

《研究ノート》

An Invisible Presence, a Double Burden

Learning Disorders and the Concept of Inclusion in the Foreign Language Classroom

Jason Takada- Latchford

〈Abstract〉 Since the general education reform in 2006, special education in Japan has promoted the principle of ‘inclusive’ education, the education of learners with disabilities in general education classrooms. Prior to this, Japanese students with disabilities had traditionally been educated in special schools, specific to one type of disability, and often isolated from the rest of society. With the ratification of the UN Convention on the Rights of Persons with Disabilities in 2014, and its subsequent effect on legislation, learners with disabilities now have access to all parts of the curriculum, including foreign languages.

For the foreign language teacher, the presence of learners with disabilities in their classrooms presents an opportunity to offer these students learning experiences that differ from those in other subject areas. However, it also presents unique challenges, especially with learners with Learning Disorders (LD), as teaching communication and social interaction skills are the core of the foreign language classroom, and these are the areas that are most heavily impacted by these complex neurological disorders. This paper will attempt to outline the basic characteristics of the major learning disorders and offer some practical strategies to maximize the learning experiences and outcomes of these students.

Keywords : Learning Disorder, Inclusion, autism, dyslexia

Introduction

Driven by the rise of the internet and subsequent global interconnectedness, the ability to speak a foreign language, especially English, is increasingly becoming both a necessity and an asset for all individuals all over the globe. English has become the lingua franca in many professional domains, especially science, business and information; and almost every educational institution in the world includes English as part of their core curriculum. In Japan, English is a compulsory subject from primary school grade 5 until at least the second year of university, and from 2020 will be a compulsory subject from primary grade 3 (MEXT, 2017).

Ostensibly, this is a positive development. Foreign language classes offer more than the

opportunity to learn the language of others. Students acquire knowledge and skills in these classes that complement and expand learning in other subjects. They learn tolerance and acceptance, investigate their own language and culture and compare it to others (Wight, 2015). It is a learning opportunity that should not be denied any learner, regardless of disability or ability.

In Japan, the combination of both compulsory English education and inclusive education means that the benefits of foreign language study are available to all learners, in some cases whether they like it or not. Again, this is an extremely positive development for all concerned. However, for the language teacher who may, especially in large classes, already be struggling with considerable variation in levels and motivation, the inclusion in the class of students with differing educational needs poses additional challenges.

Foreign language teacher training usually prepares educators for the ‘ideal learner’ who is expected to master language skills through exposure and practice with their classmates (Otanjac, 2016). Teaching materials are largely text-based, and the ability of the learner to read and write in the target language plays a major part in most formal assessments. Obviously, any impairment in any of the four skills of listening, reading, writing or speaking will have a significant impact on the learner’s ability to successfully acquire the target language, and pass the course they are taking. Unfortunately for both learner and language teacher alike, it is these skills that are most heavily impacted by learning disorders.

Inclusion is defined as ‘a process of addressing and responding to the diversity of needs of all children, youth and adults through increasing participation in learning, cultures and communities, and reducing and eliminating exclusion’ (Mithout, 2016).

In an inclusive educational environment, like the one presently being developed in Japan, all learners with special needs have the right to attend regular schools and institutions and therefore are the responsibility of general education teachers (Isogai, 2017). It is then the general education teacher’s responsibility, to identify the weaknesses of these learners and adjust the content and instructional style of the course to maximize their learning outcomes. In some cases, these teachers may also have to participate in the identification of students with learning disabilities. It is often the case, as with language-based learning disabilities (LBLD) and dyslexia, that although these disabilities may be initially identified as early as primary grade three, they often become most noticeable when educational demands and expectations rise (Learning Disabilities Association of America, 2017). This means that it is usually educators in the upper levels of formal education who notice significant delays or deficiencies in a learner’s performance as cognitive loads and processing demands increase. Lacking formal training in learning disabilities, they can often identify the symptoms of the disorder, but are at a loss as how to minimize its effect on student learning.

In Japan, the inclusive classroom is a relatively new concept and many, if not most general education teachers whose classrooms include students with special needs, may have additional problems due to a lack of experience and training in working with these learners. According to MEXT, 25% of teachers in special education still do not have the special needs school teacher certificate, and it has only become compulsory for regular school teacher candidates to take at least one course on special needs

education from 2017 (Isogai, 2017).

In the case of foreign language teachers, who have often been excluded from the core subject domain, and therefore not expected to deal students with significant learning difficulties, many are unlikely to have had special needs training. In fact, until recently, in many countries learners with special needs were given exemptions from foreign language course requirements at university level (Difino, M. & Lombardino, L. 2004), depriving them of a potentially life enriching experience and further reducing the demand for special needs training for foreign language teachers.

This does not mean however, that foreign language learning is impossible for the individuals affected, or that the language teacher needs to be a specialist to work with them. Recommended best practices in foreign language teaching often correspond to those in special education for providing student support. Teachers who regularly employ such practices in their classrooms will find that the adjustment to an inclusive learning environment is not a difficult or particularly radical experience. Simple techniques such as giving learners instructions in both oral and written form; segmenting and sequencing instructions clearly and giving learners adequate time to comprehend and respond to those instructions can make a big difference. There are many other simple, easily implemented practices that can be adopted in the classroom to assist these learners, some of which will be addressed later in this paper.

