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Teaching Special Education in the ES/FL Classroom

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### Abstract

English language learners (ELLs) are growing in number in the United States school system. With this increase in population comes the task of providing quality and appropriate education for these students. A great part of this responsibility falls on instructors of English as a Second/Foreign Language (ES/FL) courses. As with every other content area, the possibility of having students with disabilities and disorders in the classroom exists. However, in the context of language acquisition unique obstacles and pitfalls exist which are particular to this field. Providing services for ELLs with special needs is a major concern in the realm of education. Each area of intervention is affected by the fact that these students are not functioning in their first language and by the fact that many disabilities interfere with language processing and social skills. The relationship between the language acquisition process and certain disabilities is an essential part to understanding how to assist these students in language learning. Methods, approaches, and curriculum can be modified and accommodations can be made in order to allow English language learners with special needs to achieve their highest level of success in the ES/FL classroom.

### Teaching Special Education in the ES/FL Classroom

Identifying and diagnosing special needs in the school system can be a difficult process. The added element of a language barrier complicates this process even more. English language learners in the school systems are especially at risk for misdiagnosis and overrepresentation in Special Education. Many disabilities affect how a person processes language and add an additional challenge to the English as a Second/Foreign Language (ES/FL) instructional process. The relationship between particular disabilities and elements of the language learning process must be understood and explored in order to give English language learners with disabilities the opportunity to succeed. Even though ES/FL instruction falls under general curriculum, instructors must be familiar with the field of special education and how the various disabilities and disorders can hinder an individual's language learning process.

### **Understanding the Need for Special Education in ES/FL**

English language learners (ELLs) entering the school systems in the U.S. are entering a system in which it is necessary for them to function in a foreign language. Many of these students are classified as having Limited English Proficiency (LEP). This means that the student's current level of mastery of the English language is not sufficient for him or her to be placed in the classroom without additional language assistance and training. As of 2014, "Approximately 5.5 million students who attend U.S. public schools have a native language other than English" and the amount of students with LEP "is increasing approximately 10% per year" (Miller & Katsiyannis, 2014, p. 121). The number of students learning English as a second or foreign language is growing rapidly in the United States. The National Council of Teachers of English has reported that "in the

past 30 years, the foreign-born population in the United States has tripled” (Cohand and Honigsfeld, 2012, p. 13). Programs and services are growing in number as well in order to accommodate this increase in demand.

The potential of disabilities and disorders being present in the classroom increases with the rising number of students. According to the National Center for Education Statistics, in 2013 the number of children and youth ages 3-21 receiving some form of special education services had reached 13% of all students enrolled in the public school system (2015, para. 2). This means that approximately 6.4 million students are receiving special education services in the United States’ school system. With such a large number of students requiring these services, there is an increase in crossover between the ES/FL classroom and special education. English language learners with disabilities deserve the same opportunity to be able to access the general curriculum as every other student in the school system.

Currently in the United States, students in public school settings are protected under certain laws and requirements. One of the most prominent laws protecting students with disabilities is the Individuals with Disabilities Education Act (IDEA). This law requires that all students in this nation are provided the opportunity to receive a free and appropriate public education. Students cannot be excluded from the education system due to a disability and those with disabilities are guaranteed services and accommodations as deemed appropriate and necessary. Within this law the provision of an Individual Education Plan (IEP) is given for students with diagnosed disabilities or disorders. The IEP is specifically designed for and tailored to the individual student’s academic or behavioral needs. These IEPs are legally binding and it is required for teachers of all

content areas to adhere to the requirements, goals, and accommodations outlined in the document.

Another key law that is important to note is the Americans with Disabilities Act (ADA). This law guarantees that no individual will be discriminated against because he or she has a disability. The Every Student Succeeds Act (ESSA) creates accountability within the school system. It ensures that there are no achievement gaps between underserved or disadvantaged students and their peers. ELLs have traditionally not achieved as high academic success as their proficient peers. The ESSA is put in place to ensure that ELLs are not being ignored or passed over in the school systems (U.S. Department of Education, 2012, para. 8). These laws also require that ES/FL instructors understand the relationship between disabilities and the language acquisition process so that ELLs with disabilities are still able to access the curriculum.

