Supporting Neurodiverse Students in the EFL Classroom: A Cross-Border Challenge and Responsibility

Jennifer Yphantides

Associate Professor, Faculty of International Liberal Arts
Soka University
Tokyo, Japan

Dr. Jennifer Yphantides has been teaching English since 1993 and has worked in her native country of Canada, as well as in Greece, the UK, Korea, Israel, and Japan. She has taught at the tertiary level in the Japanese context for more than a decade and has lectured at Kanda University of International Studies, International Christian University, and Soka University. She served as the Chief Editor of The Language Teacher from 2009-2012, a bimonthly journal published by the Japanese Association of Language Teachers, and currently serves as a regular reviewer. Her research focuses primarily on neurodiversity in the English Foreign Language classroom and she has delivered award-winning and plenary presentations, locally and internationally, on this topic.

Abstract

Typically, English Foreign Language (EFL) teachers the world over have a wide range of students in their classes who present with different learning challenges and needs. However, in recent years, the number of students with conditions that can cause more severe learning difficulties such as dyslexia, Attention Deficit Hyperactivity Disorder (ADHD), and Autism Spectrum Disorder (ASD), are increasing due to more recognition and better diagnostic tools (Rogers & Dawson, 2010). While there has been a marked rise in the number of students presenting with neurological difference in the English language classroom, EFL teachers often lack specific training and guidance to best support those requiring accommodations in their classes (Lowe, 2016; Yphantides, in press). This paper weaves together a systematic, explanatory review of these neurologically-based differences and the learning challenges they can entail, and provides practitioners with an overview of some of the symptoms they may observe in their
students. It then conducts a brief comparative examination of the medical model of disability with the social model and discusses implications of the adoption of the neurodiversity model in EFL education. Finally, this paper offers evidence-based, classroom-tested solutions for helping their students with different learning styles and needs.

Keywords: neurodiversity, EFL inclusion, teacher support

Introduction

Numerous teachers, including in the EFL context, have special needs students, either with or without formal diagnoses, who exhibit present with neurodiverse characteristics in their classrooms. However, the majority are not adequately trained to respond to their students’ special needs and their difficulty is exacerbated by the stigma, defined by Goffman (1963, p. 6) as “an attribute that is deeply discrediting” and “a special kind of relationship between an attribute and a stereotype”, surrounding developmental differences and learning challenges (Lowe, 2016; Yphantides, in press). This paper is based on a practitioner-centered workshop that the author has delivered on several occasions in Japan and abroad. It addresses topics that represent the most commonly-asked questions posed by EFL teachers about their neurodiverse students and how to best offer support. The first portion of the paper is dedicated to providing teachers with a clear and concise history of these conditions, an explanation of their neurological basis, and a brief description of how language learning can be affected. The second part of the paper explores a re-imagining of the way these special needs students are perceived within the EFL classroom. To do so, the current conversation on the social model of disability, mental disability rights, and disability pride, will be discussed. The third part of the paper is aimed at providing teachers with practical, concrete solutions for a variety of challenges faced by learning disabled students in the EFL classroom. The solutions come from people with dyslexia, ADHD and ASD themselves and have been tried and tested by the author in her EFL classroom. These include the re-shaping of the EFL environment into a supportive, inclusive learning community, methods for increasing engagement and belonging through recognition of neurodiverse strengths, and employing student-led systems for monitoring and self-regulating behavior.
Neurological Difference

Approximately 20% of the world population presents with neurodiverse characteristics and the most common diagnoses of neurological difference are dyslexia, ADHD, and ASD (Armstrong, 2010). Many children with these diagnoses, or children who lack a formal diagnosis but demonstrate characteristics of neurodiversity, are now in mainstream schools whereas in the past, those with milder symptoms may have simply been labeled as trouble-makers while those with more severe symptoms were often placed in special education or remedial courses, or institutionalized (Silberman, 2017). Because all of these conditions affect a person’s ability to learn and use both spoken and written language, it is particularly important for foreign language teachers to develop a better understanding of these conditions, their genetic and neurological roots, and how they affect language learning. With this knowledge, teachers will be more prepared to devise suitable accommodations so that students with special needs can be fully included in the EFL classroom and their potential can be filled.