From the learner's perspective, recent shifts in the way the concept of foreign language proficiency is defined mean that students are now judged by what they 'can do' rather than what they 'can't do' in relation to native speakers. This is a very empowering concept, and employed correctly in the classroom, the emphasizing of abilities over disabilities and subsequently, inclusion over exclusion, can produce significant results.

Background

Traditionally, students with disabilities in Japan have been enrolled in special schools under the auspices of the Ministry of Education, Culture, Sports, Science and Technology (Isogai, 2017). Until recently, these schools were distinct from the mainstream education system and catered to only one category of disability per school. In the 1980's pressure from disabled people's associations resulted in a gradual opening of mainstream schools to disabled students. However, at that time, the number of students taking advantage of the opportunity was not significant.

In 2006 the general reform of the Japanese school system resulted in the amendment of the School Education Act. The act included the statement 'the state or local authorities should provide disabled children with adequate educational support so that they can receive a full education corresponding to their situation' (Mithout, 2016). This formed the legal basis for the transition from 'special education' where students were isolated from the mainstream and educated independently, to 'special needs education' and the concept of an inclusive education system (MEXT 2017). Students with

disabilities were now able to participate in mainstream education classes.

In 2007 Japan signed, and in 2014 ratified, the UN Convention on the Rights of Persons with Disabilities. This triggered further legislative changes that reflected international concerns regarding the legal protection of disabled individuals' rights.

In educational terms, the impact of the new reforms and laws have been mainly conceptual but significant. The ideological shift from the notion of 'special education', an inherently negative one that implies difference, to 'special support education' (*tokubetsu shien kyoiku*) anchored in the philosophy of inclusion has life changing potential for these learners. Systemic changes implemented so far have not been radical, rather aimed at supporting and strengthening existing structures (Mithout, 2016). Two predominant trends are evident; the increased enrolment of children with autism into mainstream schools, and the development within mainstream education of a support system for children with difficulties who were already attending regular education (Mext, 2017b).

Officially, individuals with special needs are no longer restricted to schools dedicated to one category of disability. Instead, they can now receive instruction and support in a variety of settings. Students have the option of attending either special support schools, special needs classrooms, *tsukuyu* classrooms or regular classrooms. *Tsukuyu* classrooms are special programs for students with 'lighter' disabilities such as low vision; hearing problems, learning or language disorders or ADHD enrolled in regular schools. Learners attend these classrooms for several hours a week to receive specialized group or individual coaching (Isogai, 2017).

Statistics indicate that the number of students classified as having special needs is increasing yearly. In 2015 there were approximately 362,000 special needs students in compulsory education, comprising 3.5% of the student population, compared with 199,227 in 2005. Of these, 201,493 were attending special needs classrooms, and 90,493 were participating in *tsukuyu* programmes (MEXT 2016b).

The increase in students with special needs can be mainly attributed to the increased recognition in Japan of 'developmental disorders', including attention deficit, hyperactivity, and learning disorders. Today, MEXT estimates that around 6.5% of school-age children have a possibility of developmental disorders (MEXT 2012a).

The general increase of children with disabilities in mainstream schooling is mainly comprised of learners with autism spectrum disorders (previously included in the category of 'mental disability' and not catered for in mainstream schools), and the new categories of learning disorders and attention deficit disorders (Mithout, 2016).

The implications of these reforms for the foreign language teacher is the increased likelihood of a learner with either an autism spectrum or learning disorder attending their classes. As these disorders are predominately language and communication based and have profound effects on the classroom performance of these individuals, it is useful for educators to have a basic knowledge of these conditions. The remainder of this paper will attempt to outline the major learning disorders and provide some practical techniques to implement in the class to assist these learners, particularly those affected by autism and dyslexia, the most prevalent of these disorders in Japanese classrooms.

Learning Disorders.

Learning disorders, or learning disabilities, are an umbrella term for a wide variety of life-long, genetic, congenital and/or neurobiological factors (Integra 2009). They are often hereditary and affect the way in which individuals affected select, retain and express information. Incoming or outgoing information becomes scrambled as it travels between the brain and the senses and in many cases, interferes with the development and use of language and the ability to speak, read or write. Learning disorders impact individual's self-esteem, education, vocation, socialization and daily living activities (Learning Disabilities Association of New York, 2018).

Statistically, learning and attention disorders affect approximately one person in five, with approximately 13-14% of the school population potentially having a handicapping condition that qualifies them for special education. Of these, 6-7% would be classified as having a learning disability, primarily in reading and language processing. However, it is estimated that world-wide, 15-20% of the population show some signs of dyslexia. These symptoms include slow, inaccurate reading, poor spelling or writing and confusing similar words (Learning Disabilities Association of America, 2017).

