

AN INTRODUCTION TO LEARNING DISABILITIES, AND WHY THEY ARE IMPORTANT FOR TEACHERS TO UNDERSTAND.

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学習障害とは？そして言語の教育者がそれを知るべき理由とは？

日本では学習障害は殆ど知られていないのが実情です。中には学習障害は読字障害であると思う者もいます。学習障害と言ってもその内容は様々で、読字障害、記憶障害、神経機能障害、注意欠陥多動性障害、失認症、発声障害、特殊言語障害があります。言語、言葉、コミュニケーション、読み書き、に關係する障害が多く、一般の教室に出席する事を拒否されたり、落ちこぼれになりやすい傾向があります。学習障害の原因の中には事故、遺伝、母親の妊婦中の飲酒、麻薬常用などですが殆どのケースの原因は不明です。学習障害を持つ子供達は精神異常者であると思う人も多いですが知能指数がとても高い者もいます。ただ、学習障害者の脳機能と組織には普通の脳と少し違う点があり、その結果文字が読めなくなったり、計算が出来なくなったり、話せなくなったりします。

学習障害者はどんな経験をしているのでしょうか。アメリカでは研究も進んでおり認識が高いので、学習障害者である証明できれば学校がその子に合った個人教育を与えなければならないのです。つまり学習障害を持つ子供達は法律で守られているのです。日本では沢山の先生は学習障害の事を認識していない様です。多くの学習障害者は複数の障害を持っていますが、多くの者は社会的認知欠陥の障害がある。勉強が出来ず、友達もいず、何事もうまくいかない生徒の場合、とても辛い、寂しい経験をしています。不登校になりがちです。

八月二十五日の朝日新聞によると、今後文部科学省が調査をし、子供達の行動についてアンケートを取ります。これは注意欠陥多動性障害を持つ子供達はどの位いるかの研究する事になっていますが、行動を観察するだけで注意欠陥多動性障害があるかどうかは判断できません。

外国語の指導と学習障害者の特別教育は別々と思われがちですがアメリカで948,000人の学習障害者にとって、英語は母国語では有りません。彼らの研究をすれば、学習障害者の為

文学科英語英文専攻

The Course of English Language & Literature

キーワード：Learning Disabilities, Learning Disabled Students, teaching techniques, 学習障害

の特別教育のテクニックは外国語を学ぶ時大変役に立つ事が分かりました。外国語を教える講師は、学習障害者の特別教育の方法を少しでも理解をし、自分の教室に隠れている学習障害者について少しでも理解する事ができれば、彼らに望みを与える事ができるでしょう。

INTRODUCTION

This paper is an introduction to learning disabilities, (L.Ds). What are they, and why is it important for teachers in Japan to understand about them? There is a growing awareness about learning disabilities and the issues surrounding them, and a growing body of research about them too, but the work is mainly taking place in the U.S. and is not generally known about in many other countries. As yet, as far as the author knows, only the United States of America has implemented educational guidelines that are specifically set up for L.D. sufferers by law, and which entitle every L.D. child to an individualized educational program, (I.E.P.).

Samuel Kirk, in 1963, first used the term learning disability, as an umbrella term, to describe,

“Children who have disorders in development of language, speech, reading and communication skills.”

(*In Their Own Way*. p6) Thomas Armstrong. 2000.

Soon after this, “The Association for Children with Learning Disabilities,” was formed. Doctors tend to focus on neurology and brain organization and function, psychologists focus on perception and processing and teachers focus on classroom behaviours and academic success or failure, so there are many different aspects to this subject. Here are two workable and useful definitions of learning disabilities.

“L.D. is a disorder that affects people's ability to either interpret what they see and hear, or to link information from different parts of the brain.”

(<http://www.ldonline.org>)

“Learning Disability is the term currently used to describe a handicap that interferes with someone's ability to store, process or produce information. Such disabilities affect both children and adults. The impairment can be quite subtle and go undetected throughout life. But learning disabilities create a gap between a person's true capacity and his day to day production and performance.”

