Neurodiversity in the Music Classroom: Using the Strengths of All Students During In-Person and Remote Learning

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Neurodiversity is a buzz word in the world of education. Currently, there is a large focus on intersectionality in education. Intersectionality refers to recognizing and celebrating different races, cultures, genders, ages, and sexual orientations found within our classrooms. Nevertheless, we also need to include the recognition and celebration of brain diversity.

All of our students' brains are different, just as all of our brains are different. Our students learn and process in various types of ways, going back to the four learning modalities. These include visual (seeing), auditory (hearing), kinesthetic (movement), and tactile (touch). All of our students learn utilizing one of these modalities. We need to incorporate all of these modalities into our teaching so all students have an entry point to find success.

What is neurodiversity?

So, what is neurodiversity? "Instead of regarding these students as suffering from deficit, disease, or dysfunction, neurodiversity suggests that we speak about their *strengths*. Neurodiversity urges us to discuss brain diversity using the same kind of discourse that we employ when we talk about biodiversity and cultural diversity," (Armstrong, 2012). Neurodiversity is recognizing that all of our brains are different and focusing on the individual strengths of our students. Rather than forcing our students to fit the environment, we are adapting the environment around the strengths of our students.

Neurodiversity is often paired with individuals who have an Autism Spectrum Disorder (ASD). "Autism spectrum disorder (ASD) is still perceived as a pervasive developmental disorder, characterized by social communication deficit and narrow interest in objects and repetitive behavior," (Lei & Ventola, 2017).

When teachers recognize that many of our students with ASD have individual strengths, our students then have the opportunity to thrive. Moreover, for some of our students, ASD can be seen as a gift. Even more,

> *All of our students' brains are different*

neurodiversity and strength-based awareness should be for all of our students, not just students with ASD. The more we recognize all of our students' strengths, the more inclusive our learning environments become.

Positive niche construction

When creating a differentiated learning environment for all types of brains, we are talking about positive niche construction. Positive niche construction originally connects back to niche construction found in human evolution and biology. There are seven areas found within positive niche construction, including strength awareness, positive role models, assistive technology and universal design

for learning, strength-based learning strategies, human resources, positive career aspirations, and environmental modifications.

Let's take a look at what each of these areas looks like in the music classroom, and let's see how they can be utilized for students who are currently learning in-person, and/or remotely.

Strength awareness is recognizing that all of our students have individual strengths, interests, ideas and motivations. It is the role of the music teacher to find out what our students' strengths are and shape the learning environment to meet their needs. For a non-verbal student with ASD, this could include incorporating text-to-speech function on their iPad to help them communicate, using gestures with visuals instead of words, changing singing full words to singing/speaking vowels (ex: instead of do, re, mi, it can be o, e, i).

In a remote environment, teachers can incorporate iPad applications/websites to reinforce learning (ex: Chrome Music Lab), create video clips with provided gestures, or do simple dances where the student can imitate gestures at home.

Positive role models are individuals who inspire our students. These can include adults in the school building, peers, family members, or even celebrities. Moreover, for our students who have a disability, we can show them other individuals with disabilities who have found success, so they can see others like themselves.

During in-person and remote learning, teachers can expose students to music celebrities who have

a disability and have found success (ex: Stevie Wonder). Teachers can also have students compare their own challenges to a celebrity with a disability and goal-set strategies. The positive role model can be used as a way to help steer our students down their own positive and successful pathway.

"Assistive technology (AT) refers to a number of accommodations and adaptations which enable individuals with disabilities to function more independently. AT includes any type of technology that provides students with disabilities greater access to the general education curriculum and increases the potential to master academic content, interact with others, and enhance functional independence and quality of life," (Wilkinson, 2017). Some examples of AT found in classrooms include adaptive keyboards, audio readers, GoTalks, iPad's, PEC symbols, pencil grippers, wheelchairs, eyeglasses, etc. Moreover, Universal Design for Learning (UDL) is the process of removing barriers for students with disabilities and ensuring opportunities to find success.