Learning disorders come in many forms and their effects are different from person to person.

They have an effect on:

- Getting information into the brain (input)
- Making sense of this information (organization)
- Storing and retrieving information (memory)
- Getting information back out (output)

(Integra, 2009)

By definition, people with LD's have average to above average intelligence yet, they have very specific impairments in one or more of the psychological processes related to learning. These processes may include:

- Language processing (understanding and expressing information using words)
- Visual- spatial processing (perceiving or organizing visual information)
- Visual-motor processing (carrying out hand-eye activities)
- Phonological processing (perceiving or organizing visual information)
- Processing speed (speed of taking in, using or producing information)
- Working memory (holding information in mind while also using the information)
- Executive functions (planning and organizing)

(Integra 2009)

People with learning abilities need to be taught in ways that are tailored to their unique learning styles.

Common Types of Learning Disorders

ADHD- Attention deficit hyperactivity disorder (ADHD)

A disorder that includes difficulty sitting still, staying focused, paying attention and controlling behaviour. Not officially classified as a learning disorder 30-50% of people with ADHD also have co-occurring learning disabilities.

Autism/Asperger's syndrome- pervasive developmental disorders

People with either autism or Asperger's syndrome have problems communicating, reading body language, learning basic skills, making friends, and or making eye contact.

Dyslexia/Learning disabilities in reading

A specific learning disability that affects reading and related language-based processing skills. The severity can differ in each individual but can affect reading fluency, decoding, reading comprehension, recall, writing, spelling and sometimes speech and can exist along with other related disorders. Sometimes referred to as a Language-Based Learning Disability

Learning Disabilities in math (dyscalculia)

Dyscalculia affects a person's ability to understand numbers and maths facts. Individuals with dyscalculia may also have a poor comprehension of math symbols, have difficulty memorizing and organizing numbers, telling time and counting.

Dysgraphia

Learning disabilities in writing can involve the physical act of writing or the mental activity of comprehending and synthesizing information. Problems may include comprehending and synthesizing information, organizing thoughts on paper, difficulty forming words and letters, as well as thinking and writing at the same time.

Dyspraxia

Dyspraxia refers to problems with movement and coordination whether it is fine motor skills (cutting, writing), or gross motor skills (running, jumping). Motor disability is sometimes referred to as an 'output' activity meaning that it relates to the output of information from the brain. In order to run, jump, write or cut something, the brain must be able to communicate with the necessary limbs to complete the action.

Learning disabilities in language (aphasia/dysphasia)

Language and communication learning disabilities involve the ability to understand or produce spoken language. Language is also considered to be an output activity because it requires organizing thoughts in the brain and calling upon the right words to verbally explain something or communicate with someone else. Symptoms of aphasia or dysphasia include problems with verbal language skills such as the ability to retell a story, understand the meanings of words, or fluency of speech. They also include auditory and visual processing problems.

Auditory processing disorder

Also known as central auditory processing disorder or language processing disorder, this disorder causes extreme difficulty in understanding what you hear or expressing what you want to say. As a condition APD adversely affects how sound that travels unimpeded through the ear is processed or interpreted by the brain. Individuals with APD do not recognize subtle differences between sounds in words, even when the sounds are loud and clear enough to be heard. They can also find it difficult to tell where the sounds are coming from, to make sense of the order of sounds, or to block out competing background noises.

Visual Processing disorder

Problems in visual perception include missing subtle differences in shapes, reversing numbers, skipping words, skipping lines, misperceiving depth, distance and having problems with hand-eye coordination. Visual perception can affect gross and fine motor skills, reading comprehension and math.

Executive Functioning

An inefficiency in the cognitive management systems of the brain that affects a variety of neuropsychological processes such as planning, organization, strategizing, paying attention to and remembering details and managing time and space. Although not a specific learning disability, different patterns of weaknesses in executive functioning are almost always seen in the learning profiles of individuals who have specific learning disabilities or ADHD.

(Learning Disabilities Association of America, 2017).

Autism Spectrum Disorders

Autism spectrum disorders (ASD) are lifelong developmental disabilities that impact the ability to process and understand audio-visual and tactile information. Individuals with autism spectrum disorders display a wide range of intellectual and cognitive ability, from severely intellectually challenged to average or above average. ASD occurs on a continuum, with individuals who have milder levels of intellectual disability referred to as having high-functioning autism, while those with more severe levels of intellectual disability referred to as having low-functioning autism spectrum disorders.

According to the Diagnostic and Statistical Manual of Mental Disorders, DSM-IV, (American Psychiatric Association, 1994), autism spectrum disorders are characterized by characteristics commonly known as the 'triad of impairments.' These are:

- qualitative impairment in social interaction
- qualitative impairment in communication
- restricted, repetitive and stereotypic patterns of behaviour, interests and activities

Prevalence rates for autism spectrum disorders are cited at 1 in 59 individuals (autism speaks 2018), and there is a markedly higher prevalence among males. Ratios vary slightly according to the definition, but most studies state a male to female ratio of between 4:1 to 5:1. (Alberta Learning, Special Programs Branch, 2003,).