### **Potential Pitfalls**

Several obstacles may stand in the way of ELLs achieving academic success. It is difficult to determine whether an ELL's struggles in academic achievement are due to the fact that they are functioning in a foreign language environment or if there is a disability interfering with the child's learning process. When determining whether or not an ELL has a disability, it is important to consider all elements of the student's life and learning history. Not doing so could result in negative consequences. A student with LEP may be "denied appropriate academic services through misidentification and [will] not have access to a rigorous standard curriculum" (Miller and Katsiyannis, 2014, p. 121). If the academic struggles a student is experiencing are simply assumed to be a result of his or

her language barrier, then that student will not receive the correct assistance that he or she needs in order to have the opportunity to succeed.

Another danger exists in the misclassification of students with LEP. These students “tend to be overrepresented in certain categories, such as speech language impairment, intellectual disabilities, and emotional disabilities” (Miller and Katsiyannis, 2014, p. 121). When this occurs, it can set students back in their education and never address the real issue at hand. A student may need additional intensive language instruction or a variation of methods in order to improve his or her language skills. If the student’s language learning needs are not addressed, then his or her skills may actually worsen, and the opportunity to succeed academically could be missed. This may not only impact the student in the school system, but could likely have an impact on his or her life beyond formal education.

### **Second Language Acquisition Variables**

Many theories exist as to how a person acquires another language. However, the language learning process is not the same for every individual and it is not a linear process. Many variables are involved in second language acquisition (SLA) such as how old a person is when they begin learning, the education environment, personal motivation, anxiety, or even personality traits (Lys, May, and Ravid, 2014, p. 88). There are many different aspects to language acquisition and every individual has a different level of language aptitude. In any given setting, “the same teaching and learning strategies do not have the same effects for all learners and... small stimuli can have unpredictable consequences, dramatically negative or positive” (Menezes, 2013, p. 411). Learning a new language is not an easy or necessarily straightforward process. It

incorporates aspects of culture and social interaction as well as academic strategy.

Second language acquisition is partially a cognitive process, but it also occurs without explicit instruction or study. Comprehensible input is equally as important as opportunities for output. The mind is constantly reconstructing and reordering information from the new language as a learner's framework is developed and challenged.

Students of all ages and backgrounds have many obstacles to face due to the complex involvement of cognitive and social skills throughout the SLA process. This process can be best understood through a complex model as it can

admit the existence of innate mental structures and sustain that part of the language is acquired by means of repetition and the creation of automatic linguistic habits. It can acknowledge the importance of language affiliation understood as the level of relationship between the learner and the second language. Cultural or personal affiliations with the second language work as a potent fuel to move the SLA system. In addition, in such a model, input, interaction and output are also considered of paramount importance for language acquisition as they trigger both neural and sociocultural connections. Each component works as a subsystem embedded in the SLA system. (Menezes, 2013, pp. 407-8)

Understanding the complexity and layered characteristics to this process enables one to have a greater understanding of how disabilities and disorders can greatly impact SLA.

English language learners with a disability or disorder must engage in this world of subsystems with additional obstacles to overcome. Not only is every language learner in a



unique place in his or her learning process, but also every disability is different and how a disability manifests in an individual is different. Each student must be evaluated on an individual basis and instructors must be intentional about understanding each situation and context.

### **The Psycholinguistic Nature of SLA**

Acquiring a language requires more than simply memorizing and regurgitating facts and information. A much greater part of this development involves mental processes and psychology. There are several key constructs of psycholinguistics in language acquisition. These include attention, working memory, and information processing (Gass, Behney, and Plonsky, 2013, pp. 265-67; 255). Each of these internal structures and systems assist in an individual's SLA. Language learning is deeply rooted in the internal workings of the mind where rules are created and organized, and linguistic information is manipulated. Every language consists of various rules and patterns. A major part of language learning is recognizing and implementing these semantic, syntactic, grammatical, and lexical rules. Language is structured and organized. Psycholinguistics focuses on the particular processes an individual's mind goes through in order to acquire the rules and patterns necessary for fluency.

Attention is one of the key elements of language learning. It is essential to rule creation and the recognition of patterns in the target language (TL). This refers to the focus and concentration of mental energy and functions on a particular object. This also means that other information and stimuli are ignored in order to focus on one particular item. In order for language learning to take place, it is necessary for an individual to focus attention on the linguistic information (Li and Hao, 2013, p. 387). If an individual

learner is not focusing on the information being presented, it is unlikely that he or she will retain or be able to utilize the provided input. The linguistic content that a learner actually attends to retains is referred to as intake. Language learning is an active process and it requires the learner to be able to focus on and consciously make note of various linguistic elements in order for input to become intake. Within the broader notion of attention, three different elements exist: “alertness (readiness to receive incoming stimuli), orientation (direction of resources to stimulus), and detection (registration of stimulus)” (Gass et al., p. 265). All of these factors work together to help individuals notice specific, crucial syntactic or grammatical information in the TL. Once linguistic information is noticed, the learner must then be able to retain and produce it.

