

### **Neurodiversity Connections**

#### **Guide to Inclusion in the Classroom**



This document will provide a brief overview of neurodiversity and highlight areas of common struggles for our students. We hope that the tips and examples are a starting point for increasing inclusion in the classroom.

#### What is neurodiversity?

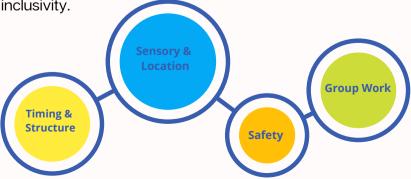
Neurodiversity is a term which has its roots in the Autism rights movement. It describes conditions such as autism, ADHD, learning disorders and other conditions which impact how someone communicates and interacts with the world. Neurodiverse individuals can often strengthen organizations by bringing a unique perspective to the table.

#### What is autism?

Autism is a brain-based condition that causes differences in communication, intense interests, desire for routine, and differences in how one perceives sensory input (such as light, sound, etc.)

#### Why do we need neurodiversity-inclusive classrooms?

Traditional classroom setups often present barriers for neurodiverse students. We have identified four domains of classroom engagement areas for faculty to consider when working to improve classroom inclusivity.





#### **Four Domains of Classroom Inclusion**



Traditional classroom setups require students to be quiet, sit still in class and stay in the classroom. Some students are able to focus better when they are allowed to move as is natural for them (e.g. fidgeting).



Changes to the class structure, such as a class running overtime can be stressful for all students and especially neurodiverse students. Building a clear syllabus and keeping structure/punctuality in mind will help all students learn better.



Traditional classroom setups require students to be able to give presentations as well as form work in groups with peers. Groupwork may increase stress on students who are socially isolated or struggle with anxiety.



Creating a classroom environment where students feel comfortable discussing challenges, strengths, and academic needs may encourage students to discuss the accommodations they receive through SDAO and together you can strategize how they can be implemented in the classroom setting.

## **Class Participation**

It is important that you specify to the student what exactly is expected for the "class participation" portion of their grade

#### **Purpose**

Neurodiverse students tend to thrive when given very clear, specific instructions

#### **Example**

A class syllabus which indicates that class participation comprises 5 percent of the total grade.

A student with anxiety and is afraid of speaking in a large class. Although they never ask questions or speak in class, they attend every office hour to ask multiple questions in a more informal setting. They also occasionally ask the professor questions after class.

At the end of the term, the student is surprised when their class participation score is low due to not participating during in-class discussions.

#### **Inclusive Example**

The professor indicates that class participation comprises 5 percent of the total grade, and that the following count towards class participation:

- Asking questions and participating in discussion during class
- Staying after class to ask questions
- Asking questions through email
- Asking or answering questions in the online class discussion forum

Each instance of participation is worth 1 point, and students are expected to have 2 points/week for full participation marks.

- Clarify what types of participation count towards the grade, and how much participation is expected.
- If possible, consider multiple methods of participation to count towards grading. Be sure to provide a list of options on the syllabus.
  - Asking questions in discussion during class
  - Staying after class to ask questions
  - Asking questions through email
  - Asking or answering questions using Sakai or discussion boards
  - Participating in office hours

### **Sensory/Physical Location**

Neurodiverse students may have a sensitivity to sensory input (light, sound, etc.) or need to move/fidget in class to meet their physical and psychological needs. It is important to allow students to leave the classroom if they are overwhelmed.

#### **Purpose**

People with a sensory processing disorder have differences in brain structure that affect the way sound/light is processed. Additionally, many neurodiverse students like to fidget (also called "stimming").

While this may be interpreted as the student not paying attention, it usually helps students stay calm and focus clearly on material.

#### **Example**

A neurodiverse student in class has a sensory processing disorder. The professor shows an educational video which starts at a quiet volume, then suddenly cuts to footage involving loud sirens and crashing noises.

The sound is overwhelming for the student, and he spends the rest of the class distressed and unable to focus.

### **Inclusive Example**

The professor plans to show an educational video featuring a sudden noise. To prepare the students, she says:

"This video has a loud noise at about the 7-minute mark. If anyone needs to step out around then, that's perfectly fine."

Alternatively, she could soften the volume around the time mark.

# Important Note

Lights and sounds can be triggering for other students in the classroom. A warning or notification can be helpful.

- Provide a warning if class materials involve a sudden or loud sound or sudden bright/flashing lights.
- Be aware of in-class demonstrations and videos that feature sudden or unexpected changes in sensory input.
- Don't assume fidgeting is due to lack of interest in the class.
- Consider openly stating that movement is okay in class.
- It is important that the student be able to leave the classroom if they are overwhelmed and need space.
- Simply adding one sentence at the beginning of term inviting students to step out as needed can be helpful.
- If the current chair arrangement doesn't allow students to easily step out, consider adding a couple of chairs right by the door.

### **Timing and Structure**

It is important to have a written syllabus with clear instructions for assignments, projects and general expectations.

#### **Purpose**

Having a clear written syllabus from the beginning can help students understand course expectations, prepare for class, and determine if the class is a good fit for them.

### **Example**

The professor has a very brief syllabus. The syllabus states which topics will be covered (though not in what order), what times the course will meet, and that the grade will consist of homework, class participation, and exams.

The syllabus does not include the office hour schedule, late homework policies, how often homework will be assigned, or what resources will be used. Two weeks into the term, the professor decides that the exam portion of the class will include pop quizzes every other week. The professor also does not mention that many homework will have an in-class component that involves partner work.

