- Hulme, C. (2010, June 27) “Interventions for Children’s Reading and Language Difficulties”, Kokusai Hattatsusei Disurekushia Kouenkai (国際発達性ディスレクシア講演会) (2010, June 27). Yokohama, Japan.
- “Japan’s child population drops to record low” (2010, May 5) *Japan Today*, Retrieved Nov. 14, 2010. <http://www.japantoday.com/category/national/view/japans-child-population-drops-to-record-low>
- Kuromaru, S., Okada, S. (1961) *Proceedings of the 7th International Congress of Neurology*. Societa Grafica Romana, Rome. Vol. 2.
- Makita, K. (1968) “The Rarity of Reading Difficulty in Japanese Children.” *American Journal of Orthopsychiatry*. Vol. 38, pp. 599-614
- Ministry of Health, Labour and Welfare (2005) “Hattatsushougai no Genjou to Shienhou ni tsuite.” (発達障害の現状と支援法について) (2005) Retrieved May 21, 2010. <http://www.mhlw.go.jp/topics/2005/04/tp0412-1.html>
- Nishihira, M. (2010, May 14) Interview. Teacher at Ochanomizu Joshidaigaku Fuzoku Chugako.
- Nishimura, R. (2008, June 18) “Learning Disabilities, Dyslexia and Autism in Japan.” *Learning Disabilities Association of Ottawa-Carleton*. Retrieved Aug. 4, 2010. <http://ldao-c.ncf.ca/new21.html>
- Shaywitz, S. (2010) “The Brain and Dyslexia—What Brain Imaging Can and Can’t Tell Us About Reading Difficulties.” *Children of the Code*. Retrieved May 10, 2010. <http://www.childrenofthecode.org/interviews/shaywitz.htm>
- Shinagawa, Y. (2010, June 27) Interview. Education journalist and author of several books on learning disabilities and dyslexia in Japan.
- Snowling, M. (2010, June 27) “Changing Concepts of Dyslexia: Language Skills and Learning to Read.” Kokusai Hattatsusei Disurekushia Kouenkai (国際発達性ディスレクシア講演会) (June 27,

2010) Yokohama, Japan.

Temple, E., et al. (2003, March 4) "Neural Deficits in Children with Dyslexia Ameliorated by Behavioral Remediation: Evidence from functional MRI." *PNAS*. pp. 2860-2865. Retrieved April 23, 2010. www.pnas.org/cgi/doi/10.1073/pnas.0030098100

Todo, E. (2010, Feb. 15 and June 27) Interviews. Founder and Director of EDGE.

Tomlinson, D. (1995, Sept. 15) "Japanese College Students and Dyslexia: The signs of language disability." *JACET Zenkokutaikaiyoukou*. Vol. 34, pp. 174-177.

- 1) Nishihira has found that spelling mistakes that are based on katakana sounds and lack a distinction between "l" and "r" (examples: neimu [name], beisborru [baseball], and harf [half]) are not indications of dyslexia. However, words or letters that appear backwards, random, or break from basic English phoneme awareness (examples: baesbll [baseball], bog [dog], mane [name], was [saw], and gose [goes]), are strong indicators of dyslexia.
- 2) The current situation in Japan is that with the dwindling number of students in the population, universities are being forced to take students with lower and lower capabilities in order to stay in business. Of the 230 newly incoming freshmen for one university in April 2010, the average TOEIC was 308.25 with 47 of the students having less than 250. (The TOEIC scoring scale goes from 10 to 990 points.)

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