Noticing is an essential part of language learning. It could be said that this principle is a prerequisite to all other aspects of language acquisition. It is vital because learners must be able to compare and contrast the linguistic information they are producing with the information they are receiving from the TL. (Richards & Renandya, 2002, p. 159). There are both external and internal functions of noticing in language acquisition. Noticing takes place externally when TL input is presented to a learner. The learner needs to actively listen to and analyze the information in order to then use it and recognize TL rules and patterns. If these are not recognized, a learner is at risk of misusing elements of grammar and syntax. This could result in miscommunication and fossilization of incorrect forms. Input allows an individual to make corrections to and restructure his or her interlanguage. The internal function takes place when a learner is producing output. Research has shown that TL input is not enough on its own for rule creation and acquisition to take place. The hypothesis was formed that language learners

need to have their attention focused on the various characteristics of forms. A result of this hypothesis was that “Output was considered to be one means to achieve this aim by prompting the learners to find problems in their IL through their production attempt” (Izumi, 2002, p. 566). Production of the TL can force the learner to better process the presented input and help in the development of the interlanguage (IL). This was assumed based on that fact that “on exposure to relevant input immediately after their production experience, the heightened sense of problematicity would lead them to pay closer attention to what was identified to be a problematic area in their IL” (Izumi, p. 566). Noticing and attention are needed in order for input and output to be meaningful and taken in as intake.

An individual’s working memory is also a vital part of his or her language acquisition. The working memory is more than just a bank of stored facts and information. It is a structure in which a person is able to manipulate specific knowledge. The content stored in the working memory can be used and applied to various situations and in multiple contexts (Gass et al., 2013, p. 267). Each individuals’ capacity to hold information in the working memory differs, but it plays an important part in each person’s language learning process. The working memory is “a multicomponent system responsible for active maintenance of information in the face of ongoing processing and/or distraction” (Conway, Kane, Buntig, Hambrick, Wilhelm, and Engle, 2005, p. 770). Since language learning involves many different physical, mental, and emotional elements all at once, this construct is important. It allows an individual to maintain, organize, and utilize new linguistic information as it is being acquired and solidified.

Information processing involves several aspects. Automaticity is defined as one's control over his or her acquired linguistic information. This involves the ease of speed, proficiency, and response time. The more that the various language skills are used and practiced, the more they become automatic and less cognitive thought is put into producing output. Another element of information processing is restructuring. Changes will be made to the internal framework of linguistic information as new content and structures are introduced and integrated into the existing system (Gass et al., 2013, pp. 255-61). The process of restructuring leads to what is known as U-shaped learning.

U-shaped learning is a three step process. A language learner will first produce the correct TL form, followed by the production of incorrect forms, and finally he or she will regain the correct form (Gass et al., 2013, pp. 255-61). The phenomenon of U-shaped learning shows that learning is not a linear. This is a cognitive-development process that must take place as an individual's knowledge of the TL grows and changes. Language learners are presented with new linguistic elements piece by piece. As this occurs, individual learners must make assumptions and guesses about the TL based off of the available information. When new information is first presented, the learner is able to use it correctly in the specific context provided. However, the second phase of U-shaped learning occurs when the learner makes a wrong assumption about how a grammatical construct can be applied or manipulated in the TL. Regained production of correct forms will occur when additional information is provided and the learner realizes that incorrect assumptions have been made (Carlucci and Case, 2013, p. 56-58). This cognitive process is important because of its involvement in an individual's TL rule development and acquisition of correct use of grammatical forms. Noticing and attention are necessary for

the completion of this process. If an individual is unable to notice his or her incorrect use of TL linguistic information, correction will likely not take place and fossilization of these incomplete forms can occur.

It is important to understand the psycholinguistic nature of language learning in order to grasp the impact disorders and disabilities can have on language development. Many disabilities impact the brain's functions and abilities to process information. Since language learning is deeply rooted in these processes any obstacles in this area will increase the difficulty of the acquisition process. Since this part of language development is internal and unique to each individual student, instructors must have a firm understanding of this nature of language learning as well as the aptitude and abilities of the individual student. Every student develops his or her own framework of the new language, called an interlanguage. This structure will be different for every individual and it is directly linked to the psycholinguistic processes language learners go through in SLA.