During in-person learning, these strategies could include: assistive straps to hold a mallet, devices to hold instruments up, technology that is responsive to sound through movement (ex: Soundbeam), or adapted instruments. During remote learning, this could include visuals on Google slides, or even interactive Google slides for students to drag a picture rather than typing or speaking an answer.

Strength-based learning strategies refers to using evidence-based supports for students, based on students' individual strengths and interests. The strategies we incorporate should be age-appropriate, and interesting enough to motivate and engage the child.

For a student who likes to make connections to music but struggles

with changes in a routine, this could be the incorporation of a text or visual schedule to allow them to navigate through multiple steps of an activity (ex: coming into a choral classroom, finding their seat, and getting their music ready). Part of the schedule can be where they get to make connections to the repertoire being learned and share with the class something they know from the real world. This can happen in person or remotely as a comment on Google classroom.

Encouraging success

Enhanced human resources refers to providing our students with a positive repertoire of individuals who can help support them. This group of individuals should be able to communicate together any successful strategies that can be generalized for all students in multiple areas (including in school and at home).

For a student who wants to be social but may be struggling to socialize appropriately, opportunities can be created throughout the school day for them to socialize with peers with scripted supports. Music teachers can create a music club during lunchtimes for this to happen. Some students who may struggle behaviorally can be provided opportunities to visit other teachers during their day as a way to self-regulate or reset when they may be feeling upset.

In remote settings, social opportunities can be provided such as remote field trips, remote musical events like a sing-along or karaoke party, or even creating family music-making time. This way they still have the opportunity to see everyone in a less formal setting.

Affirmative career aspirations are providing students with musical ideas of what a career could look like after high school. Music teachers should be regularly exposing all students to career areas in the field of music. An example that can be done in-person

or remotely is exposing students to a specific local composer, allowing them to engage and see the process of what it is like to write, and then have someone perform their music. Moreover, students can be provided the opportunity to compose their own music and share it with a local neighboring school (you can call it "composers in residency"). This can create a positive opportunity for self-esteem and may engage students to want to continue down this pathway.

Lastly, environmental modifications need to be considered. Similar to UDL, certain parts of the music classroom can be challenging for some of our students. These can include sounds, lights, colors, smells, temperature, or the actual classroom layout. Music teachers need to incorporate UDL to prevent these barriers from preventing student success.

Some examples music teachers can incorporate for in-person students include noise canceling headphones, weighted vests, sensory items, flexible seating, visual supports or social stories. For students who are learning remotely, music teachers can incorporate frequent breaks with a timer for students, movement/gestures can be used instead of speaking/singing, or having students record a short performance using Flipgrid rather than during synchronous instruction.

While music education is looking quite different this school year, we can still focus on the individual strengths of our students, no matter what form they are learning. We should be recognizing and celebrating that all of our students learn in different ways. We should be modifying the learning environment based on our students' needs and not the other way around. When we recognize neurodiversity and use a strength-based model, then we are ensuring that all of our students can find success. ▮

Resources:

Armstrong, T. *Neurodiversity in the Classroom: Strength-Based Strategies to Help Students with Special Needs Succeed in School and Life* (Alexandria, VA: ACSD, 2012), 9.

Lei, J. & Ventola, P. (2017). Pivotal Response Treatment for Autism Spectrum Disorder: Current Perspectives. *Neuropsychiatric Disease and Treatment*, 13, 1613-1626.

Wilkinson, L. A., *A Best Practice Guide to Assessment and Intervention for Autism Spectrum Disorders in Schools Second Edition* (Philadelphia, P.A..: Jessica Kingsley Publishers, 2017), 175.

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You can find a variety of resources on the Music for Special Learners page on the NYSSMA website (https://www.nyssma.org/committees/music-for-special-learners/). Wagner-Yeung can be reached at brianwagneryeung@gmail.com