

Supporting Students on the Autism Spectrum in College



ALGONQUIN
COLLEGE | Student Support
Services



Training Manual

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ALGONQUIN
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Accessible Learning

Purpose:

This manual has been compiled with the purpose of helping teachers support students with Autism Spectrum Disorder (ASD). In addition to providing an overview of ASD, suggestions for effective teaching practices as well as practical examples of tools for use in the classroom to enhance student functioning are outlined.

If you are working with a student who identifies as being on the autism spectrum, it is beneficial to understand the basic underpinnings of ASD so that you can build your support from that framework, always remaining aware that you are supporting an individual.

While there are common characteristics, autism is neurodevelopmental in nature, and each individual student with ASD will present with a unique combination of characteristics and will bring richness to the post-secondary environment.

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Introduction to the Autism Spectrum



What is Autism Spectrum Disorder?

Autism Spectrum Disorder (ASD) includes a range of complex developmental variances that begin in childhood. An individual with ASD will present differences in thought processes, feelings, language abilities, and relatability to others, which may result in **social, communication, and behavioural** challenges (American Psychiatric Association, 2013; 2016).

As with all individuals, those on the spectrum present various strengths and challenges that impact their functioning. While people with ASD have similar characteristics, representations of the spectrum vary widely with each individual. The spectrum is aptly named due to this variability (Baker, 2006). Examples of some strengths and challenges that one might see are provided below:

Strengths

- Detail-oriented
- Skilled in particular areas
- Logical in thought process and decision making
- Independent
- Interested in social justice
- Visual in thinking
- Above-average visual spatial skills
- Strong rote memory
- Strong at communicating verbally
- Direct in communication
- Average to above-average intelligence
- Passionate about particular topics or ideas
- Hard working and diligent
- Skilled in solving problems creatively

Challenges

- Limited perception of how others think and feel
- Difficulty understanding social cues and unstated rules of conversations
- Misunderstanding of social conventions
- Literal thinking – difficulty understanding abstract concepts and vague instructions
- Difficulty dealing with change (need for routines)
- Difficulty with visual-spatial processing
- Differences in values
- Limited comfort in asking for assistance when needed
- Coexisting conditions (learning disabilities, anxiety, ADD/ADHD, obsessive compulsive disorder, etc.)

As one might expect, people without ASD can also present with these strengths and challenges. As a result, it is essential to focus on meeting the needs of students without assuming a particular diagnosis.

In Focus – Stephen M. Shore

Non-verbal until the age of 4, Dr. Stephen M. Shore was diagnosed as having “Atypical Development with strong autistic tendencies” (US Autism & Asperger Association, Inc., 2015, Living With Autism Section, para 1). With very little prospect of improvement as an outpatient, he was recommended for institutionalization. Now, he holds a professorship position at New York’s Adelphi University having completed a doctoral degree in special education. In Professor Shore’s words:

“If you meet one person with autism, you’ve met one person with autism” (US Autism & Asperger Association Inc., 2015).

In Focus - Hidden Curriculum

When it comes to everyday activities, people typically know how to introduce themselves to others, when to be honest (but tactful!) with someone, how to invite someone for coffee, and what to bring when they're invited into someone's home. Over time, all people are exposed to different experiences and learn how to behave and what to say in a variety of situations. Often this learning comes from observing other people, although we sometimes also receive instructions or advice when it comes to new situations. The unwritten social rules that govern almost all situations are referred to as the **hidden curriculum** (Wolf, Thierfeld Brown, & Bork, 2009).

Understanding and following the hidden curriculum can be challenging for students with ASD given the difficulty they may have understanding social cues and conventions. In many ways, having ASD can be compared to living in another country and not completely understanding the social rules there. If you were to live in another country, you might find it challenging to communicate with other people and understand parts of the culture. You would probably make some mistakes that would seem strange or rude to other people, and you might even unknowingly offend or scare other people. It can be helpful for provide students struggling with social conventions clear guidelines for what the expected behaviour is in particular environments as well as relevant reasoning for the expected behaviour.

