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.

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 creatively, 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.

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

"I'm artistic, which people often find surprising. I'm an inpatient and Adhd and have a strong community of friends — and that doesn't make me any less artistic. Sometimes when I tell people about my disability, they respond that they 'never would have known' or that I 'don't seem artistic.' And I recognize that the intent is positive, but what these phrases really do is narrow the 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 diagnosis for what people think of me and ability to speak my truth regardless of who's listening, and I choose these things. It's complex, but it's very complex because there are social consequences and it's these social consequences that I cannot understand and which I have no access to that keep me up at night (quite literally)."

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 lends 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.