### **Interlanguage Development**

The role of an individual's interlanguage (IL) development during the language acquisition process is crucial. This IL is created and used by language learners as they begin working toward achieving fluency in the TL. It is made up of elements of both the native language and the available linguistic information of the new language. However, there are also elements of an individual's own interpretation and assumptions about the TL which are imposed upon what has been introduced and acquired (Gass et al., 2013, p. 11). The IL is constantly changing and being shaped by the language learner as new or

corrected information is processed. Throughout this time of acquisition, an individual is building up an internal framework involving many different psycholinguistic procedures.

The issue that arises in the context of working with ELLs with disabilities is that many of these disabilities interfere with psychological processes. If a student is not able to notice, analyze, remember, or interpret the linguistic information, then he or she will have a much more difficult time building and maintaining a functional IL. Without a working framework, individuals will struggle to integrate new linguistic information. If a student's ability to process the verbal, visual, social, or auditory input of language is obstructed, gaps and deficits will arise and the IL will not progress. ES/FL instructors must understand the intricate relationship between disabilities and the development of the interlanguage in order to increase students' opportunities to succeed in communicating in the TL.

### **Specific Disabilities and Their Impact on Language Acquisition**

Limited English Proficiency is not considered a disability. Academic struggles stemming only from a language barrier do not qualify a student for special education services. According to the Individuals with Disabilities Education Improvement Act of 2004 (IDEA), a child is determined to have a disability if he or she is diagnosed

with mental retardation, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (referred to in this title as 'emotional disturbance'), orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities. (Individuals with Disabilities Education Improvement Act, 2004, p. 6)

Deaf-blindness, developmental delay, and multiple disabilities are also categories used in the diagnosis process of special education which are not specifically mentioned in the IDEA listing. Each of these unique classifications of disabilities can interfere with language learning in a variety of ways.

The intellectual disability (formally labeled mental retardation) classification is sometimes mistaken to mean that an individual is not intelligent. However, it actually means that there is a “significantly sub-average general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child’s educational performance” (Center for Parent Information and Resources, 2012, para. 7). This means that an individual’s cognitive ability is below average. It may take a longer period of time for students with an intellectual disability to understand or grasp concepts and information. While they are not incapable of learning, learning new information is a longer process. These disabilities may be in language, reading, writing, visual or auditory processing, or math. Intellectual disabilities may also interfere with communication and social skills. All of these factors are obstacles in an individual’s language education.

The second category of disabilities is hearing impairment. This area is described as “a deviation or change for the worse in either auditory structure or auditory function, usually outside the range of normal” (American-Speech-Language-Hearing Association, 1981, para. 2). A great deal of language learning comes through hearing and processing comprehensible input of the second language (L2). Hearing impairments interfere with this aspect of the language acquisition process and can greatly detract from a student’s potential to obtain necessary language skills. The inability to accurately process and

comprehend input can also impact a student's ability to produce correct output. The disability could affect how the phonetics of a language are interpreted and produced, potentially leading to obstacles in achieving the ability to communicate effectively in the L2.

The category of speech or language impairment (SLI) will greatly impact a student's language acquisition process. It is defined as "a communication disorder such as stuttering, impaired articulation, a language impairment, or a voice impairment that adversely affects a child's educational performance" (Center for Parent Information and Resources, 2012, para. 12). These types of disabilities would greatly impact a student's oral abilities in the L2 and they are caused by both biological and lack of social engagement (Deirdre, 2015, p. 51). Pronunciation of words, inflection, and fluency can be affected which can interfere with clear communication. This classification has "a prevalence of around 7%, which makes it comparable in frequency to dyslexia" (Bishop, 2009, p.163). The potential for misclassification or a missed diagnosis when dealing with this category is profound. It is often difficult to determine whether or not a student simply has a lower language aptitude or if there is an SLI interfering with the language acquisition process. It must be established that the apparent disability exists in the first language (L1) as well as in the L2 in order to move forward in assisting the student in the language learning process.

The visual impairment category also includes blindness. This category is described as "an impairment in vision that, even with correction, adversely affects a child's educational performance" (Center for Parent Information and Resources, 2012, para. 14). Students with partial sight or blindness will be limited in their ability to benefit



from certain types of instruction. Much of language instruction and cultural norm education comes from using visual aids, cues, and modeling. However, if a student is unable to, or is limited in his or her ability to, see and interact with language in this way, then other methods must be implemented that utilize the student's strengths and abilities. Auditory input and activities geared toward kinesthetic learning in the language classroom would be of great benefit to students with visual impairments.