General Tips for Supporting Students on the Spectrum:

- Developing a good understanding of the common issues experienced by individuals with ASD will be helpful to you in building your generic toolbox of best support practices
- Offering students the opportunity to have a confidential, one-on-one meeting to discuss what has worked best in their experience will help you to fine-tune your teaching approach
- Providing clear guidelines and outlining expectations in all aspects of student responsibilities (i.e., classroom expectations, assignment criteria, communication requirements, support requests, etc.)
- Being clear with students on what you can and cannot do will help them manage their expectations and prevent anxiety or misunderstanding

Video Resources

- **Myth-Busting Video of Students at Algonquin**
 - Visit this [link](#) to view a video of Algonquin College students demystifying certain aspects of ASD



- **TSC Videos of Algonquin College Faculty**
 - Visit the following [link](#) to view the videos of Algonquin College Faculty who provide their perspectives on supporting students with ASD.



- **TSC World Autism Awareness Video 2019**
 - Visit this [link](#) to see our students' in a video providing facts the support the celebration of the spectrum for World Autism Awareness Day.



Common Misconceptions & Notes on Disclosure



Common Misconception – College Admission & Program Completion Requirements

A common misconception about college applications is that students with disabilities are not required to meet the same admission requirements as typically functioning individuals. This is not at all the case!

All students who have been accepted to Algonquin College must have met the academic requirements for entry (Algonquin College, 2018 – [Policy AC01](#)).

In addition to meeting the academic entry requirements, all students at Algonquin College must also complete the same learning requirements and be evaluated by the same criteria (Algonquin College, 2018; Wolf et al., 2009). **While accommodations are provided, they are used to make learning more accessible, but do not alter the fundamental nature of learning.** This is very important to keep in mind when supporting students in classes.

Disclosure

Autism Spectrum Disorder (ASD) can potentially have an impact on all areas of a student's life – academic, social, and independent living. Many students with ASD will have self-identified and have thus been registered with the **Centre for Accessible Learning (CAL)** for academic accommodations and support. However, some may choose not to disclose what their disability is to professors or even go through with the accommodations provided for their classes. They may want to see if they are able to be successful without academic accommodations. A student like this could be fine, or they might be unable to manage the academic workload, which could have a direct impact on staying in the program after first semester.

It is important to remember that it is the students who must ultimately choose whether to share information with their professors. If shared, this disclosure is private and confidential.

Identification – To Disclose or Not to Disclose?

When students choose not to self-identify as being on the autism spectrum, it can be difficult to understand particular behaviours as well as to provide the appropriate support. We can easily draw conclusions that students are perhaps uninterested, rude, or unwilling to do work (Wolf et al., 2009).

Whether a student with ASD chooses to disclose to you or not, you will likely be aware that the student needs additional support in a classroom setting. You may become aware of this because the student exhibits certain differences in their functioning. A few examples of these differences are listed below:

- Exhibits “odd” behavior
- Has strong reactions to the environment (noise, smells)
- Experiences difficulties connecting with other people in an age-appropriate way, understanding their viewpoints, and interpreting their body language
- Seems isolated from others
- Experiences anxiety
- Demonstrates difficulty thinking in abstract terms and organizing work
- Speaks in a way that may sound different in volume, intonation, and speed
- Demonstrates difficulty transitioning between tasks or subject materials (Wolf et al., 2009)

Please note:

Not all students who fit these criteria have ASD, so it is important to not assume that they do. Regardless, they may all need support to get through the semester and have a positive experience.

What Can You Do If You Suspect a Student Would Benefit From CAL Support?