(Levine)

Learning disabilities are neurological, caused by some slight difference in the wiring of the brain, so that sufferers perceive, process or organize information in a slightly different way, or produce language in a slightly different way from non L.D. sufferers. Neurological research is in its early stages, but a neurology for reading has been discovered, and the activity in a dyslexic brain has been found to be different from the activity in a non dyslexic brain.

The causes of L.D. are almost always unknown. Some L.D.s appear to run in families, so there is a hereditary genetic factor, and other known causes are: developmental neurological problems, chromosomal disorders, birth complications, a mother's abuse of drugs or alcohol during pregnancy, environmental poisons, (lead, dioxins), and accidents, especially those involving blows to the head, or strokes. In the vast majority of cases though, the causes remain a mystery.

As the field is still relatively new, there is not, as yet, a general consensus as to how L.D.s should be grouped. Some of these categories may appear to overlap and in many cases sufferers have problems in overlapping areas.

TYPES OF LEARNING DISABILITIES

Visual Processing Disorder (Visual Processing Deficit)

The sufferer does not have problems seeing. There is no problem with the eyes. The problem is with interpreting or processing visual information in the brain. There are several kinds of visual processing disorders. The main ones are:

- 1) Spatial relationships. An understanding of spatial relationships is necessary for the skills of both reading and maths. In order to read letters, recognize a "b" and a "d," or to see the difference between a one and a four, and a fourteen and to understand mathematical symbols and the spaces between words, an understanding of spatial relationships is required.
- 2) Visual closure. An understanding of a partly completed drawing, map or diagram. When this skill is impaired, a child may not recognize a drawing, even when it is almost complete.
- 3) Object recognition, visual agnosia. A sufferer may not be able to identify well known objects. Visual stimuli may not be integrated or synthesized properly in the brain, or there may be a visual memory problem. This results in failure to recognize letters, pictures etc. Apparently learned information may vanish and may or may not reappear later.

Visual processing disorders may affect all aspects of a child's life. Often these children

don't know where they are in space, (agnosia) and their coordination and gross or fine motor skills may be severely affected. Often they can appear clumsy, can't write well or organize well, and have trouble working with computer screens, graphs, charts, etc.

Auditory Processing Disorder (Central Auditory Processing Deficit, C.A.P.D.)

This is not deafness. It is an inability to process or interpret aural information. This can affect speech and language and other areas, especially reading and spelling. The ear itself only brings in the sounds from the outside world. It is in various parts of the stem and the cortex of the brain that they are processed and interpreted. The child may have difficulty in understanding instructions and teacher talk in the classroom. There are several main types of problems.

- 1) Phonological awareness. Understanding that language is made up of phonemes is essential in order to be able to manipulate it in order to learn to read and spell. Some children are unable to separate words into phonemes and to recognize rhymes etc. Being unable to recognize phonetic similarities and differences is considered to be a lack of auditory discrimination.
- 2) Auditory memory. Sufferers can't recall information taken in through the ears. They may not be able to follow instructions or to retell a story.
- 3) Auditory sequencing. This group of problems relates to ordering and sequencing. If this ability is impaired, word order or the order of syllables, may be reversed in speech.
- 4) Auditory blending. The phonemes can be identified individually but the sufferer cannot put them together into words.

In some literature CAPD sufferers are classed as having Attention Deficit Hyperactivity Disorder. It is not surprising, as many CAPD sufferers display the same kind of attention related deficits as ADHD patients. Consider the amount of tasks that are performed in the classroom that are related to aural language. Here are just a few. Students must be able to: follow instructions and directions, analyze, listen to talks and presentations, associate sounds and letters, respond to jokes and requests, answer questions, negotiate, etc. So much of our education systems depend on aural input that students with this L.D. can really fail to thrive, especially in a teacher centered classroom. These students may also fail to separate out background noise and therefore fail to pay attention to what they are supposed to be focussing on.

Attention Deficit Hyperactivity Disorder A.D.H.D. (Attention Deficit Disorder A.D.D.)