Asperger's Syndrome

Asperger's syndrome was considered a separate subtype of autism until it was included into the single diagnosis of autism spectrum disorder in the Diagnostic and Statistical Manual of Mental Disorders, DSM-IV in 2013. Individuals with Asperger's syndrome display many similar characteristics as individuals with autism spectrum disorders, however, they are usually included on the 'high-functioning' end of the spectrum.

Like individuals with autism spectrum disorders, they display:

- a qualitative impairment in social interaction,
- restricted, repetitive and stereotyped patterns of behaviour.

Unlike other autism spectrum disorders, language development is usually not delayed, and their speech typically lacks significant abnormalities, it is often clear and fluent. However, their use and acquisition of language is often atypical. They demonstrate a very literal understanding of language, and communication is usually one-sided. They also possess at least a minimum level of average cognitive abilities, and adaptive functioning skills (Uchiyama, 2013).

Individuals with Asperger's syndrome often appear reasonably capable within an academic setting, achieving average to above average test scores, however they display significant differences in social and cognitive processing. Many will memorize extensive facts about subjects that are of interest to them, but will have difficulty with abstract thought and comprehension. More visibly, they often have problems with thinking flexibly. Their thinking tends to be rigid, and like people with autism spectrum disorders, they have difficulty adapting to, or accepting change (Alberta Learning, Special Programs Branch, 2003, p. 135).

Common Misconceptions

Autism spectrum disorders are often associated with a prevalent set of misconceptions that are frequently perpetuated by the media. While there is some factual basis to these myths they cannot be applied to all individuals. The most popular misconception is that people with autism disorders possess genius-like abilities, photographic memories, extraordinary artistic and mathematic talent.

Unfortunately for most people with these disorders this is not true, although such individuals do exist. People with ASD often do however, memorize large amounts of information related to an area of interest to them, and this, coupled with their uneven skill development, may be the cause of such myths (Takada-Latchford, 2017).

The Triad of Impairments in the Language Classroom.

Social Interaction

With Autism spectrum disorders, there is always an impairment in social interaction (Wire, 2005, p.2). This means that these students have difficulty initiating and maintaining social interactions, especially conversations. They are often uncomfortable around others and respond to attempts at communication in a rigid, repetitive manner. This is usually not due to a lack of desire to interact with others, rather a lack of the necessary language-processing and non-verbal skills. Individuals with autism spectrum disorders are also often classified into three broad subtypes according to their ability to interact socially aloof, passive and active (Department for Education and Skills, 2004).

Students who are on the more active and engaging end of the spectrum are obviously easier to have in the class. They are more visible, and other students find them easier to work with. In a large class, more aloof or passive individuals can easily become 'invisible', and the teacher needs to pay special attention first to identify them, and secondly to ensure that they don't get lost or ignored in the crowd. This is especially true, if, as in many cases, the teacher has not been notified in advance of the special nature of the individual's disorder (Takada- Latchford, 2017).

Social interaction is obviously a crucial part of foreign language work, although it is often the most difficult for learners with ASD. Due to the nature of the disorder, and the tendency of many of these students to isolate themselves, a foreign language class may be one of the few times in an individual's day that they get to have a conversation with someone outside their family. This interaction can be extremely beneficial to the student, and potentially enhance the quality of their life (Wire, 2005, p. 10).

However, before any social interaction can take place, some basic groundwork may have to be done, as students with ASD instinctively do not want to interact with others, especially in peer groups. The following are some practical suggestions to help the student with their transition into social interaction:

1. Understand that the student may become stressed by the close proximity of others.
2. Explain the student's situation to their classmates and enlist their support.
3. Work one to one with the student at regular intervals during the class and throughout the semester, especially when introducing new concepts and reinforcing old ones.
4. Enlist a mature member of the class that has some compatibility with the student to act as a regular partner during group work.
5. Gradually create co-operative learning opportunities with other peers by gradually introducing new people to the student's group of 'friends' (Takada- Latchford, 2017).

Social Communication

The second aspect of the triad of impairments for individuals with autism spectrum disorders is difficulty with many aspects of their own language. Arguably, this is the characteristic of these disorders that poses the greatest challenge for the foreign language teacher. All people with ASD experience language difficulties, depending on the severity of their disorder. They usually have some mastery of the 'mechanics' of the language, the literal meanings of words and grammatical constructions. However, all have difficulties with the pragmatics of the language; using language in social situations, knowing what to say, and how to talk to others. They have a tendency to use language to have needs met, rather than for social purposes, often confined to requests and rejections to control their physical environment. However, this does not mean that those students cannot achieve a practical level of functioning in a foreign language (Duda & Riley, 1990).

Students with high-functioning autism syndrome disorders usually are usually good at rote learning, meaning that grammar rules, new vocabulary and scripted dialogue are usually not problematic for them. Most can achieve a reasonable level of functional competence by performing basic language functions such as ritual enquiries about health, weather, and requests to have their needs met (Duda and Riley, 1990, p. 29). They also usually achieve pass-level scores or higher on grammar and vocabulary tests, provided that they receive clear instructions on what to study, and the test questions are relatively straightforward.