We cannot make assumptions about whether or not a student has a disability that should be accommodated through the Centre for Accessible Learning. However, if a student is struggling in classes, it is always beneficial to help connect that student with Student Support Services at Algonquin and to destigmatize the use of services to facilitate success. If you have a student with whom you are working that you suspect may require additional help:

- Consider meeting with the student one-on-one and allowing the student to identify the struggles that they feel they are experiencing
- Show the student the [Student Support Services](#) website, indicating the wealth of services available as well as the requirement for all students at Algonquin to make use of the service that best suit their needs in order to facilitate success
- Encourage the student to read through and understand the service options and access the one they feel is best suited to their current needs

Accommodations



Working Together for Accessible Learning

The Accommodation Process

- ✓ Academic accommodation refers to educational practices, systems and support mechanisms designed to accommodate functional challenges posed by an individual's disability.
- ✓ The purpose of accommodation is to allow students to perform the essential requirements of their courses or programs.
- ✓ At no time does an academic accommodation undermine or compromise the learning objectives of a course or a program.
- ✓ The principles of respect for dignity, individualization, inclusion, and full participation apply both to the substance of an accommodation and to the accommodation process.

Duty to Accommodate: It's a Shared Responsibility

Algonquin College Policy: AC01 Students with Disabilities

All members of the Algonquin College community have a **shared responsibility** to accommodate students with disabilities whose needs have been duly assessed by the Centre for Accessible Learning (CAL). Academic accommodations play an important role in creating an equitable environment where respect for the dignity of the persons with disabilities and respect for confidentiality are realized. Algonquin College's Accessibility Policy [AC 01 Students with Disabilities](#) is intended to reflect the College's response to the legislative requirements of the Ontario Human Rights Code and the Canadian Charter of Human Rights and Freedoms.

As members of the Algonquin College community—upholding the [core values](#) of caring, learning, integrity and respect – we embrace this shared responsibility and support equal opportunity for all students to achieve their academic and career goals.

Letter of Accommodation (LOA)

The Letter of Accommodation (LOA) is a confidential document that provides a written statement of the academic accommodations to which a student registered with the CAL is entitled. The LOA describes both in-class accommodations and test/exam accommodations. The accommodations are intended to equalize the opportunity of the student in meeting essential program and/or course requirements. The Disabilities Counsellor's name and contact information is listed on the bottom of the letter. Letters of Accommodation (LOA) do not always disclose a specific diagnosis. Remember that it is a student's choice whether or not to disclose a diagnosis

Student's Responsibility

- ✓ Students are responsible for deciding how the LOA is provided to their professors/instructors. They are encouraged to consult with their Disabilities Counsellor to discuss options for LOA submission. Students also may benefit from discussing their needs with a professor/instructor if they are seeking accommodations for that course.

Faculty's Responsibility

- ✓ Professors/Instructors are required to provide accommodations as per the LOA. Should the faculty member require assistance with this, the contact information for the student's Disabilities Counsellor is provided on the letter.

Example LOA

- ✓ An example LOA is provided [here](#).

Note: *The nature of a student's disability is private and confidential. Disclosure is at the discretion of the student.*

Example Accommodations

Accommodations vary for each individual, but some commonly used accommodations are as follows:

- Extra time for tests in CAL Test Centre
- Reduced course load
- Note-taking support
- Memory aids
- Computer use
- Lecture recording

Best Practices for Faculty in Supporting Students with Disabilities through the use of Universal Design for Learning

Universal Design for Learning (UDL):

UDL is a framework for creating educational materials and assignments, which considers all learning preferences and tailors environments to be most inclusive. The UDL approach is comprised of three principles: multiple opportunities for engagement, representation, and action/expression (CAST, 2017). An example of UDL can be explored through the use of closed captioning in videos. This feature is particularly supportive of individuals with hearing impairments; however, closed captioning can be helpful for any person watching a video for reasons ranging from people preferring to read information rather than hear it, people who may be learning a new language, or people who may be listening to audio in a noise-restricted environment. In providing the closed captioning, the video becomes accessible to a wider range of individuals with varying needs.