This disorder is not always classified as a learning disability, as many sufferers with mild cases can perform normally on academic tests. However many children suffer severely

from attention deficit hyperactivity disorder and are severely disabled in the classroom and their lives. Many sufferers also have auditory or visual processing deficits as well, and many also suffer from social deficiencies. There are estimated to be 3 to 5% of children suffering from this and 2 to 4% of adults suffering from this in the American population. There are three main types of ADHD.

- 1) Attention Deficit Type. These patients suffer from the following symptoms.

Fail to give close attention to details, make careless mistakes.

Have difficulty sustaining attention.

Do not appear to listen.

Struggle to follow through on instructions.

Have difficulty with organization.

Avoid or dislike tasks requiring sustained mental effort.

Are easily distracted.

Are forgetful in daily activities.

- 2) Hyperactive Type. These patients suffer from the following symptoms.

Fidget with hands and feet or squirm in chair.

Have difficulty remaining seated.

Run about or climb excessively.

Blurt out answers before questions are finished.

Have difficulty in engaging in quiet activities.

Act as if driven by a motor.

Talk excessively.

Have difficulty waiting or taking turns.

Interrupt or intrude on others.

- 3) Group three is a combination of group one and two, showing both kinds of symptoms. (Lists from Chadd.org).

Many sufferers also show great impulsivity, an inability to control temper tantrums and, especially in adults, depression is a frequent problem. Sufferers of ADHD also struggle with all kinds of behavioural and social problems, moods swings, forgetfulness, restlessness, low self-esteem and a generally disorganized lifestyle.

Dyslexia

Dyslexia has been studied for over a hundred years. It was first recognized in 1896 by a British doctor observing an apparently very intelligent fourteen year old boy, who couldn't learn to read. In the 1920's it was decided that it was a visual problem, which caused such symptoms as reversal of letters and poor spelling. The cure was thought to be eye exercises. Neurobiology has demonstrated the activity of the brain during reading, and we now know that the cause of dyslexia is in the brain and not in the eye. Autopsies have shown an overdeveloped right brain, and dyslexics are known to be

poor on analytical language skills and reading, writing and spelling, which are left brain dominant activities.

Brain scans, fMRI technology, have opened up the field of reading neurobiology. There is now a fairly well accepted hypothesis about the problems that cause dyslexia. The Phonological Deficit Hypothesis proposes that the dyslexic has difficulty turning language into its smallest sound segments, phonemes. The dyslexic would have trouble in splitting the word cat, for example, into three separate sounds. It also takes the dyslexic much longer to hear the differences between similar sounding words, such as bat and pat. This time delay is also a symptom of Specific Language Impairment, SLI, another disability with a very high correlation with dyslexics. (80% of SLI sufferers are also dyslexic.) The skill of reading is thought to be made up of several separate processes. Firstly the brain needs to recognize the phonetic nature of language. Secondly the brain must be able to identify the letters on the page, and to relate them to phonemes. The brain must be able to map phonemes onto the graphemes and then turn them back into sounds, phonemes, inside the head. Unlike speaking, which is a totally natural skill, which we will learn by being exposed to language, reading is an invented skill and it must be taught. If the first link of this process is not understood then the whole chain breaks down and the following processes cannot be brought into operation. This is what happens to the dyslexic when trying to read.

Studies in the U.S. and in Britain, with students of all ages, have consistently revealed that phonological awareness is the most accurate predictor of reading success, even in preschoolers. Phonological training has been found to be more effective than general language training in improving reading skills.

Using fMRI technology, it has also been discovered that in men and women there is a difference in which part of the brain is used for decoding phonology. This may well explain part of the reason why there are many more male than female dyslexics, and why women tend to recover language skills better than men after strokes.

It is thought that between 15 and 30% of American school children have difficulty learning to read. Many of these children learn coping strategies and their dyslexia may not become apparent until they learn a second language. Dyslexia is known to transfer across languages and the problem that may no longer be apparent in the first language, may be revealed by learning a second one. More severely disabled students may find that their access to higher level cognitive knowledge is continuously blocked by their inability to decode the words on a page.