A Brief History

In the late 1870s, dyslexia was first discussed in the professional literature. Berlin, a German ophthalmologist who studied subjects who could not learn to read, could find no vision problems in his patients. He therefore posited that their difficulties must be attributable to differences in brain structure (Kirby, 2018). Similarly, in the late 1890s, a description of ADHD is given in the literature as “the incapacity of attending with a necessary degree of constancy to any one object” and was attributed to brain differences in patients, although the specific nature of the brain differences could not be identified (Lange, Reichl, Lange, Tucha & Tucha, 2010). Several decades later, in the 1940s, two practitioners on opposite sides of the Atlantic Ocean identified autism (Silberman, 2017). However, in contrast to assumptions made by practitioners working with patients with dyslexia and ADHD that their conditions were caused by brain differences, it was assumed that autism was caused by poor parenting (Silberman, 2017). As a result, therapies for autism focused more on parents than children until the 1970s when a behavioral therapy program for autistic children began at the University of California (Silberman, 2017). Presently, neuroimaging and the mapping of the human genome allows for a
deeper understanding of all three of these neurodiverse conditions and a genetic basis is being identified by researchers (Armstrong, 2010).

Genetically-based Brain Difference and Learning Difficulty in the EFL Classroom

**Dyslexia**

Dyslexia is a common neurological difference that is found in between 15%-20% of the population, according to the International Dyslexia Association. Dyslexia is typically associated with specific reading difficulties which include diminished phonological awareness and reading fluency (D'Mello & Gabrieli, 2018) but dyslexic students also have trouble with pronunciation and learning and remembering vocabulary (Dal, 2008). Additionally, dyslexic students often have trouble with spelling (adding or omitting letters is a common sign of dyslexia), as is the inability to recognize words written in alphabetic languages (Akbasli, Sahin, & Gürel, 2017). However, there are other challenges that dyslexic people face beyond trouble with reading, pronunciation, vocabulary acquisition and spelling. Neuroimaging scans show that people diagnosed with dyslexia have brain-structure differences which also affect speech, sensory processing, decision making, and impulse control (D'Mello & Gabrieli, 2018), all of which have an impact on language learning and a student’s ability to function in the classroom.

**Attention Deficit Hyperactivity Disorder**

According to a parenting survey conducted by the Center for Disease Control and Prevention, approximately 10% of children in the United States have been diagnosed with ADHD and world estimates are assumed to be similar. People diagnosed with ADHD have less white matter which translates to less connectivity between different sections of the brain. As a result, those with ADHD lack a typical degree of impulse inhibition (Booth, Burman, Meyer, Lei, Trommer, Davenport, & Marsel- Mesulam, 2005). Some of the key learning challenges faced by those with ADHD are problems with executive function, or task organizing and planning, and with working memory (working memory is synonymous with short term memory) (Leons, Gerbert & Gobbo, 2009). Motivation and task engagement have been identified as
challenges for those with ADHD, as well as anxiety about performing on tests (Akbasli, Sahin, & Gürel, 2017). All of these challenges can have a negative impact on language learners, and, if not managed, can have an effect on the whole class, as EFL lessons tend to be underpinned by the communicative method and pair and group work.