Faculty are Encouraged to do the Following:

- ✓ Create a classroom atmosphere that is inclusive, non-discriminatory, and barrier-free by implementing principles of universal design.
- ✓ Encourage students registered with the CAL to submit their Letters of Accommodation (LOA) and be available to discuss the students' accommodations upon request.
- ✓ Maintain the students' rights regarding confidentiality and refrain from disclosing personal disability-related information.

- ✓ If an LOA is submitted, contact the Disabilities Counsellor (whose name and contact information is listed at the bottom of the LOA) with any questions about the student's accommodations or support needs.
- ✓ Become familiar with the CAL Test/Exam Accommodation procedures (see below).

Test/Exam Accommodation Procedures:

Both Students and Faculty use the **CAL Online Portal** test/exam booking system. Students initiate the booking process, which the Faculty member then confirms. Please review the steps listed below:

1. Student books test/exam using the [CAL Online Portal](#) test booking system.

Note: It is the student's responsibility to book tests at least **seven days** prior to a test date and **at least three weeks** prior to the beginning of the final assessment period if they would like to write their test/exam in the CAL Test Services to receive their accommodations (e.g. extended time, assistive technology).

2. Faculty member receives a **CAL test booking notification email and confirms the test booking.**

Note: Click the [link](#) provided in the email or use the link below to log onto the booking system.

- a. Click 'Course'.
 - b. Login using your Algonquin College Username and Password.
 - c. Follow the steps outlined on the webpage to complete the booking request.
 - d. You are responsible for the delivery of the test/exam to CAL Test Services – E304e and ensuring a cover sheet is attached unless you make use of the CAL Digital Storefront Initiative. For the latter initiative, please consult [this website](#).
 - e. If you have any questions please call (613) 727-4723 ext. 6092 or visit the [CAL Website](#)
3. If you have a student who does not meet the 7-day deadline for tests or 21-day deadline for exams, alternate arrangements to receive accommodations could be facilitated in a couple of different ways:
 - a. At their discretion, the faculty member may choose to give the student extra time in class or in another setting.
 - b. At the faculty member's discretion, the CAL Test Services can accommodate the test on an alternate test date. If it is an exam, it could be accommodated in the first week after the exam period. In order for this option to work, the following steps would need to be taken:
 - i. The student would need to book the alternate test date through the CAL online portal
 - ii. The alternate date would need to be at least 7-days from the date the student books it (outside of the exam period)
 - iii. The professor would confirm the booking and provide the testing materials

The CAL looks forward to working with you!

“...accommodations do not provide an unfair advantage to students – rather they ensure that every student has the same advantage” (Transition Resource Guide, 2015, p. 20).

Teaching Practice



Teaching Practice

This section of the manual provides various suggestions that you can apply within your classroom. Some will be applicable, others will not, so feel free to adapt them to your particular needs. By considering some of the teaching principles, you will increase the accessibility and universal design of the environment for the benefit of all students (see [Professors of the 21st Century Framework](#) for more information on [Universal Design for Learning](#)).

Content Delivery - Organization and Routine

Provide Explicit and Consistent Class Structure

For people with Autism Spectrum Disorder (ASD), routines can be very important (Paxton & Estay, 2007). Some students may become quite agitated when established routines are not followed. As such, they benefit from explicit support to get accustomed to classroom/laboratory routines. When these established routines change, advanced warning is beneficial to help increase the likelihood of a smooth transition. This warning can help to reduce the environmental interpretation required by the student to immediately adapt to the change.

