

NEURODIVERSITY@MINES:

a roadmap to a more neuro-inclusive campus

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WHAT IS NEURODIVERSITY?

To put it simply, we all have different types of brains.

Neurotypical people have brain behavior that works similarly to the rest of the human population. Other people may identify as neurodivergent when their brain is wired differently.

Neurodiversity is a positive and affirming term. It signals that all people - whether neurotypical or neurodivergent - deserve respect and inclusion.



dysgraphia autism obsessive compulsive disorder
sensory processing disorder dyspraxia
common neurotypes
sensory integration disorder
disassociative identity disorder Tourette's ADHD acquired ND
dyslexia dyscalculia



Step 1: Engage the community. Listen to neurodivergent voices.

"I'M AUTISTIC, WHICH PEOPLE OFTEN FIND SURPRISING. I'M AN HONOR ROLL STUDENT AND HAVE A STRONG COMMUNITY OF FRIENDS - AND THAT DOESN'T MAKE ME ANY LESS AUTISTIC. OFTENTIMES WHEN I TELL PEOPLE ABOUT MY DISABILITY, THEY RESPOND THAT THEY "NEVER WOULD HAVE KNOWN" OR THAT I "DON'T SEEM AUTISTIC". AND I RECOGNIZE THAT THE INTENT IS POSITIVE, BUT WHAT THESE PHRASES REALLY DO IS SHOW THE NARROW RANGE OF WHAT PEOPLE BELIEVE AUTISM IS."

"I THINK I'M WILLING TO PUT MYSELF OUT THERE LIKE THAT BECAUSE OF MY NEURODIVERGENCE, LACK OF CONCERN FOR WHAT PEOPLE THINK OF ME, AND ABILITY TO SPEAK MY TRUTH REGARDLESS OF WHO'S LISTENING, AND I CONSIDER THOSE GOOD THINGS. BUT IT'S VERY COMPLEX BECAUSE THERE *ARE* SOCIAL CONSEQUENCES, AND IT'S THOSE SOCIAL CONSEQUENCES THAT I CANNOT UNDERSTAND AND WHICH I HAVE NO ACCESS TO THAT KEEP ME UP AT NIGHT (QUITE LITERALLY)."

"CAREER SEMINARS, SUCH AS THE CAREER DAY PREP SESSIONS, ARE ENTIRELY PREMISED ON THE PRESUMPTION THAT ALL THE STUDENTS ATTENDING ARE NEUROTYPICAL AND WON'T HAVE ANY TROUBLE WITH VAGUE INSTRUCTIONS ABOUT BODY LANGUAGE, TONE, ETC. THESE ARE ALSO GIVEN IN A WAY THAT TREATS MEETING NEUROTYPICAL STANDARDS OF BODY LANGUAGE AND TONE AS GOOD AND NOT MEETING THEM AS BAD, INSTEAD OF ACKNOWLEDGING THE ARBITRARY AND DISCRIMINATORY NATURE OF THESE EXPECTATIONS. CAREER DAY ITSELF IS A SENSORY NIGHTMARE, MASSIVELY OVERWHELMING NOISE AND CHAOS EVEN IF YOU AREN'T AUTISTIC, WITHOUT MUCH IN THE WAY OF SPACES TO RECOVER OR ACCOMMODATIONS."



Step 2: Research the medical and social models of disability.

The **medical model of disability** is based on perceived deficits and deficiencies. If a person appears to deviate from neurotypical norms, they may be evaluated by a medical professional and compared to diagnostic criteria. If a clinical diagnosis follows the evaluation, to minimize the effect of the disability, doctors may recommend accommodations, prescribe medications, and/or refer the person to therapists and specialists.

The **social model of disability** is more related to differences (both strengths and challenges) than deficits. The social model identifies the barriers that are imposed on neurodivergent people by societal norms. For example, autistic people tend to communicate honesty and directly, which may be mistaken as being "inappropriate" or "unprofessional." As another example, people with ADHD may process information quickly and interrupt others to accelerate the conversation, which may be misunderstood as "rudeness" or "disrespect."



Step 3: Grapple with the confounding idea of twice-exceptionality.

Neurodivergent engineering students and faculty may be "**twice-exceptional**." These individuals have remarkable cognitive and intellectual abilities (they may have been called "gifted" as children). Despite their intelligence, they still face challenges associated with their neurotype/s. Their strengths are very strong; their challenges are very challenging. Common neurodivergent strengths (e.g. creativity, pattern recognition, deep focus) can be advantageous in a STEM career.

Step 4: Think "strengths-based," but be mindful of challenges

Neurodivergent people (in fact, all people) thrive in an environment that is **strengths-based**. We prefer to live and work in our areas of strength. Learn to adopt **universal design principles**: if you design for those that are most marginalized, then everyone benefits.

Finally, be mindful that neurodivergent people have often experienced a lifetime of exclusion, bullying, and isolation. Neurodiversity is often linked to trauma. In turn, trauma leads to high levels of depression, anxiety, and PTSD. Always presume good intent and employ radical empathy.



Step 5: Ready to take the next step? Scan that code.

[MINES.EDU/DIVERSITY/NEURODIVERSITY](https://mines.edu/diversity/neurodiversity)

STRENGTHS AND CHALLENGES

Neurodivergent individuals are all different — but may have a wide array of strengths, such as incredible focus on preferred projects, strong passion for social justice, an ability to think broadly and creativity, excellent pattern-recognition skills, and the capacity to work independently.

Despite these strengths, neurodivergent people may face significant challenges, such as feeling misunderstood, staying organized, meeting deadlines, coping with overt or subtle bullying, and masking neurodivergent characteristics to better fit in — all of which may lead to anxiety, depression, or mental burn-out.