It used to be thought that the proportion of dyslexics in any population would be the same, but now it is thought that written languages that closely, or overtly follow, the sound systems of the spoken language actually produce a smaller dyslexic population. Certainly, dyslexia seems to be virtually unheard of in Japan, where the hiragana and katakana systems can be mapped directly onto the phonemes of the spoken language with perfect clarity and systematicity. This is called a written language that has high transparency. English, with its huge vocabulary and the diverse origins of many vocabulary items, and with all its irregular patterns, is a language of low transparency, which is thought to produce a relatively higher dyslexic population. The effects of different kinds of orthography on dyslexia have yet to be studied in detail.

The teaching of reading has recently been moving away from phonetics towards laying importance on meaning and discourse. Dyslexics benefit from training in phonetics and phonetic theory and this kind of training also helps in learning to read. Phonetic awareness was the key predictor of success in reading skills. Of course, meaning is very important, but it seems that a significant proportion of people would benefit from the overt teaching of phonetics and phonetic theory. Maybe it is time to redress the balance again. This same phonetic awareness would also help when students later come to learn a second language.

Specific Language Impairment, S.L.I.

There are numerous ways in which language skills can be impaired, and there are numerous tasks for which we need to use language. Many children who were late speaking, and thought to be late bloomers, were thought to have caught up by the age of five. However, as the demands of the increasing number of functions for which language is used in the educational system increased, difficulties in reading, memory, recall and communication often revealed that the impairment remained. Late development of spoken language is a warning sign of SLI. 80% of SLI students also have dyslexia. There is a very large correlation between the two groups. Language impairment should be distinguished from speech impairment, although they can both occur together. Many cases of mental sickness result in severe SLI.

Language related problems can be receptive or expressive. Receptive problems are concerned with the processing of language input and how it is organized in the brain, whereas expressive problems are concerned with being able to generate the desired language to perform a communicative act. Sometimes disabilities affect only the form of language, grammar and syntax, and sometimes they affect the meaning aspects of language, semantics and discourse.

In a classroom the demands on language skills are very high. (See also the section on CAPD.) Every day students must be involved in following directions, associating sounds and letters, making presentations, analyzing words, learning abstract words and concepts, making and understanding metaphor and jokes, learning how to question, or negotiate, how to inform, hint, persuade, compare, disagree, justify and many other complex linguistic tasks. Because language is so important in our lives, students who experience problems in this area also often suffer from disturbed social relationships, because of the difficulties they experience in communicating with peers and teachers. Loneliness is very common among SLI students. This often leads to depression.

Two to three times as many males as females suffer from SLI and neurobiological research suggests that there may be a developmental defect in the left hemisphere of the brain that causes it.

Dyspraxia

This is the inability to speak clearly. It may occur with or without SLI. Sometimes the cause is physical, e.g. a cleft palate. Articulation of phonemes, voice problems or rhythm may be affected. The most common type of dyspraxia is stuttering. This used to be considered an emotional problem, but it has been found to have a neurological basis.

Dysgraphia

Dysgraphia is a neurological complaint that results in the inability to hold a pencil properly and it affects all kinds of writing and drawing and numeral writing activities. Children with dysgraphia often also display motor performance or auditory or visual-spatial difficulties.

Dyscalculia

This neurological complaint affects the ability to reason and solve problems. It also disturbs creative and critical thinking and concept formation. Children disabled in this way will usually resort to rote learning in order to master mathematical problems.

Neuromotor Function Disabilities

These may affect gross or fine motor skills. Gross motor skills are those such as hopping, running, skipping, jumping, throwing and catching a ball, and balancing. Fine motor skills are those that demand hand eye coordination such as writing, threading a needle, threading beads, sewing, knitting, copying accurately, colouring.

Sufferers may be considered clumsy, be poor at sports, have untidy writing, and spill things a lot.

Memory Deficiencies

These may be related to short or long term memory. The education system makes incredible demands on our memory systems. Any malfunction can have serious consequences.