However, a definitive feature of autism spectrum disorders is that these students will have difficulty in using the newly learned language outside of the contexts they have learned in the classroom. They have difficulty adapting the language to other situations or unscripted responses. For the teacher, this means that these students will be willing to absorb the more concrete aspects of the foreign language, but probably not be able to apply it outside the learned contexts. It makes sense then, to teach and reinforce structures and vocabulary that are primarily used for meeting basic needs, as this mirrors their functional ability in their own language.

Impairment of flexible thinking

The third aspect of the triad is a lack of flexible thinking. Researchers speculate that this is due to the effect that the impairment in language development has on the thinking of these individuals. They theorize that people with autism spectrum disorders attempt to resolve their inner confusion by insisting on following known routines, and depending on real objects (Department of Education and Skills, 2003, p. 7).

For the teacher, this insistence of following known routines and general insistence on consistent sameness may be the one of the easiest methods to initially identify a student with autism spectrum disorders in a class, if not previously notified of their presence.

For these students, simple changes in a daily routine such as a change in seating arrangements, a new partner, or even a teacher or student inadvertently changing the order of the individual's pens on the desk may cause significant distress. Sudden changes in the pattern of the class, 'spot tests' or a

substitute teacher will inevitably create anxiety for the student and it is important that these changes are carefully explained in advance, or at least on the day.

Anxiety

Anxiety is not included in the Triad of impairments, but it could be argued that it should be as it is almost always present in individuals with autism spectrum disorders. Recent studies indicate high anxiety disorders in the population of individuals with autism (Kim et al., 2000). Individuals with high functioning autism are at a greater risk for anxiety than the general population, some studies suggesting that individuals with autism spectrum disorders are almost three times more anxious than the general population (Gillot, 2004).

All students perform poorly when anxious, however for students with these disorders it can be paralysing. From in-class observation, anxiety can be triggered by relatively simple things such as a change of seating arrangements. In many cases, however, the remedy for the student’s anxiety may be equally as simple, a quick return to an original status quo. If the teacher has established a regular routine of working with the student during the class, the teacher’s presence beside the student may be enough to reduce their anxiety. Tables 1 and 2 outline some of the characteristics of learners with ASD and some practical teaching strategies that may help improve their learning outcomes.

table 1 **Autism Spectrum Disorders- Learner Characteristics**

Factors to take into account Pupil characteristics which may affect learning	Effect on Foreign Language learning Pupil may have difficulty with the following	Teaching/learning strategies Incorporating these strategies into FL classroom practice may help
Impairment in Social Interaction Unaware of unspoken rules May appear aloof and disinterested Interacting with others causes anxiety May lack empathy	 Following socially accepted rituals Sharing personal information with others Working in groups or pairs Two-way conversations	 Pair-work with a comfortable partner Allow learner to work alone if necessary Allow learner to respond to teacher Encourage peers to be patient
Impairment in Social Communication Difficulties in modifying speech Lack of ability to read/show appropriate body language May find it difficult to hold eye contact Tendency to interpret language literally	 Moderating volume/speed of delivery Showing appropriate body language Reading others Holding eye contact Interpreting what others say literally leading to misunderstanding	 Use other learners as models Model appropriate body language Avoid too long eye contact Inform peers and ask to be clear When talking to the learner
Inflexibility Becomes upset at change in routine Individualized obsessions Difficulty making transition from 1 place or task to another	 Omissions of daily greetings/routines Sudden changes in seating arrangements Being forced to use something e.g. pencil rather than pen Leaving a task incomplete/imperfect Settling into lesson at start	 Vary classrooms routines regularly Prepare pupils for changes Allow eccentricity in writing materials Specify finishing time of task Make clear what is needed at start
	Processing verbal instructions	Short, clear instructions for each task, verbal and written on board.

table 2

Autism Spectrum Disorders- Learner Characteristics

Factors to take into account Pupil characteristics which may affect learning	Effect on Foreign Language Learning Pupil may have difficulty with the following	Teaching/learning strategies Incorporating these strategies into FL classroom practice may help
<p>Self-organisation</p> <p>Preparing equipment, homework</p>	<p>Organizing books, writing tools</p> <p>Doing homework, particularly 'vague' learning tasks</p>	<p>Prior notice re necessary equipment</p> <p>Be specific about homework tasks, and write it on board.</p> <p>Explain specifically what is to be Done regarding homework tasks</p>
<p>Associated Disorders</p> <p>Difficulties of a dyslexic type which affect phonological processing, memory, auditory and visual discrimination, processing and sequencing information</p> <p>Low-cognitive ability Learners with moderate learning disabilities</p> <p>ADHD May display behavioural difficulties Lack of concentration</p>	<p>Dyslexia</p> <p>Reading, pronunciation, vocabulary Repeating and remembering Listening sound recognition Copying and spelling Responding to instructions</p> <p>Low cognitive ability Understanding & responding appropriately Applying the language in different contexts Following difficult instructions</p> <p>ADHD Concentrating quietly & calmly on activities Completing tasks appropriately Not distracting other pupils</p>	<p>Dyslexia</p> <p>Allow time to process verbal instructions Practice and reinforcement Use multi-sensory strategies Encourage reading and writing</p> <p>Low cognitive ability Give short, simple instructions Simplify curriculum, reduce language content Use multi-sensory strategies where possible</p> <p>ADHD Give short interesting tasks which get marked quickly Give praise frequently Offer rewards to motivate completion of task</p>

Figure 1& 2: Autism Spectrum Disorders-Learner Characteristics
Adapted from Vivienne Wire: Autism doc. (2005).

