How to Build a Neurodivergent Friendly Classroom

Autistic Spectrum Disorder Developmental Language Disorder Tic Disorders Intellectual Disability AttentionDeficity Hyperactivity Disorder Developmental Coordination Disorder Dyslexia Dyscalculia

What is Neurodiversity? What Might It Look Like?

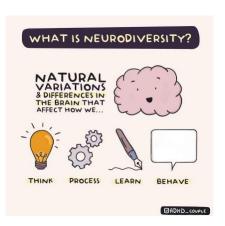
Neurodiversity can look like many different conditions, but ultimately it is a term used to describe the idea that everyone's brain functions differently.

Some common conditions under the neurodiversity umbrella include attention deficit hyperactivity disorder (ADHD), obsessive-compulsive disorder (OCD), autism spectrum disorder, dyslexia and more. (Toke, 2023)

https://therapyfocus.org.au/on-the-blog/understanding-neurodiversity/

How Neurodiversity Affects Learning

 Only 60% of neurodivergent secondary students continue to post-secondary education, this is 17% less than their neurotypical counterparts (77% of students) in the same period. (Government of Canada, 2019)



- At the University of Waterloo, 12% of students identified as having a disability, 42% being neurodivergent. This accounts for approximately 5% of Waterloo students being neurodivergent. (Office of Equity, Diversity, Inclusion and Anti-Racism at the University of Waterloo, 2021)
- However, consider, seventeen percent of students are registered as neurodivergent at the University of Calgary. University of Calgary, 2024)
- This is consistent with the Canadian statistic that approximately 5% of Canadians aged 15+ have a disability and diagnosed developmental disorder. (Government of Canada, 2019)



Examples of Neurodiversity

- *Examples are for illustrative purposes and do not represent all cases.
- 1. <u>Andrea has ADHD</u>. She often has trouble focusing on one topic and finds her thoughts can be fast-paced and unfiltered, making conversations difficult. While Andrea has difficulty focusing on one task, she can narrow in on the one at present, meaning she has multiple hobbies from woodworking to rock climbing and has a knack for all of them.



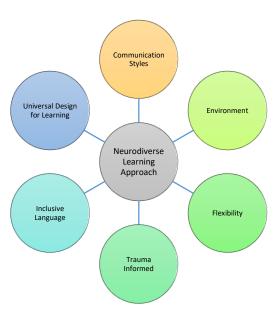
- 2. <u>Justin has OCD</u>. Among other behaviours, Justin compulsively checks the locks to his house before leaving and throughout the day while at home. This process is very time-consuming but is essential for his peace of mind. Justin has excellent organizational skills which are extremely useful in his career as an auditor.
- Brooke has autism.She finds it challenging

to be in noisy public places where there is a lot of sensory stimulation. Furthermore, she finds it challenging to understand subtle forms of humour such as sarcasm and puns. This makes social interactions challenging and often uncomfortable. Brooke is a talented professional pianist thanks to her ability to home in on a regular practice routine twice a day and focus on the skill.



https://reservoirnow.com/autism-andsensory-overload/

4. <u>Anton is dyslexic</u>. He has great difficulty when trying to read text. It takes him longer than most people and he does not always get the correct interpretation. Similarly, he has difficulty writing which makes it challenging to hand in school papers. However, Anton has a very strong memory and is a great engineer; being able to think simultaneously and quickly solve a variety of challenging problems.

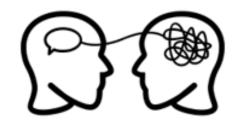


Strategies for a More Inclusive & Accessible Learning Environment

- Provide the day's schedule in advance, giving students ample time to review course content before their lecture. Some questions to consider include, 'what concepts will be covered, and what slides will be used'? When students are given the material in advance, they can focus on the content of the lecture, not just the slides themselves.
- •Take the time at the beginning of the semester to make general statements on accessibility; finetuning one's teaching style for those who are neurodiverse. Inviting students for office hour visits, or sharing information about one's

communication style, can be helpful and may invite students to share more about their needs.

- For instance, a student might say refraining from using acronyms where possible, as it makes it easier to process what is being said.
- For any extended learning projects such as group work, providing flexible options like collaborating in a less noisy environment can be a helpful option for some.
- Where possible, alter the physical space to allow neurodiverse individuals to control the sensory environment. This could look like flexible seating in class, comfortable areas, quiet spaces, and alternatives to the "open concept office."



Created by Prashanth Rapolu from Noun Project

Resources on Campus to Manage Learning

- Students should consider registering with Accessibility Services to take advantage of available accommodations. Such as:
 - Preferential seating
 - Alternative testing location
 - Note-taking services
 - Record course content
 - Flexible deadlines
 - And more







Best Practices for Universal Design for Learning in the Classroom

- Universal Design for Learning is the goal of helping students engage with the course material in a way which best suits their learning.
 - This looks like anything in the classroom which helps to remove barriers and is adapted to people's neurodiversity needs.
- Provide comfortable quiet spaces for collaboration such as those briefly mentioned previously. This makes collaboration easier for students to be more effective learners.
 This could be as simple as an empty classroom next door.
- Provide closed captioning for videos to assist students with processing delays. This
 gives students more options to engage with the material.
- Be prepared to offer flexible assessment options for when accommodation requests arise. For instance, some students may have an accommodation for presentations. Allowing a presentation to occur during office hours with a smaller audience instead of in class or through an essay instead of through a PowerPoint presentation, serve as examples of alternative means for assessment.
 - Ask the students about their unique needs. If the main goal of the assessment is to determine if a student has engaged and understood the material, the same can be achieved through alternative means.

Trauma-Informed Lens

- Professors should create a learning environment where students feel comfortable expressing their needs.
 - When students share trauma-related experiences, professors should respond with empathy and understanding, providing appropriate support even without training.
- Professors should make themselves accessible to students to reach out for support. This could look like having office hours or stating availability for meetings in the course syllabus.
- Acknowledge that trauma may impact a student's performance and engagement. Providing support can help students overcome barriers to success.

Additional Resources for Supporting Neurodiversity

- Explore updates for equity and inclusivity in UDL by addressing biases and highlighting learner diversity.
- More tips for supporting a neurodiverse campus
- How to make instruction more inclusive



References

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Barriers to Postsecondary Access?

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