In short term, or working memory, information is temporarily stored and processed, whereas long term memory is a retrieval system of what has already been learned. Baddeley, in 1985 proposed that there are three types of short term memory, a central executive system, which selects and organizes information, and decides whether to operate long term memory retrieval, an articulatory loop, responsible for storage and verbal memory and a visuo-spatial "scratch-pad" memorizing images. It is thought that the central system doesn't function normally in L.D. sufferers. Forgetting can take place within seconds and recognition and recall need to be trained. Long term memory includes several different kinds of memory, semantic memory, motor memory and autobiographical memory. These can be lost after accidents that affect a certain part of the brain.

Organizational Deficiencies

These can be of two types and they produce very different kinds of symptoms.

- 1) Temporal-sequential. With this kind of organizational deficiency the patient will have problems with timing, deadlines, schedules, appointments, meetings etc.
- 2) Material-spatial. With this kind of organizational deficiency the sufferer will have problems in keeping track of objects, organizing desks, rooms, notebooks, schedules etc.

Many sufferers of ADHD also have organizational problems.

Cognitive Function Impairment

Cognition has been said to be the act of perceiving, attending, thinking, remembering, and knowing. This deficiency affects one's performance at higher cognitive levels, such as reasoning, problem solving, concept formation and creative and critical thinking.

Social Cognition Deficiencies

Many L.D. sufferers of all kinds show social cognition deficiencies. They may demonstrate antisocial behaviour and be described as having attitudinal or motivational difficulties. Many of them, whose L.D. affects their use of language, find that they cannot

interpret social situations, approach peers or teachers, cannot predict reactions or judge appropriate language use. Many of them inadvertently offend or annoy those around them and may also use inappropriate body language.

Often these students are experiencing excessive failure in the classroom. They find it hard to stay on task, concentration may be weak, and they may feel inadequate and hopeless when faced with difficult tasks. Low esteem is experienced with excessive failure, and low esteem students often blame factors outside themselves, (they experience an external locus of control), and therefore feel that they are powerless to change anything. They are unable to make a shift from learned helplessness, giving up, to self efficacy, a strength in the belief of personal competence. Most L.D. students find this very hard as they don't experience the success in the classroom that is required to build up self-efficacy, and they don't perceive an internal locus of control. Social and relationship problems, and associated emotional problems, continue into adulthood and are one of the most devastating aspects of learning disabilities.

WHAT HAPPENS TO LEARNING DISABLED STUDENTS

It is thought that 15% of the U.S. population is learning disabled. As the problems are neurological and not environmental or emotional, it is very likely that there is a similar percentage in other populations. Similar percentages of dyslexics have been found in different countries and it is thought that similar populations of learning disabled people are present in all ethnic groups. However, that does not mean to say that all governments treat learning disabled people the same way, or even that they recognize the existence of learning disabilities.

In classrooms in most countries, therefore, the learning disabled students must just struggle along in the mainstream classroom with no help or guidance to deal with their special problems. Often learning disabled students are labelled as low achievers, students with attitude problems, low motivation, or lack of concentration. Students with disturbing behaviour, such as the need to walk around the classroom, may aggravate both peers and teachers. These students are at high risk for dropping out of school and after that for other problems and even have a higher risk of turning to crime. Students who show severe forms of learning disabilities or the behavioural problems that are sometimes related to them, may actually get put into special schools for the mentally handicapped, in spite of the fact that they may actually have high I.Q.'s.

In The United States, where students are protected by the Individuals with Disabilities Education Act, I.D.E.A., every state must, by law, provide an individualized education