The emotional disturbance classification is broad in its description. It is defined as "a condition exhibiting one or more of the following characteristics of a long period of time and to a marked degree that adversely affects a child's educational performance:

- (a) An inability to learn that cannot be explained by intellectual, sensory, or health factors
- (b) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
- (c) Inappropriate types of behavior or feelings under normal circumstances
- (d) A general pervasive mood of unhappiness or depression.
- (e) A tendency to develop physical symptoms or fears associated with personal or school problems." (Center for Parent Information and Resources, 2012, para. 5)

The characteristics of emotional disturbances can be the cause for interference and setbacks in the language learning experience. An inability to appropriately express or cope with emotions can lead to things such as interruptions during instruction or negative peer interaction. Since a major aspect of language learning is social interaction, students classified with emotional disturbance are at risk of missing out on this essential element.

Orthopedic impairment may include “impairments caused by a congenital anomaly, impairments caused by disease, and impairments from other causes” (Center for Parent Information and Resources, 2012, para. 9). These impairments may not necessarily interfere with the language processing function of the brain itself, but language acquisition can be affected in other ways. Having severe physical impairments often affects a student’s social experience. Language learning is a social experience. When students do not have positive social experiences, it increases the possibility that they will struggle to engage fully in the language learning process. In addition to social barriers, orthopedic impairments may result in frequent absences from school, resulting in missed instructional time. This puts the child at risk for falling below benchmarks and not having access to the curriculum.

Autism spectrum disorder (ASD) is one of the most commonly known and widespread categories discussed in IDEA. Autism is a broad term that describes “a group of complex disorders of brain development. These disorders are characterized, in varying degrees, by difficulties in social interaction, verbal and nonverbal communication and repetitive behaviors” (Autism Speaks, 2016, para. 1). Many aspects of language use and processing are affected by autism. It can be very challenging to find ways to assist students with more severe diagnoses in the ES/FL context. Communication and the ability to receive comprehensible input are vital elements of language learning. Autism affects both of these abilities in an individual. In this case it is important to focus on what a student is able to achieve and to create goals based on that individual’s strengths. Acquiring another language is already a difficult process without added obstacles. It is vital that students are encouraged and that they see improvement.

The traumatic brain injury (TBI) category differs slightly from other classifications. An individual is classified within this category if he or she has “an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child’s educational performance” (Center for Parent Information and Resources, 2012, para. 13). Individuals who are diagnosed with a TBI are usually not born with this disability. It is usually acquired through some sort of accident. The effects this type of disability has on the language acquisition process often depends on the severity of the injury, the age at which the injury occurs, and the nature of the injury itself. Sometimes language centers are not as affected as other functions when the brain is damaged. However, other cases show that language skills are lost or severely hindered. No two brain injuries are exactly the same.

Deafness is described as “a hearing impairment so severe that a child is impaired in processing linguistic information through hearing, with or without amplification, that adversely affects a child’s educational performance” (Center for Parent Information and Resources, 2012, para. 3). While not being able to hear spoken language may be considered a lost cause in the realm of language instruction, there is much more to language than just the spoken word. English language learners who are deaf still need to learn the English language in forms such as writing, reading, and possibly even reading lips. While American Sign Language instruction does not fall under that of ES/FL instruction, it may also be necessary to work with these students toward fluency in ASL in addition to non-verbal forms of English.

Deaf-blindness is another area of disability under IDEA. This category is defined as “concomitant hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness” (Center for Parent Information and Resources, 2012, para. 2). This category of disability makes language learning extremely challenging. Students with deaf-blindness are not likely to be placed in ES/FL courses due to the nature of this disability. However, it is possible for these students to acquire ASL and other forms of communication.

The other health impairment category is a broad classification that means “having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment” (Center for Parent Information and Resources, 2012, para. 10). The conditions that cause these impairments are often just as important in their impact on academics as the impairments themselves. Disabilities in this category can be caused by “chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome” (Center for Parent Information and Resources, para. 10). In particular, the condition of attention deficit/hyperactivity disorder (ADD/ADHD) can greatly impact an individual’s ability to learn a language. Attention and noticing are essential in the acquisition process. Being unable to focus would be very detrimental to the language learning process. Additionally, many of the health problems listed out in this category could impact how often a student

is able to attend classes and receive necessary instruction. If the TL is not experienced and practiced regularly, the learning process will be much slower and more difficult.