**Autism**

Autism affects approximately 1-2% of the world population, according to the Center for Disease Control and Prevention, however, about 10% of the population presents with one or more autistic characteristics. People with autism tend to have slightly larger brains than those without autism because pruning of unnecessary or defunct neural connections does not occur as rapidly or as completely in autistics as it does in neurotypicals, and because of this, processing speed can be reduced (Hill & Frith, 2003). Additionally, due to their difference in autistic brain structure, many autistic students also have trouble with sensory sensitivity. For example, they may be disturbed by loud noises, troubled by sudden movements, and dislike bright lighting. They may also be overly aroused by too much visual or aural information (Marco, Hinkley, Hill & Nagarajan, 2011). While processing speed and sensory sensitivities need to be considered by language teachers, the core feature of autism is difficulty with language acquisition and with developing an understanding of what is pragmatically appropriate (Tager-Flusberg, Paul & Lord, 2005). As a result of these neurological differences, the typical EFL classroom may be a noisy, distracting, exhausting place for autistic students which can compound their trouble with language learning and pragmatic appropriateness.

For example, in my own experience teaching autistic students in EFL classes in the higher education context, the constant group discussion proved to be taxing. These students, while they had much to contribute, were overwhelmed by the continuous chatter and had to withdraw several times each class in order to collect themselves and return to the frame of mind needed to communicate with their group members. Because their methods of withdrawal (putting their heads down, getting up and walking out of the class without saying where they were going, and expressing anger and frustration) were often seen as socially inappropriate by their peers, reintegration back into the group was difficult on occasion.
Medical and Social Models of Disability

For a significant period in history, disease and disorder were observed through the lens of what is now called the medical model of disability. In the 1960’s, with the rise of the disability movement in Britain and the United States, a paradigm shift towards the social model occurred. Within this model, disability is framed not as being in the body of an individual but in the environment that surrounds them. Stemming from this social model is the concept of neurodiversity which advocates not only for acceptance of brain difference but celebration of it.

The Medical Model

In the 1800’s, the medical model of disability arose, replacing the notion that disability was an act of God (Henderson & Bryan, 2011). Looking at disability through the lens of the medical model, one sees disability as a problem to be solved. Within the model, the disabled person is compared with the non-disabled and the challenges they face are seen as a list of deficits (Retief & Letšosa, 2018). In the medical model, the doctor is the power broker who compares patients to a certain standard and compiles a list of deficits that need to be remedied. The disabled person must play the role of a helpless individual who depends on the rest of society for support (Retief & Letšosa, 2018).

The Social Model

The social model of disability constitutes a significant paradigm shift away from the medical model. The social model conceptualizes disability as a societal issue rather than a personal one and, therefore, it is society that needs to be remedied, rather than the body of the individual. In other words, the physical and social environments need to be examined and adjusted, rather than the disabled person (Barnes, Mercer & Shakespeare, 2010). While proponents of the social model do not deny that disabled people can face significant challenge, their key message is that there is a great deal of power in adapting physical and social environments to provide the support needed by the disabled in order to facilitate their integration into society (Barnes, Mercer & Shakespeare, 2010).
Neurodiversity

While dyslexia, ADHD, and ASD have traditionally been viewed through the lens of the medical model of disability, the neurodiversity movement has prompted a shift in this perception (Silberman, 2017). The term neurodiversity, coined in the 1990s, is used to describe people with dyslexia, ADHD, autism and other neurological differences. The goal was to alter the discourse surrounding these conditions from a medical model where these terms are pathologized to a more socially-oriented model where it is recognized that the challenges faced by the neurodiverse are rooted in how they are being taught, not in their brains. Neurodiversity, however, does not stop with a shift towards the social model. Within the neurodiversity movement, conditions such as dyslexia, ADHD, and ASD are recognized and respected as a naturally occurring phenomenon and are a source of pride rather than shame. Some proponents of neurodiversity argue that just as homosexuality was removed from the Diagnostic and Statistical Manual of Mental Disorders (DSM), so too will neurological “disorders” and they will, like homosexuality, soon be recognized as a commonly occurring, natural difference that is not to be pathologized or remedied (Silberman, 2017). Slightly different from the social model, the neurodiversity movement can also be conceptualized as a combination of the identity model and the cultural model. The identity model claims disability as a positive factor (Brewer, Brueggemann, Hetrick, & Yergeau, 2012) while the cultural model which views disabled people members of a distinct cultural group (Retief & Letšosa, 2018).