Dyslexia

Developmental dyslexia is defined as an unexpected difficulty in reading in adults and children who otherwise possess the intelligence and motivation considered necessary for accurate and fluent reading, and who also have had reasonable reading instruction. Dyslexia (specific reading disability) is the most common and carefully studied of the learning disabilities, affecting 80% of all individuals identified as learning disabled (National Center for Learning Disabilities, 2014). It is estimated that approximately 15% of the international school population has a handicapping condition that qualifies them for special education, and that approximately one half of these individuals have a primary learning disability in reading and language processing. World-wide, it is estimated that up to 20% of the population exhibit some signs of dyslexia such as poor reading, writing, spelling and confusing words (Virginia Department of Education, 2017).

Dyslexia has been identified has having a strong genetic basis, with studies showing that approximately 40% of the relatives of affected individual showing signs of the disorder. As with autism spectrum disorders, dyslexia mainly affects males, with studies finding males more likely to be affected than females at ratios of between 3-4 to 1 (American Academy of Paediatrics, 2009).

Contrary to popular myth, dyslexia is a language-based and not visual disorder, and individuals with dyslexia do not 'read backwards' although reading is a problem for them. The principle cause of

dyslexia is phonological processing problems, that is, the ability to analyse speech or written language, from individual words, to syllables and phonemes (Learning Disabilities Association of America, 2017).

As a result, dyslexia as a term that is used to cover a very broad range of learning disabilities which involve language processing deficits. These deficits lead to problems relating to:

1. Attention-the most common type of learning disability.
2. Language-difficulty in interpreting and/or remembering verbal instructions.
3. Spatial orientation-poor reading and spelling skills because of difficulty with processing information visually and distinguishing similar looking letters.
4. Memory-difficulties with retrieval of presumably stored information because it is mis-stored and can't be found spontaneously.
5. Fine motor control issues-which cause ideas to break down between the head and paper.
6. Sequencing-difficulty organizing information and instructions into an appropriate order so that tasks can be successful completed (Root, 2016).

Cognitive Basis of Dyslexia

Prevailing theories in dyslexia suggest that dyslexia is by caused impairments in phonological processing, that is the processing of the sounds of speech. Individuals with dyslexia often have difficulty decoding, or breaking words down into individual sounds. This is accompanied by subsequent difficulty in recomposing sounds together to read words quickly and accurately, resulting in comprehension problems (Integra, 2009).

Researchers maintain that while speech and language are acquired naturally, reading must be taught. Reading entails two main processes: decoding and comprehension. Decoding requires the ability to decipher a phonetic code and make sense between written symbols and sounds. The reader must understand that spoken words can be pulled apart into phonemes, the elemental particles of speech, and that the letters in a written word represent these sounds, this ability is deficient in people with dyslexia (Shaywitz, 2003).

In dyslexia, a deficit at the phonological level impairs the ability to segment the spoken word into its base elements and then link each sound to their corresponding graphic symbols. Readers with dyslexia experience difficulty both in decoding and identifying words . This phonological deficit does not affect higher order cognitive and linguistic functions involved in comprehension, such as general intelligence and syntax. It does however, block access to higher-order language processes, explaining why otherwise intelligent people experience difficulty with reading (Shaywitz & Shaywitz, 2007).

In the foreign language class, phonological and reading deficits obviously represent a major barrier to acquiring another language for the affected learner, although as with all other learning disorders, it is not impossible. There are a number of practical coping strategies that can be applied within the parameters of a normal class that can make learning significantly more effective and enjoyable for these individuals.

However, for the foreign language teacher, the real difficulty may lie in identifying whether a learner is dyslexic or not and gaining the learner's acknowledgement of the fact. As stated previously, mainstream recognition of learning disorders is a relatively new phenomenon in Japan and the number of professionals working in the field is relatively small compared to the population. The invisible nature of dyslexia and the ability of those affected to develop strategies to hide its effects, means that many of them will never have been diagnosed by a specialist and therefore will not be aware that they have the disorder.