In Focus: General Routines in Classes

Consider following the same general routine in each class:

Before class:

- Provide a clear Course Section Information (CSI) document outlining the weekly tasks, assignment/test schedule, and required reading at the start of the semester
- Post PowerPoint slides or course notes at least 24 hours in advance of each class
- Write the class plan on the whiteboard to ensure students know what to expect throughout the lesson
- Remind students of upcoming deadlines/projects and where to locate relevant information on Brightspace

During class:

- Review where to find the content for the week on Brightspace
- Take attendance (if applicable)
- Announce class plan (what will the students be doing and learning). Refer to visual aid on board
- Emphasize any special notes or changes for the day
- Begin material coverage (relate it to what was previously learned)
- Give warnings that transitions to new activities will take place and guide transitions when they occur (**For example:** *If students are working on a group project and will be transitioning to a didactic lesson, the professor can state “You have 5 more minutes to work on this group activity; we will then be continuing with today’s lecture content about ____.”*)

At the end of class:

- Restate the main take-away messages from the class (consider having these in writing on the PowerPoint slides or notes you provide through the Learning Management System (e.g., Brightspace))
- Remind the students of upcoming assignments/special notes for next class

Provide Course Outline and Course Section Information (CSI) Documents

You are already an expert at providing these documents and reviewing them with students at the beginning of the semester. As you know, emphasizing where to find the semester schedule and assignment requirements will help to improve students' comfort level and understanding of expectations throughout the semester. Some students benefit from suggestions of what to do with the CSI once it is received. You may consider sharing what you have found useful in order to keep track of due dates. Example suggestions include:

- Inputting the dates for assignments and exams on an electronic calendar, such as the one on a cell phone
- Printing the CSI and taping it in a visible area at home for easy reference
- Putting each CSI as a shortcut on the desktop of a computer for quick access

In Focus: Why Provide the CSI?

- Providing an outline of what content will be covered weekly throughout the semester as well as when assignments/assessments will be taking place is invaluable. When in place, it can allow students to better plan their course work throughout the semester by collecting all of their course CSIs and combining the information into a semester plan. Having this concrete plan can aid students in completing work on time and to the best of their ability.
- The Centre for Accessible Learning encourages registered students to access Learning Strategy support. This involves students meeting one-on-one with a Learning Strategist who can support the student with:
 - Time and task management
 - Organization
 - Studying and test taking skill
 - Reading strategy
 - Assignment planning
 - Etc.
- Providing the students with access to CSIs for each course helps Learning Strategists to more effectively support students with their academic skills including the planning and organization of their time and task management through the creation of a semester plan. To learn more about semester planning, visit the [Learning Portal's time management section](#).

Highlight That Documents are Subject to Change

While reviewing these documents, be sure to highlight that changes can occur to this schedule. When changes do occur:

- Give as much advance notice as possible
- Provide this notice in writing (make an announcement about the new course syllabus on Brightspace)
- Announce the change verbally in class (Freedman, 2010)

Remind Students of Document Location

It is not uncommon for any student to forget where to find these documents throughout the semester, so emphasizing their location at key moments can benefit all. Going through the process of checking for assignment due dates when students ask about them in class using the CSI can be useful as well, especially when students are new to the college.

Make sure to encourage and normalize the submission of Letters of Accommodation

When reviewing the CSI and Course Outline, be sure to highlight that students can register with the **Centre for Accessible Learning (CAL)** to receive disability-specific support.

- Emphasize that it is the student's responsibility to self-identify to the CAL in order to receive accommodations
- Remind students to submit their Letter of Accommodation (LOA) in class and through an announcement on Brightspace

Create an Accepting Environment

While many students with ASD are already accessing the post-secondary environment, it is estimated that even more will be in college and university settings in the near future (Alcorn Mackay, 2009). As such, colleges and universities need to be better prepared to understand this population of students while providing appropriate and timely supports. Enhancing college-wide knowledge of best practices for students with ASD will not only improve their access to education, but it will also better the educational environment for the general population of students (Wolf et al., 2009).

There is a need for better education about ASD and associated best practices in post-secondary in order to ensure students are entering an environment that respects and understands the unique offerings they bring (Tipton & Blacher, 2014). There is a tendency demonstrated through research that shows faculty members are interested and willing to accommodate and advocate for students with disabilities in their classes (Cawthon & Cole, 2010). However, research also shows that students with disabilities do not necessary feel their interactions with faculty reflect this finding. It was reported that students with disabilities experience a lowered sense of belonging in classes (Kurth & Mellard, 2002, as cited in Cawthon & Cole, 2010). As such, all classrooms can benefit from deliberate work on the part of faculty to create open and accepting environments that influence the development of a community of learners.