Depathologizing the Differently-Abled

In addition to the contrasting medical and social models of disability and the reconceptualization of developmental disability in the neurodiversity movement, there is also space to examine the possibility of depathologizing and destigmatizing those who are differently abled. Baar (2017) traces the history of the disability movement and its links with other social movements that were based in human rights. These include the movements for women’s liberation, environmentalism and LGBTQIA+ rights. When disability rights activists banded together, the perception of disability began to shift from a pathology to a social and cultural
identity (Baar, 2017). This integration of disability into the framework of human rights led to the
international mandate that was ratified by the majority of member states in one of the most
significant steps towards depatholoization and destigmatization.

Adoption of Progressive Models of Disability and Diversity

With the framework or disability rights in mind, it is possible to envision the adoption of
more progressive models of disability and diversity in the EFL classroom. While students with
brain differences tend to be examined through the medical model by psychologists, language
teachers can take a different approach towards diversity and inclusion by becoming more aware
of the social and human rights models and the concept that changes in the classroom
environment and the materials used could offer a great deal of support to students, more so than
comparing them to their fellow neurotypical students in a deficit model. Additionally, becoming
more aware of neurodiversity and the strengths that often accompany brain difference, can help
EFL teachers frame their relationship to their students in a different way. The subsequent section
explores some concrete examples of what EFL teachers the world over can do in order to support
the well-being and success of all their students.

Evidence-Based Advice for Supporting Neurodiverse Students

The following practical tips for working with students who learn differently have been
gathered by the author over several decades of teaching all types of students in the EFL
classroom. They are rooted in her conversations with students who needed extra support, her
participation within a number of neurodiverse virtual communities, and her communication with
a variety of support professionals such as psychologists, counselors, and therapists in a number
of different EFL teaching contexts including elementary and high schools, conversation schools,
and higher education. They are also underpinned by the nascent body of literature that focuses on
supporting neurodiverse students in the foreign language classroom.

Building Support Communities
Teachers often feel alone when it comes to supporting students who learn differently. When they notice those who are struggling in their classes, they tend not to want to approach these students because of the stigma attached to learning challenges or disabilities. Compounding the problem is the fact that teachers are often unaware of the network of support services that are embedded in some schools or they cannot easily access the services due to language and cultural barriers (Yphantides, in press). Despite these challenges, some teachers find methods of supporting their students without ever exchanging words with them about their learning difficulties (Vu & Nguyen, 2020). On many other occasions, teachers, lacking the appropriate training for coping with a variety of learners in their classroom, either ignore these learners’ needs or separate them from the rest of the class by requiring them to complete different assignments from their peers (Vu & Nguyen, 2020).

Rather than working alone, however, awareness needs to be raised among teachers about how to approach their neurodiverse students and how to talk with them about the support they need to best succeed in class. When working with adults, probably the first person teachers need to approach are the students themselves who are experiencing difficulty. While these kinds of discussions can be uncomfortable, there are several different ways to broach them. For example, when working with older students in high school or university, it is possible to make an in-take form for students to fill in at the beginning of a course. An intake form is a simple sheet that probes for any special needs the student may have (including non-diagnosed issues). One of the questions on the form can be about special learning needs that the student may have. Teachers can follow up with students who express their special needs by meeting with them and making a specific plan of action, based on the demands of the course that can be revised and updated periodically. When working with younger students, it is possible to have their parents fill in the intake form. While parents and students alike may be hesitant to disclose diagnoses, they may use euphemisms on the intake form like “social anxiety”, “difficulty getting along with others”, “struggles with following directions” or “short attention span”. All of these can alert the teacher from the very beginning as to which students may need special support. When this line of communication is open between teachers and students and/or their parents, it can be considered the beginning phase of building a support community (Connor & Cavendish, 2018).
Once teachers and students have established a line of communication, they may want to involve other students in the community as support providers. While it is important for the teacher to be closely in tune with their students with special needs, they cannot provide optimum support alone and they may want to recruit additional people. In the communicative language classroom, there is typically a significant amount of pair and group work. Neurodiverse students can feel isolated in this kind of environment and teachers need to empower and educate their neurotypical students to be supportive. Oftentimes, neurodiverse students are ignored in class because other students do not have the necessary knowledge, skills, or attitudes to work together with them (Rentenbach, Prislovsky & Gabriel, 2017). However, teachers can serve as a model of inclusion to their students and can make an active effort to recruit them into support positions, being careful to ensure that the neurodiverse student plays a key role in letting their fellow students know what kind of support they need. Peer to peer support models have been found to increase self-efficacy and self-esteem in students (Ncube, 2011).