The classification of specific learning disabilities (LD) is a broad category under IDEA. It is defined as

a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. (Public Law 108-446, 2004, p. 11)

The connection between struggles in the foreign language acquisition process is self-evident from the definition. These disabilities interfere with language processing on a psychological level and they may affect one or more areas of language production and comprehension. Students with an LD will show discrepancies in various areas of academic achievement. These gaps are characteristic markers of LD (Mather and Gregg, 2006, p. 99). Examples of conditions that fall under this category are: “perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia” (Center for Parent Information and Resources, 2012, para. 11). Dyslexia and developmental aphasia are important to note in how they may interfere with the language learning process. Dyslexia can inhibit an individual’s ability to utilize written linguistic materials. Reading and writing are important aspects of obtaining fluency in the TL. Not being able to consistently and fully access this portion of linguistic content could have a negative impact on a student’s language education. Aphasia affects a person’s ability to communicate with both spoken and written language. The production and understanding of both is inhibited due to damage in the areas of the brain controlling language.

If a child is diagnosed with a developmental delay (DD) it means that he or she has been diagnosed with a delay in “one or more of the following areas: physical development; cognitive development; communication development; social or emotional development; or adaptive development” (Individuals with Disabilities Education Improvement Act, 2004, p. 7). The age range for DD classification is from three to nine years old. The language acquisition process is multifaceted. It is a cognitive skill that also involves communication and social skills. If a child’s development in any of these areas is delayed, it will affect his or her ability to pace with his or her peers in the language classroom. More intentional and individualized instruction needs to be provided for students with DD in order assist them in accessing the curriculum and to keep them from falling below determined benchmarks.

The classification of multiple disabilities is the final category. This means that an individual has been diagnosed with concomitant impairments (such as intellectual disability-blindness, intellectual disability-orthopedic impairment, etc.), the combination of which causes such severe educational needs that they cannot be accommodated in a special education program solely for one of the impairments. (Center for Parent Information and Resources, 2012, para. 8)

It is fairly common for individuals to be diagnosed with more than one disability. Certain types of disabilities are more likely to be grouped with others. For example, it is a common occurrence for someone diagnosed with autism to also be diagnosed with something from the other health impairment classification, such as ADHD. Multiple variables of language learning can be inhibited at the same time. This can create gaps in

knowledge and processing that will become obstacles in an individual's success. In the language acquisition process, this can present unique challenges to how instruction will take place and what methods will be used to accommodate the multiple disabilities and effects.

### **Principles of Language Learning in Relation to Disabilities**

The language learning process involves many different principles which are all connected. If something interferes with an individual's ability to engage in his or her language learning process in one or more of these ways, acquisition will be greatly hindered. There are many principles that describe how people learn languages. Particular attention should be given to those which are most directly affected by certain disabilities and disorders. These principles include that: varying levels of language aptitude exist; language learning styles, strategies, and practices depend upon the individual; cognitive abilities aid in language learning; copious language exposure and practice are necessary; and comprehensible input is a prerequisite to language learning. These principles can be greatly affected by an individual's disabilities and can reveal obstacles these language learners will face in the SLA process.

The concept of language learning aptitude is a principle that should be grasped by any language instructor. Not every individual is equipped with the same language skills, nor will every student achieve the same level of fluency. The psycholinguistic nature of SLA means that language learning is a very unique and personal journey. One's ability to process, analyze, and integrate linguistic information of a target language will determine how easily and completely languages will be acquired. J. B. Carroll presented a four component framework of language aptitude. His components included: phonemic coding

ability, grammatical sensitivity, inductive language learning ability, and memory and learning. Phonemic coding ability refers to an individual's ability to differentiate between the sounds of a foreign language and to integrate them in a way that they can be utilized at a later time. Grammatical sensitivity refers to the ability to perceive the functions of individual words in a sentence. An individual's ability to inductively learn a language involves the ability to recognize rules and general concepts about the TL without explicit instruction or explanation. Independent learning can better take place and less time will be spent on rule creation if this ability is well developed. Finally, memory and learning refer to one's ability to integrate and retain linguistic information from the TL.

Vocabulary, grammar, and even syntactic structures are memorized at the beginning of the acquisition process. This information is then referenced over and over again as the learner moves into producing and processing the new language (Gass et. al., 2013, p. 445). Each individual has different abilities and aptitude levels. Some areas will be stronger than others, and it is up to the instructor to recognize students' strengths and weaknesses in the classroom. Students with disabilities affecting cognitive processing may have weaknesses in the areas of inductive language learning and grammatical sensitivity. Each one of these processes is complex and require an individual to notice and actively compare or contrast linguistic material and to notice patterns and regularities in language.