program, or I.E.P, for every student that is diagnosed as having a learning disability. If appropriate help cannot be provided in the state school, then the state must foot the bill for private schooling. The system is not perfect. After a problem has been recognized, special education teachers, the student's class teacher and parents will collect information and have the child tested by an educational psychologist. Counsellors, doctors, therapists and audiologists may all be involved in the final diagnosis. The I.E.P. must be set up by a team of teachers, counsellors and the parents and it must lay out long and short term goals. The I.E.P. must be reviewed at specified intervals and is adjusted to meet the child's needs. The child also enjoys the right to be tested in a way that doesn't penalize him for his handicap. He may be given extra time to read a test or be tested orally instead of by a written report, for example. In 1996 there were 2.6 million children receiving some kind of special education in the U.S. L.D. children left unaided in mainstream classrooms may suffer excessive failure, and terrible humiliation. The hours of personal help and training that they receive in special education, can help to reverse this trend. It can help them to retrain their brains, and also teach them to use coping strategies to deal with their particular problems. The system is not perfect, and has many critics. One problem is that the diagnosis often comes too late, often between 9 and 14 years old, far too late to save academic careers. In the U.K. handicapped children are also entitled by law to, "appropriate education." However it seems that the decision or definition of this is left up to the local authorities and social services. While British internet resources mention A.D.D, dyslexia and hearing and visual problems, there didn't seem to be any recognition of the wide range of learning disabilities discussed in the American resources. There were many pages for support groups, and pages for groups lobbying for changes in the law, but there was little research and the information on the government pages was couched in so much technical language, that the average parent would not find it a useful kind of resource for helping with their child's problem.

What is the situation in Japan? Unfortunately it seems that not many educators in Japan are unaware of the issues surrounding learning disabilities, and many are not even aware of their existence. If children cannot behave normally in school, they are likely to be sent to a special school. Although there is evidence to show that learning disabilities are neurological in nature, and therefore are likely to exist in all populations, the government in Japan has been very slow to recognize the existence of L.D. There is a school of thought that says that there is no dyslexia in Japan. Dyslexia in Japan may not be such a significant factor, as children are trained phonetically as they learn to write the hiragana and katakana syllables and it is possible that kanji are read with a different part of the brain to alphabetic languages. It does appear

that almost everyone can learn to read. However, whether or not dyslexia exists in Japan, there is a wide range of other learning disabilities that almost certainly do.

The Asahi newspaper for August 25th reported that Mombusho, (the Ministry of Education), is going to conduct the first survey to find out about A.D.H.D. This sounds like a good step, but the methodology is very problematic. There is no proper control on the study. Basically children's behaviours will be rated on a questionnaire, by parents and teachers. With many different parents and teachers being raters, there will be no standard by which to judge what is, or is not, abnormal behaviour. There is also the problem that observing behaviour only informs about observable behaviour and not the causes of it. There are many children who are not learning disabled, who may exhibit similar types of behaviours. These could be for many other different reasons, social, environmental and emotional factors could all be major factors. In the Asahi's follow-up article, mothers of learning disabled children complained about how long it had taken, (in one case three years), to get a diagnosis, and now having got one, there is no system in order to help the suffering child. Many mothers complained that teachers just told their children to try harder and assumed that they had attitudinal problems. Japan has a large population of students who don't want to go to school. It is very possible that amongst these students are learning disabled students whose problems are going unrecognized. As a group, they are known to be at high risk for dropping out of school. The nature of education in Japan is very textbook oriented. It depends very heavily on linguistic, logical and mathematical skill building and reasoning. Children with linguistic, cognitive or logistic reasoning problems, or those with visual or audio processing problems, or even those with attention problems are going to find the regular classroom a very challenging place to be. Students who also display problems with social cognitive deficiencies will also face great problems in a society where fitting in with the group, and maintaining harmonious relationships in the group is so important. The person who cannot read the linguistic and metalinguistic clues involved in these group relationships will find it hard to conform to the group's standard and will suffer the risk of being ostracized and isolated from the group. They will also find it hard to negotiate for their own place or point of view and may not be able to approach peers or teachers when they need to.

WHAT DOES THIS MEAN FOR LANGUAGE EDUCATORS?

Second language education and special education are usually considered to be two separate and relatively unrelated fields. However there are cases where the two

overlap and, interestingly, it has been found that many of the teaching techniques used in special education can be very beneficial to language learning. In 1991 it was estimated by the U.S. Office of Special Education, that an estimated 948,000 students in the U.S. were both learning disabled and had limited proficiency in the English language. There is a large percentage of language minority students in the U.S. Some of these students are learning disabled, but because they have problems with their language, they end up in bilingual language programs instead of in special education programs. There is a need for bilingual special education for these students. The problems they have with language can mask their underlying learning disability. However, the neurological problem will still be present in whichever language the student functions, and so it needs to be addressed in order for progress to be made.