For neurodiverse students these sudden changes make the class very stressful.

#### **Inclusive Example**

The professor has a comprehensive syllabus that addresses the following:

- · Office hour schedule
- Expected textbooks and any other resources (computer programs, secondary textbooks, etc.)
- Homework policy and frequency
- What subjects will be covered on what dates
- Exams and projects, as well as a one or two sentence description of any major projects that will be held
- Any expectations in class participation or groupwork
- How the final grade will be assigned
- Statement about SDAO accommodations and support

- Try to make the syllabus clear and easy to read.
- Provide written instructions for both homework and projects.
- Provide indication of how grading will be weighted.
- Avoid ambiguous phrasing.
- Invite students to ask questions about deadlines and assignments.
- Post lecture slides/notes
  online prior to lecture. Some
  students greatly benefit
  from having written notes
  that they can print out and
  follow during lecture.
- Take video recordings of class which are posted online afterwards. This can help students who benefit from being able to rewatch explanations of key concepts.

### Timing and Structure (continued)

It is important that the student be able to leave class immediately at the end time (for example, if class runs overtime, that the student is not expected to stay overtime).

#### **Purpose**

Punctuality, schedules, and routines can be key aspects of stability for all students and especially for neurodiverse students.

While many students might not be affected by staying 1-2 minutes over, this can be extremely stressful for students who are heavily schedule-focused.

### **Example**

The professors accidentally runs class overtime by 3-4 minutes. Often, at about 3 minutes overtime, they will say "sorry class, I see the time is up. Let me just quickly mention that next class we will focus on X and that my office hour times this week have changed to Y."

While most students don't seem to mind, a neurodiverse student often relies on a precise schedule to navigate their day. They finds the unpredictability of the class schedule very stressful.

However, they do not feel like they can leave class on time since the professor often makes small announcements a couple minutes overtime.

#### **Inclusive Example**

The professor sets an alarm 2 minute before the end of class, and makes sure to wrap up all important material and announcements in the last two minutes.

If part of the class is interested in staying overtime to finish a topic (e.g. a proof that is almost done), the professor makes it clear that it is okay to leave on time and that anything done overtime will be reviewed at the beginning of the next class as well.

- Provide clear time structure to class.
- Make sure that all essential topics are covered within the class time, and that anything overtime is clearly stated as optional.

### **Group Work**

Group work can be stressful for neurodiverse students—in fact some students will not take a course based on the amount of group work required. If possible let students know ahead of time if there is an expectation for impromptu group work and on-the-spot classroom participation.

#### **Purpose**

Many students do well when it is clear what to expect in class and when they know what is expected of them socially. This is especially true for neurodiverse students. Asking students to form groups can be quite stressful. Students might wonder:

- 1.) What if no one wants me in their group? (This can be particularly stressful for neurodiverse students, who have often experienced some amount of social isolation in their life.)
- 2.) How do I ask others to join their group? (For students with social anxiety, being expected to form groups on the spot can be stressful.)

#### **Example**

Most of the professor's classes consist of traditional lectures while students take notes. Every once in a while, the professor likes to add variety by spontaneously asking students to get into groups of 2-3 and work on specific problems.

A student in the class has large amounts of anxiety and dreads the uncertainty of not knowing when group work will suddenly be expected. She spends a lot of energy in class worrying about whether today will be a groupwork day and isn't able to focus well on the material.

#### **Inclusive Example**

The professor also likes to do occasional groupwork. However, she lets students know one class in advance (for example, at the end of Tuesday's class, "there will be some groupwork in the second half of our class on Thursday.")

- Eliminate uncertainty about the class structure.
- Give students time to prepare for social interaction.
- Respect students needs for extra processing time.
- Providing students with the option of giving a prerecorded (versus "live") class presentation can help students who have speaking anxiety or students who have fluctuating levels of verbal communication ability.
- At the beginning of the term, give students the option of electing to choose their own groups by filling out an optional onequestion poll on the course website.
- Assign groups ahead of time, thereby removing anxiety associated with the process.

### Creating a safe classroom

It is helpful for professors to reach out to the students at the beginning of the semester and offer to clarify course expectations as needed.

#### **Purpose**

When faculty normalizing seeking help and using campus resources, students often feel more comfortable asking for support. Some students may be in the process of receiving a diagnosis or navigating the accommodations process, but may feel empowered to discuss their needs and challenges when encouraged to do so.

### **Example**

A neurodiverse student enrolled in a class where the professor reluctantly accommodated her request to be able to leave the classroom during panic attacks (without affecting class participation grade as based on SDAO accommodations).

When she asked if it would be possible for her to take the exam in a private environment so that if she has a panic attack it is less embarrassing, the professor told her to "stop asking for special treatment."

#### **Inclusive Example**

The professor has a portion of the syllabus stating that students are welcome to discuss SDAO accommodation needs with her.

Additionally, she reaches out through email at the beginning of semester to any students who are registered with SDAO. She states that she will be happy to meet to discuss accommodations further or clarify course expectations.

### Recommendations

- Help students feel more comfortable discussing their SDAO accommodations.
- If you are unclear about accommodations outline in letters from SDAO, reach out to them and ask for support.
- Speaking directly with the student will help the professor understand what might be causing problems with academic performance and provide relevant resources to the student including:
  - Academic Dean
  - Academic Guides
  - Academic Resource Center
  - CAPS
  - DukeReach
  - SDAO
  - NeurodiversityConnections

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