Closely related to the concept of aptitude is the principle that there are different language learning styles and practices. Personality, preferences, educational backgrounds, cultural influences, and communication tendencies all play a role in how successful individuals are in learning a language. No two individuals will learn in exactly the same



way. There are three major categories of learning styles which include: visual, auditory, and kinesthetic learning. While most people do not exclusively learn one way, there is generally one of these types that is predominant and preferred (Blevins, 2014, p. 59). Disorders and disabilities such as language processing disorders, dyslexia, and cognitive processing disorders will affect the levels at which an individual will be able to achieve certain language skills. Certain disabilities may also affect how an individual learns new information. Students with auditory processing disorders will likely be more of a visual or kinesthetic learner than an auditory one. Likewise, students with visual impairments could benefit more from auditory input than visual illustrations. An individual's learning styles and preferences are always important, but are even more so when greater obstacles stand in the way of an individual achieving his or her goals. It becomes necessary for instruction to be even more individualized when disabilities are present.

The principle that cognitive abilities aid in language learning is important to note in how it ties into the context of disabilities. Implicit and explicit knowledge work together in the language learning process (Gass et. al., 2013, p. 445). Many times, individuals with disabilities such as Autism Spectrum Disorders, intellectual disabilities, and speech and language impairments have not acquired the same implicit knowledge as their non-disabled peers. More explicit instruction will need to take place in order for these students to overcome these deficits in implicit knowledge. Cognitive processing disorders will make this element of language learning much more difficult as the mental processes and structures involved will either not operate at all, or operate in a different way. As previously discussed, the psycholinguistic elements of attention and noticing in language learning are essential. Anything inhibiting the brain's ability to cognitively

focus attention onto particular elements and to integrate them into the working interlanguage will interfere with the long term acquisition process.

For any language learner, high quantities of exposure to and practice using the TL are necessary for acquisition to take place. As previously discussed, the psycholinguistic elements of input and output are closely tied to noticing and attention. Language learners must receive large quantities of native-like input in order to learn and recognize correct rules and linguistic information. Output must also take place in order for students to practice using and manipulating the information. Additional input will allow the learner to compare his or her IL with the TL (Izumi, 2002, p. 566). If students are expected to notice and integrate crucial linguistic information into their IL, they must be given the opportunity to observe, process, and produce it regularly. The need for both input and output increases even more when disabilities are present. This applies to any category of disability as each type affects different aspects of the language learning process. In the case of visual or hearing impairments, speech or language impairments, emotional disorders, intellectual disabilities, or any other classification, additional exposure and opportunities to utilize linguistic information are vital to the success of individuals who have any disability. When there are gaps in knowledge or comprehension, the greatest benefit lies in the student being able to hear, see, experience, and produce the TL in different contexts and situations. Input and output are both essential in this principle, but more importantly these must be comprehensible.

Comprehensible input is one of the most important principles of language learning. Human beings learn language by hearing, speaking, reading, and writing. However, if this material is not able to be understood and processed then learning will not

take place. Comprehensible input occurs when the presented linguistic material is mostly understood by the learner but also contains information that is unfamiliar and a step above the learner's current knowledge (Gass et al., 2013, p. 131-32). This includes visual, auditory, and written linguistic content. If the linguistic information is too difficult, then the learner will not be able to figure out the relationship between the new content and what has already been learned. However, if it is too familiar, the learner may lose interest or stabilize in his or her acquisition too soon. In the context of disabilities, determining the appropriate level of difficulty for presenting new linguistic information is just as important, if not more so. Students working with disabilities will lose motivation and quickly become frustrated and disinterested if the material being presented to them is unobtainable at their current level. Language learners need to have this comprehensible input in order to progress in the process of acquiring the TL.

### **Pedagogical Implications**

In the ES/FL classroom context, instructors must develop and implement strategies that will target the areas of disabilities that may be interfering with students' language learning process. Each disability interacts with different aspects of language learning in unique ways. The language acquisition process is very complex and involves multiple variables. If any of these variables are inhibited or interrupted in any way, it will be necessary to provide intervention and assistance in the learning process. Individualized Education Plans (IEPs) are part of the special education structure and they exist for this very purpose. Not every student will need or benefit from the same things and each individual with certain disabilities is in a unique academic situation. However, there are certain strategies and pedagogical practices that will generally benefit individual

language learners with certain types of disabilities. Differentiated Instruction is a vital tool in this context.

