Giftedness Conceptualized as Neurodiversity: Considerations for Advocacy

By Phoebe Patterson

Neurodiversity refers to the naturally occurring variations in the brain leading to differences in cognitive functioning among individuals.¹ The term has been used with increased frequency at education conferences and in a variety of education publications in recent years with the current focus on inclusion, identity, and concern over the often-negative implications of labels. Neurodiversity has even made its way into popular culture as television shows such as Atypical and The Big Bang Theory feature neurodivergent protagonists. It’s safe to say that the field of neurodiversity is “trending.”

However, despite the growing interest in the neurodiverse movement, many teachers, administrators, and policymakers are unfamiliar with the term and the research establishing the neurological differences of high-achieving students. As educators seek to provide bright and high-achieving students with an appropriate education, a new conversation about giftedness is necessary that highlights these students’ uniqueness as a neuro-minority in light of the growing body of research surrounding the neurodivergent nature of the gifted brain.

While notions of giftedness and talent development are multifaceted and complex, for the purpose of this article, the National Association for Gifted Children (NAGC) definition will be used. According to NAGC:
“Students with gifts and talents perform—or have the capability to perform—at higher levels compared to others of the same age, experience, and environment in one or more domains. They require modification(s) to their educational experience(s) to learn and realize their potential.”

The term neurodiversity was coined in the 1990s by Australian sociologist Judy Singer who rejected the idea that people living with autism were disabled. She argued that all brains function differently, and that this diversity is natural and beneficial to the human species. In other words, neurodiversity refers to the natural and typical variation in brain development, which is akin to biological diversity.

With the introduction of this term, learning differences such as autism, ADHD, and dyslexia were viewed through a kinder, more empathetic and biological lens. Proponents argued that neurodivergent individuals should not be stigmatized as possessing deficits and disorders that need to be “cured”; rather, these individuals should be respected, supported, and even celebrated for their creativity and divergent thinking.

While the term neurodiversity has been used in the past to encapsulate those previously labeled as disabled, there is an argument to be made that the neurodiversity movement could provide a new way of thinking about gifted students.

The idea that students with high potential possess increased processing speed, memory, and retention is not new. However, recent advances in technology such as the functional magnetic resonance imaging (fMRI) have led to improved brain-mapping technology, paving the way for new studies that suggest the brains of gifted individuals with IQs above 130 have increased volume, surface area, network connectivity, and white-matter tracts.

Understanding the link between giftedness and the correlation between IQ and gray matter volume is an important step in reframing the conversation about what it means to be gifted and how these bright students should be categorized.

This new understanding of the gifted brain has the potential to debunk myths that gifted education is elitist. In this new context, educators could think of gifted students as neurologically different in a similar way that those with Asperger’s Syndrome are neurologically different, thus needing a different education. In this line of thinking, gifted programming has the potential to be reconceptualized as a necessity rather than a luxury. If giftedness was no longer viewed as a vague concept associated with elitism that is at odds with equity, enrichment programs and specialized gifted-education services could be deemed an essential, rather than a superfluous expenditure that is the first to get cut during budget reductions. In sum, viewing giftedness through the neurodiversity lens adds another arrow in the advocacy quiver.

In order to better understand gifted education, advocates might incorporate neurodiversity into their work. A review of the evolution of gifted rights is worthwhile. In 1975, The Education for All Handicapped Children Act (Public Law 94-142) was passed, guaranteeing a free, appropriate public education for students with disabilities. In 1990, an amendment to that law changed its name to the Individual with Disabilities Education Act, or IDEA as we refer to it today. Unfortunately, gifted students, some of whom struggle with asynchronous development, heightened emotions, and maladaptive perfectionist tendencies were not included under this law.

In 1988, Congress passed the Jacob K. Javits Gifted and Talented Students Education Act, which was designed to support research to address solutions for better identification of and services for underrepresented gifted populations. The Act does not mandate gifted education services and does not provide a funding stream to school districts to support gifted learners. While the Javits Act helps to keep gifted students in the conversation about serving the full range of students, by itself, it does not ensure all gifted students have access to an appropriate education.

As gifted stakeholders know, changing minds and understanding are often the first steps to changes in policies and practice. Success often depends on shifting the way in which educators, administrators,
and policymakers conceptualize and categorize gifted students. Thinking about gifted students as a unique, neurodiverse group could pave the way for better resources and programs for bright and high-achieving students.

To truly affect change in society’s way of thinking about gifted students, thought leaders of the neurodiversity movement such as Charlotte Valeur who founded the Institute of Neurodiversity and Rachel Worsley, founder of Neurodiversity Media, must push to include the gifted population in conversations about neurodiversity. A cross-collaboration and dialogue is needed among the leaders of organizations such as the National Association of Gifted Children and advocates in the newly emerging and successful neurodivergent movement.

Replication of the promising practices and strategies employed by Asperger’s advocates and others falling under the umbrella of the neurodivergent movement could be helpful to those advocating for the gifted. As the term neurodiversity gains traction in pop culture and is increasingly referenced in academic journals and education circles, it is essential that neurodiversity advocates partner with gifted-education stakeholders and seize this unique opportunity to begin a conversation that puts gifted and high-potential students in the fold of the neurodivergent movement.

### Resources

**Institute of Neurodiversity: ION is a global neurodiversity member organization offering resources and advocacy to their members. [https://ioneurodiversity.org/about-us](https://ioneurodiversity.org/about-us)**

**Neurodiversity Media. Neurodiversity Media brings stories about neurodiversity, particularly in autism, ADHD and dyslexia into the broader public consciousness. [www.neurodiversitymedia.com](http://www.neurodiversitymedia.com)**


**Insight Into a Bright Mind: A Neuroscientist’s Personal Stories of Unique Thinking by Nicole Tetreault. (2021). Gifted Unlimited.**

### Author’s Note

Phoebe Patterson is a graduate student in the Master of Science in Education, Gifted Education program at Johns Hopkins University and is the founder and Principal of Patterson Tutoring. She received a Bachelor of Arts in English from Providence College in 2006. She is an Orton Gillingham Associate and a Wilson Dyslexia Practitioner. Reach her at phoebe@pattersontutoring.com.

### Endnotes