While this support community of teachers, students, parents, and peers is vital to the success of those with special needs, it is important, if possible, to include specially-trained personnel in the community. Ideally, teachers should meet their special needs students for regular discussions in the presence of specially trained personnel. This staff can offer invaluable tips for support to both teachers and students and can, in some cases help students with other key skills like time management and self-organization through one-on-one sessions or workshops. However, many schools lack trained people on their campuses and, as a result, teachers feel it is not possible to access their expertise. However, there are a number of online groups that teachers and their students can access to avail themselves of additional support and they can ask questions about the different methods available to ease the learning process and communication in the classroom.

**Celebrating Strengths**

As was discussed earlier, dyslexia, ADHD, and autism have often been presented in the professional literature from a deficit-based perspective and people with these diagnoses are often viewed as problems to be fixed while neurotypicals are valued as the gold standard (Silberman, 2017). However, while brain-based differences can and do result in disability, they also result in
strengths (Silberman, 2017; Lee, Black, Falkmer, Tan, Sheehy, Bölte, & Girdler, 2020). For example, dyslexics tend to have entrepreneurial capabilities that are higher than the neurotypical population and they also have improved visual-spatial skills (Leveroy, 2013). ADHD is associated with higher levels of creativity and extreme focus on areas of special interest (Sedgewick, Merwood, & Asherson, 2019). Similar to ADHD, autism is also associated with extreme focus when dealing with areas of special interest. It is also related with systematic information processing, strong visual perception, strong technical ability, and tolerance for repetitive tasks (Scott, Jacob, Hendrie, Parsons, Girdler, Falkmer, & Falkmer, 2017). When the classroom is not only a place of supportive community learning based on the social model of disability and neurodiverse celebration, but also a place where the deficit model is eschewed and the strengths-based model is embraced, students are in a better position to be successful and to feel included.

How exactly can a teacher celebrate strength in the classroom? There are a number of methods including the project-based approach in which students can choose an area of interest and work on a project with others who share that interest. This long term work promotes increased focus, a sense of community, a shared sense of purpose, and allows for a greater amount of student-directed, cooperative learning (Nunez, 2018). Another possibility is allowing for more creativity and flexibility in the class. For example, rather than the teacher creating all materials used in class, students can make tasks for each other to complete. They can also make other materials such as color-coded card games that promote review of materials covered in class with each color representing vocabulary, grammar, or other target language point. These student-created tasks and games can allow for increased motivation, cooperation, and sense of belonging by being on a team (Oakleaf & Dodd, 2020). They also can allow neurodiverse students to showcase their creative strengths while getting support, in the context of team-work, for the areas where they may be experiencing difficulty.