The category of intellectual disabilities, for example, is fairly broad. It includes many different groupings such as reading, writing, language, and math, as well as auditory and visual processing. Each of these types of disability could hinder an individual in the ES/FL classroom. Reading disabilities interfere with the cognitive side of language learning. They also do not allow an individual to completely access written input of the TL. When this occurs, written materials cannot provide comprehensible input for this individual. Since reading is still an important part of obtaining fluency, instructors should continue to work with students with reading disabilities to help them improve these skills. However, it is also important to increase comprehensible auditory and visual input so that learning is still taking place through these modalities. Accommodations such as allowing tests to be read aloud to the student and permitting oral responses should be considered in such cases as well.

Writing disabilities, such as dysgraphia, also interfere with SLA. Unlike reading disabilities, these inhibit a person's ability to produce linguistic information. Output is just as important as input for language learners. Writing disabilities can make practicing writing out thoughts in the TL very difficult and time consuming. The ability to communicate with written word is important in this context. It is often a good way for students to demonstrate what they know and the level of fluency they have achieved in grammar, vocabulary, and syntax in a written form. Yet when a student has a writing disability, this is no longer a valid form of evaluation. Assistance should be provided to strengthen these skills and to grow in this area, but it should not be used as the primary

evaluation tool. Instructors can help these students by increasing auditory and visual linguistic content and allow for more opportunities to give responses verbally.

Accommodations for writing disabilities include a variety of modified writing utensils, speech-to-text technology, and specially designed paper for dysgraphia. It may also be beneficial to allow these students to give oral responses for tests rather than written ones depending on the severity of the case.

Language disabilities will affect a person's ability to both produce and comprehend spoken language. Both of these skills are essential to acquiring a language. In this case, an individual would have difficulty understanding and retaining vocabulary as well as parts of speech. Fluency in speech production would also be inhibited to varying degrees depending on the severity of the disability. Acquisition of new words and sentence structures will take more time for students with this type of intellectual disability. Repetition and presentation of vocabulary and grammatical content can help these students. Additionally, the use of visual aids and provision of opportunity to practice implementing and utilizing new words helps to solidify this information. It is also beneficial to ensure that instructions are clear and understood. Students with language disabilities will also benefit from testing and assessment accommodations, such as extended time limits and assistance with understanding instructions or expectations during the tests.

Another important example can be seen by looking at the affects Attention Deficit Disorder (ADD) has on SLA. ADD is not listed specifically as its own category of disabilities in IDEA, but it is included under the grouping of Other Health Impairment. This disorder specifically interferes with the psycholinguistic process of attention.

Noticing is an important part of the language learning experience. Research has shown that attention “appears necessary for understanding nearly every aspect of second and foreign language learning” (Gass et al., 2013, p. 265). Attention requires the learner to be constantly comparing and contrasting his or her interlanguage with the correct forms of the TL. This essential psycholinguistic function will be inhibited by ADD. The goal, then, for students with ADD is to find ways to help them to focus on important content and to assist them in the noticing process if they are not able to do so themselves. Token economies can be implemented in the classroom in order to bolster motivation to stay on task and focused on content. The other obstacle with ADD is that attention is often drawn to things that are not important. It would likely be beneficial for the teacher to emphasize and point out the most essential information being presented. A student with ADD will need assistance in recognizing and noticing important linguistic information. The student may be rewarded for things such as task completion, consistent note taking, or for participation in class discussions or activities. It may also be beneficial to increase repetition of the materials and to present them in different ways each time. The use of visual aids and hands on activities could also assist in keeping these students engaged in the content.

### **Conclusion**

Language acquisition is a complex process that is challenging for most individuals. Disabilities and disorders add obstacles to this process and can make a difficult experience seem impossible to overcome. However, with educated and intentional ES/FL instructors, ELLs with disabilities have potential to succeed. These students will not have the opportunity to achieve their academic goals if language

instructors do not first take the time to learn and understand the complexity of the relationship between the language learning process and disabilities. If language instructors are not prepared, ELLs with limited English proficiency will continue to be misclassified and unassisted in their educational journey. Many disabilities interact with the language processing abilities of the brain in ways that prevent individuals from learning a new language in the same way as others. They interfere with the psycholinguistic nature of the language learning process and limit learners' abilities to access structures and functions they need to succeed. It is still not completely understood how particular disabilities and disorders interfere with the language acquisition process. Attention Deficit Disorder is one such disorder. More intensive research needs to be done to study the effects of ADD on mental processes and how this may impact an individual's ability to notice and acquire linguistic information.

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