Another group of students who have problems are those, often high school or college age who have learned strategies to deal with their learning disability and now function very well in their native English. When they come to study a second language they find that the problems caused by their learning disability come to the front and they are unable to function normally and succeed in their study of a new language. As so many disabilities are connected deeply with language skills, it is not surprising that what could be an enriching adventure for a non learning disabled student, can turn into a nightmare for a learning disabled one. Foreign and second language teachers are not normally trained in special education. However, all language teachers probably have encountered the student who mysteriously refuses to progress in their study of the target language. Teachers blame it on low motivation, laziness, poor study habits, a high effective filter, (fear of making mistakes), a low level of language learning aptitude or just a bad attitude. In many classes there are also the students who seem not to fit in. It is difficult to pair them up, they don't make eye contact, they avoid getting near others, or always sit alone in the same place. Some of these students may actually be sufferers of undiagnosed learning disabilities.

In the 1960's Dr. Dinklage started to interview his very intelligent and highly motivated Harvard University students, to see if he could find out why they were having such trouble in learning a foreign language. He found many students who had been diagnosed as learning disabled in their younger years, but had learned strategies to cope with it and had by great effort found success in the education system, and he also found some students who did, in fact, have learning disabilities but had never been diagnosed at all. His work was continued in the 1980's by Ganschow and Spark, who proposed The Linguistic Coding Deficit Hypothesis. They found that those who were failing in learning a second language had problems with the phonological, semantic and syntactic codes and systems of their native language. Good language

learners were found to be strong in all these three areas. Most especially they found that poor language learners showed a poor understanding of the phonological code of their native language. Using various methods, employed by special education teachers, lots of kinesthetic and visual materials, and with a very highly structured curriculum, they were able to train the students and improve their language learning. Reteaching and retraining students in the phonology of the first language overtly, greatly helps learning disabled students to approach the barrier of the second language.

WHAT KINDS OF SPECIAL EDUCATION TECHNIQUES ARE HELPFUL WHEN TEACHING A FOREIGN LANGUAGE?

Firstly it is important to remember that the learning disabled student usually needs more time to allow information to sink in, than a non disabled student might need. Because of this, it is preferable to slow down the pace of the class and concentrate on the essential, core elements of the curriculum. Of course, there are usually students present who can go faster, and as they are usually more motivated students anyway, they should be given enough optional, challenging material to work on, while the essentials are being thoroughly covered for those who need it.

The learning disabled student may also need much review, to make sure that the information has really been processed and remains available in the brain. Some L.D. sufferers may not be able to recall easily, or at all, what they have previously learnt. Students should not be overloaded with new vocabulary, especially if they have problems with memory.

Multisensory stimulation is very helpful in teaching L.D. students and should be made use of, whenever possible. Provide visual, tactile and kinesthetic input.

Whenever there is a chance, use more than one method to teach or instruct. For example, instead of just telling students about the homework, write it or illustrate it somehow on the board. Let them hear it and see it, too.

Activities that require movement and visual input are often very helpful and also may be better remembered than those activities that rely entirely on linguistic skills.

Make the environment a friendly one, in which it is easy to ask for repetition or ask questions.

Instructions should be very clear and precise and if they are long, it is better to do a task stage by stage to break up the instructions.

Noise and visual distractions should be eliminated as far as possible in order to help those who have problems with attention. Try not to jump around topics. Make all the steps clear and precise.

Say things explicitly and move in stages from the concrete to the abstract.

Emphasize the importance of phonology in language.

Lessons should be very carefully structured so as not to give confusing messages to the students.

Make sure that information is carefully classified into categories.

Try to increase linguistic awareness.

Monitor progress carefully.

Look for strong areas as well as weak ones and give praise and positive feedback when you observe success.

Find out how the student thinks she learns best.

Consider alternative methods of testing if your tests will discriminate against learning disabled students.