Many dyslexics go through life believing that their inability to succeed academically or in their careers is due to a lack of intelligence or cognitive abilities, leading to the development of a series of negative coping mechanisms in response (Alexander-Passe, 2006). In Japan, cultural stigma attached to disabilities means that many parents of children with learning disorders are reluctant to accept their child's need for special education, seek specialist help, or work with educators (Kayama & Haight, 2014). In a sense, these parents are doubling these learner's burden by encouraging them to join and perform in a mainstream educational setting, without providing them with the tools to do so. Publicly altering classroom methodology to accommodate these learners or working one to one with them may be difficult if the learner is not comfortable with asking for assistance. In this case, the teacher may have to take an indirect route to assistance, quietly altering classroom pedagogy and offering accommodations for these learners. In many cases, adaptations in teaching methods that will help dyslexic learners will also benefit the class as a whole. The tables below show some characteristics to look for in students that indicate dyslexia, the effect they have on foreign language learning and some easy to adapt helping strategies.

table 3 CHARACTERISTICS OF DYSLIXIC LEARNERS

Factors to take into account Characteristics of dyslexic learners which may affect learning	Effect on MFL learning Dyslexic learners may have difficulties with the following	Teaching/learning strategies Incorporating these into classroom practice may help
Phonological processing Poor grasp of sound/symbol relations. Lack of awareness of individual sounds within words.	Pronunciation even of familiar words. Recognizing familiar words and phrases, confusing similar sounding words. Reading, especially aloud.	Early introduction of L2 phonic system. Introduce new material in multi-sensory Way. Learner reads aloud only when wants to.
Memory Working memory is limited; if overloaded, information may be lost. Long-term memory may contain representations.	Remembering instructions. Remembering vocabulary. Repeating multi-syllable words.	Break down information to be presented. Set limited but realistic targets. Use a variety of learning methods.
Auditory discrimination / perception Unsure of sound heard. Difficulty in differentiating sounds. Difficulty in differentiating between end and start of spoken words.	Recognizing correct pronunciation. Differentiating between similar words. Listening tasks and answering oral, questions.	Accompany text with sound. Exaggerate word separation at first, then repeat at normal speed.
Sequencing Getting things in order, letters, words etc.	Accessing words in dictionaries, ordering days of the week, months of the year, numerical data.	Frequent practice with a variety of strategies. Visible lists and diagrams for reference.

Table 3: Characteristics of Dyslexic Learners
Adapted from Crombie, M. & MColl, H. (2001)

table 4 Characteristics of Dyslexic Learners

Factors to take into account Characteristics of dyslexic learners which may affect learning	Effect on MFL learning Dyslexic learners may have difficulties with the following	Teaching/learning strategies Incorporating these into classroom practice may help
Writing Handwriting may be slow and results inaccurate and difficult to read.	Copying from the board. Writing down what can be produced Orally.	Limit volume of writing. Allow the submission of work in alternate forms i.e. audio, visual, spoken mediums.
Speed of processing information Tendency to be slower in responding to incoming information.	Responding to verbal instructions. Responding to a continuous flow of information.	Slow down speed of presentation. Allow learner extra time to answer questions and finish tasks.
Difficulty with directionality Tendency to confuse left/right, up/down, etc.	Following or giving directions, following instructions which rely on prepositions.	Provide diagrams, arrows etc. as well as Text. Use visual clues when speaking..
Grammar and syntax Poor understanding of grammar and syntax in first language.	Forming accurate sentences and grammar rules.	Frequent reinforcement of learned structures/use diagrams etc. to show linear sequences and patterns.
Visual discrimination/recognition Limited ability to differentiate/discriminate between words.	Differentiating between similar looking words. Differentiating between accents. Confusion between languages, especially similar sounding words in both.	Use visual clues for association. Visually highlight important information.

Table 4: Characteristics of Dyslexic Learners
Adapted from Crombie, M. & McColl, H. (2001)

Conclusion

Students with learning disorders can present a difficult but worthwhile challenge to the foreign language teacher. Despite common myths and attitudes, they can succeed with foreign languages and teachers can work successfully with them. Provided that teachers have some knowledge of the issues surrounding these disorders, help the students cope with change and provide some scaffolding, these individuals can achieve they can achieve at the very least, a basic functional competence in the target language, acquire new social communication and interactive skills, and hopefully, some new friends. By creating a classroom atmosphere where they feel welcome and safe to experiment with the new language, it is possible to provide them a learning experience that may have long-term impact on their lives.

References

- Abe, Y. (1998). Special Education Reform in Japan. *European Journal of Special Needs Education*, 13, 86-97.
- Alexander-Passe, N. (2016). How dyslexic teenagers cope: an investigation of self-esteem, coping and depression. *Dyslexia*, 12(4) 256-275.
- Alberta Learning, Special Programs Branch. (2003). *Teaching Students with Autism Spectrum Disorders*. Author.
- Crombie, M. & McColl, H. (2001). 'Dyslexia and the Teaching of Modern Foreign Languages', Peer, L. & Reid, G. (Eds.) *Dyslexia: Successful Inclusion in the Secondary School*. London: David Fulton Publishers.