**Daily Support**

While it is important to focus on strengths, it is also key to take note of weakness and to provide metaphorical access ramps to neurodiverse students. These access ramps not only benefit special needs students, but all students in the language classroom and are based on the concept of
Universal Design for Learning (UDL). One key area ripe for support is that of giving instructions. Neurodiverse students often have trouble following multi-step directions and, as a result, can feel lost in class. This can quickly be remedied in the following ways. First, visual support should regularly be provided for directions. This support can come in the form of a list on the board, picture cues on a handout, or on a powerpoint slide. When a task with multi-step directions is set, the visual support may not be sufficient and, therefore, teachers could also get students to confirm with each other what they need to do before starting a task. Teachers should also monitor and support neurodiverse students when a task is set to be sure they are on track. Ample praise or gentle redirection should also be used when necessary.

In addition to visual support for directions, teachers should also be aware that the fonts they use on worksheets and PowerPoint presentations can be difficult to read. Sans serif fonts or the Open Dyslexic Alta font make materials more accessible, as do darker colored backgrounds (Burke, 2020). Additionally, neurodiverse students tend to have poor spelling and penmanship. Because this sets them apart from the majority of the class, they tend to suffer from poor self-esteem and, as a result, tend to become task avoidant (Burke, 2020). One possible solution is to allow students to type their work or to use voice to text applications in class. Another solution is to focus consistently on the content of the work, rather than the presentation of the work (Burke, 2020).

As discussed earlier, ELT classrooms are often communicative classrooms and, as a result, can be exhausting for neurodiverse students. The noise levels and distractions need to be managed in order to provide them with an atmosphere that is conducive to learning. Additionally, while pair and group work, when supported by the teacher and peers who are aware of the needs of the neurodiverse students in their group, can be good opportunities to foster bonds between students, they can also be overwhelming. As such, it is important for teachers to provide their special needs students for a chance to opt out. While we may try to monitor students to the best of our abilities, we cannot watch for everything and often, neurodiverse students, particularly older ones, are good at masking their feelings. When situations are overwhelming, younger students may act out and older ones may withdraw. Their behavior may seem sudden but their stress may have been building up over a longer period of time. As a result, it is useful to have a card system in place that allows students to signal their feelings without words. For example, each student can have a card set including green, yellow,
and red cards. When they are feeling positive about group work, they can have their green cards displayed. When they are becoming frustrated or overwhelmed, they can take out their yellow cards to signal their growing stress and, at this point, teachers or peer support students may want to get involved to try to de-escalate the situation. Finally, students should have the opportunity to put down a red card to signal their need to take a break for a certain period of time. If students put down a red card, they can be encouraged to withdraw into another area of the classroom and work on a preferred activity like quiet reading. Certainly, teachers may feel that students could potentially abuse the card system. However, with regular use and careful monitoring and discussion between teachers and students, this card system can be a valuable way of teaching students to monitor their behavior, self-regulate, and share their feelings with others. Such self-management strategies have been found to correlate with greater independent academic performance and increases in on-task behavior (Crosland & Dunlap, 2012).

Conclusions

The main thrust of this paper has been to put forward an argument in favor of EFL teachers adopting a conceptual framework for practice that is based on neurodiversity rather than the current medical model that is used in schools. In order to shift to a neurodiverse model, teachers can employ several strategies including: (1) the re-shaping of the EFL environment into a supportive, inclusive learning community by reaching out to both parents and students to determine levels of need and modes of accommodation, (2) exploring methods for increasing engagement and belonging through recognition of neurodiverse strengths which include project-based learning and student-created materials, and (3) developing student-led systems for monitoring and self-regulating behavior. This paper argues that EFL teachers are in a unique position to lead the institutions that employ them in this area because the neurodiverse students’ challenges are strongly related with the work of language learning. However, our role as language teachers does not stop with the linguistic support of neurodiverse students. As Rentenbach, Prislovsky and Gabriel (2017) argue, educators need to lead others to appreciating the benefits of neurodiversity, taking a moral stance embedded in a human rights approach. Additionally, as Block (2018) points out, there has been a narrative turn in our field as of late and research has become oriented towards culture and identity-based injustices. This exploration can
serve as a small contribution to this research. However, as practitioners, the key is in applying the findings of research to helping each student reach their potential.

References


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