As most L.D. second or foreign language students are in mainstream classes, with teachers unqualified in special education techniques, it is very difficult for them to get as much help as they might require. The teacher cannot give all her attention to one or two students with difficulties in a class of thirty. It may be impossible to single out the L.D. student for special training outside the classroom. However, many of the above techniques will help all students, not only those who happen to be learning disabled. There are also many aspects of communication and language skills that can be taught overtly that will help many students, e.g, Phonology, grammar systems, study habits, social skills, body language awareness, etc.

A CONTRASTING POINT OF VIEW

There is a strong movement of holistically minded psychologists who are against the whole L.D. movement and what it stands for. This viewpoint is eloquently expressed by Thomas Armstrong in what he calls, "The Learning Disability Trap."

"On Saturday, April 6, 1963, a new disease was invented in Chicago, Illinois, which, over the next thirty five years would slowly begin to infect millions of school children nationwide. This was no simple virus or bacteria. Hidden deep within the neurological system, it resisted detection by medical personnel, evaded clear diagnosis through testing, and had no discernable cure. The federal government would spend billions of dollars on this learning disease, and yet by 1998 it would be said to inflict fifteen percent of the American population."
(Armstrong 2000.)

Armstrong's point of view is that the L.D. movement is misguided because it

separates out children who don't learn in a particular way. He believes that there are eight different learning styles, (From the research of Howard Gardner), and they are linguistic intelligence, mathematical/logistic intelligence, spacial intelligence, bodily/kines-thetic intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence and naturalistic intelligence. All learners evidence all the different types of intelligence, but in different proportions. In the school system however,(which Armstrong describes as a worksheet wasteland), learning relies almost exclusively on only two types of intelligence, linguistic and mathematical/logistic. For students who prefer to learn in any of the other ways, the school system will be a very difficult place in which to be successful. If a student needs to learn something kinesthetically, or musically, they will not find their needs met in the regular school system. Armstrong also feels that labelling children L.D, and removing them from the classroom is a form of discrimination in itself and he feels that in many cases, the students then get more of the same,(worksheets) in the special education class. He feels strongly that the problem is not inside the learners but in the education system itself.

Gardner's viewpoint certainly seems to be true to a certain extent, in that our school systems do rely heavily on certain kinds of learning. However our societies also value those kinds of learning, and if students are to be successful they need to be accomplished in those particular areas, if they are not to be ostracized in society. Education must prepare students for their future. Having said that, there are obviously many other talents and abilities that are not being developed in regular school systems and there are obviously going to be those who languish in those systems. Recent neurological research also supports the view that there is a neurological basis for these learning differences.

CONCLUSIONS

The case for learning disabilities is not closed. There are still those who refuse to acknowledge it as a problem. There is great controversy about how to deal with it, and neurological research is still in its infancy. A certain amount of variation in the way that humans learn and process or classify information, may be normal, just as it is normal for everyone to have a different finger print and body type, and to have a different emotional profile.

There is surely a case for re-examining the educational system, so that it can meet more effectively the needs of a wider range of students and learning styles.

There is also a case for re-examining the recommended treatments for learning

disabilities. Taking Ritalin and other stimulant drugs is a way of life for many sufferers of A.D.H.D. but there are those who believe that this is unnecessary and unethical. Natural treatments, such as certain physical exercises and nutritional treatments are claimed to effect significant changes in the condition.

As neurological research reveals more about the brain, and our understanding of these conditions grows it is to be hoped that our increasing understanding of these conditions will lead to the better equipping of these people to reach their full potential. The brain has been found to be very open to training, especially in children, and there is much that can be done to help L.D. sufferers.

Finally, the attitude and awareness of those people who are around L.D. sufferers is very important. If the L.D. student is seen as a failure, or mentally retarded, or as having a poor attitude, then they will behave according to those expectations. As educators, there is a chance and a challenge for us to effect a positive change. Teachers can encourage, teachers can show learning disabled coping strategies, teachers can use creative methodology, teachers can try to understand the problems, try to be enlightened and most important of all, try to give these students, who are, in Japan, a hidden population, a taste of success.

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