- Department of Education and Skills (UK), (2004). Children with Autism- Strategies for Accessing the Curriculum Modern Foreign Languages. Author.
- Difino, M. & Lombardino, L. (2004). Language Learning Disabilities: The Ultimate Foreign Language Challenge, *Foreign Language Annals*, 37(2).
- Duda, R., and Riley, P. (1990). *Learning Styles*, Nancy: Presses Universitaires de Nancy
- Gillot, A. (2004). Anxiety and Stress in Adults with Autism, *Journal of Intellectual Disability Research*, (48) 230-239.
- Integra, (2009). *A Handbook on Learning Disabilities*. Ontario Ministry of Children and Youth Services. Author.
- Isogai, K. (2017). Recent Developments in Japan's Special Needs Education- Promoting an Inclusive Education System. *NISE Bulletin*, Vol. 16.
- Kayama, M. (2011). *Disability in Cultural Context: Providing Social and Emotional Support for Japanese Children with "Developmental Disabilities at School"*, University of Urbana-Champaign, Dissertations and Theses - Social Work.
- Kayama, M., Haight W. (2014). Disability and Stigma: how Japanese educators help parents accept their children's differences. *Soc Work*, 59(4) 24-33.
- Kim, J.A, Szatmari, P., Bryson, S. E, Streiner, D.L., and Wilson, F.J. (2000). The Prevalence of Anxiety and Mood Problems among Children with Autism and Asperger's Syndrome. *Autism*, 4(2), 117-132.
- Learning Disabilities Association of America, (2018). *Types of Learning Disabilities*. Author. Retrieved from: <https://ldaamerica.org/types-of-learning-disabilities/>
- MEXT, (2012). *Policy Trends of Special Needs Education in Japan*. *NISE Bulletin*, Vol. 11.
- MEXT, (2012a). About the results of a survey on students with a likeliness of developmental disorders enrolled in ordinary classes needing special support. Retrieved from: http://www.mext.go.jp/a_menu/shotou/tokubetsu/material/1328729.htm
- MEXT, (2016b). Tokubetsushienkuoiku Shiryo (Heisei 27-Nendo). Retrieved from: http://www.mext.go.jp/a_menu/shotou/tokubetu/material/1358539.htm.
- MEXT,(2017b).Heisei28-NendoYosananShuyojikoJikobeppyto-shotochutokyoikkukyoku.Retrievedfrom:
http://www.mext.go.jp/component/b_menu/other/_icsFiles/afieldfile/2016/01/08/1365888_4_1.pdf.
- MEXT, (2017). 2018/2020 New Course of Study in Foreign Language Education Plan. Retrieved from: <http://www.generalunion.org/laws-and-rights/1696-the-2018-transition-towards-smooth-implementation-of-new-course-of-study-in-foreign-language>.
- Mithout, M., (2016). Children with disabilities in the Japanese school system: a path toward social integration? *Contemporary Japan*, 28(2), 165-184.
- National Center for Learning Disabilities, (2014). *The State of learning Disabilities*, 3rd ed. Author.
- Otanjac, M. (2016). *Students with Language Learning Disabilities and Difficulties in A Foreign Language Classroom*. *Specijalna edukacija i rehabilitacija* (Beograd), Vol. 15(4) 461-474.
- Root, C. (2016). *A Guide to Learning Disabilities for the ESL Classroom Practitioner*. LD Online. Retrieved from: <http://Iodonline.org/article/8765/>
- Saggers, B., Klug, D., Harper-Hill, K., Ashburner, J., Costley, D., Clark, T., Bruck, s., Trembath, D., Webster, A.A., and Carrington, S. (2015). *Australian autism educational needs analysis-What are the needs of schools, parents and students on the autism spectrum? Executive summary*. Cooperative Research Centre for Living with Autism. Author.
- Shawitz, S. (2003). *Overcoming Dyslexia*. New York: Alfred A. Knopf.
- Shaywitz, S. & Shaywitz, B. (2007). The Neurobiology of Reading and Dyslexia. *World Education*, 8(D).
- Schirmer, C., Fontoura, D., Nunes., M. (2004). *Language and Learning Disorders*. *Jornal de Pediatria*, 80(2).
- Takada-Latchford, J. (2017) *Teaching Students with Autism Spectrum Disorders in the Japanese University Foreign Language Classroom*. *Shoin University Kiyō*, 23, 147-158.

- Uchiyama, T. (2013). What is Asperger's Syndrome? The Tokyo Chapter of Autism Society Japan. Author.
- Virginia Department of Education, (2017). Supporting World Language Learning for Students with Disabilities. Author. Retrieved from: www.doe.virginia.gov
- Wight, S. (2015). Students with Learning Disabilities in the Foreign Language Learning Environment and the Practice of Exemption. *Foreign Language Annals*, Vol. 48, (1), 39-55.
- Wire, V. (2005). Autistic Spectrum Disorders and Learning Foreign Languages, Support for Learning. *The British Journal of Learning Support*, 20 (3).
- Wire, V. (2005). High Functioning Pupils with Communication Disorders on Autism Spectrum. Summary Planning Grid. Retrieved from: www.languageswithoutlimits.co.uk/Resources/AutoGrid.pdf