Creating an open and accepting atmosphere can help enhance students' willingness to be open and honest in reporting their particular needs or issues. Ensuring that students feel their voices are being respected and heard is essential.

Research has shown that students' seeking help is dependent on "(a) classroom focus, (b) students' perceptions and beliefs, and (c) a teacher's instructional approach and openness and flexibility" (Kitsantas & Chow, 2007, p. 384).

General Tips (Kitsantas & Chow, 2007):

- Be task-focused rather than ability-focused in your classroom so that you encourage students to develop content mastery, comprehension, and effort
- Create a classroom climate in which you are a community working together towards a common goal
- Make yourself available to provide support, not only in the classroom but also during your office hours
- Normalize the act of seeking help by providing examples of previous students who have done so and subsequently succeeded
- Provide suggestions for how to approach a faculty member for help with examples of appropriate conversation starters such as "I'm having trouble with this assignment. Could you please help me with _____"

Cross College Link - Use Professors of the 21st Century Framework

The [Centre for Organizational Learning \(COL\)](#) at Algonquin College provides a number of resources that faculty can use to improve their effective teaching practice.

One such resource relates to the [Professors of the 21st Century Framework](#). This framework is comprised of seven competencies that reflect universally designed educational approaches. Developing competency in these areas will ensure effective preparation to teach within the contemporary college environment.

Three other resources provided through the COL are listed below.

Prof's Resource Site



<http://www.algonquincollege.com/profres/>

- Resource that describes the Professors of the 21st Century framework and links to information and best practices with the framework's seven competencies

Monday Morning Minutes



<http://www.algonquincollege.com/pd/mmm/>

- Weekly blog post linking faculty with information relevant to their teaching practice

Engaging Learning Environments (Competency #2)

<http://www.algonquincollege.com/profres/engaging-learning-environments/>

The second competency of the Professors of the 21st Century framework applies directly to creating learning environments that promote student success. In the link above, you will find information on how to do the following:

- Develop rapport with your students
- Promote and motivate student success
- Identify students in need
- Encourage students' creativity, independence, and innovation

Provide Visual Instructions for Students to Prepare for Classes/Labs with Special Requirements

When classes have standardized preparation routines that students are required to follow, it can be beneficial to provide them with visual instructions for these routines to increase the likelihood that they will come to class prepared. It is understood that professors rarely have time to develop individualized tools like this to support particular students, but professors could encourage students to work on their own to create such a schedule or refer them to Student Support Services if applicable.

These instructions are best if they are simple, straight-forward, and visual in nature.

Chef John created a 5-Step Flow Chart for Kitchen Success, which greatly enhanced a student's preparedness for classes.



Example of Visual Support for Culinary Lab




5-Step Chart for Kitchen Success Cycle

Date: _____

Lab: H-114 Quantity Food Production

Chef Instructor: John Young

Step	Visual Representation
<p>1. Get Ready for Class</p> <p>a. Get dressed in full uniform</p> <ul style="list-style-type: none"> ○ Chef Jacket ○ Chef Pants ○ Chef Black Shoes ○ Chef Apron ○ Chef Hat 	 
<p>2. Arrive to Class 10 Minutes Before Start Time: 7:50 a.m.</p> <p>a. Wash your hands, dry them. Throw paper towel in recycling bin</p> <p>b. Set up your station</p> <ul style="list-style-type: none"> ○ Cutting board ○ Knives ○ Tools 	

Step	Visual Representation
<p>3. Open Recipe Journal to Recipe of the Day</p> <ul style="list-style-type: none">a. Collect your Recipe Ingredientsb. Collect Your Kitchen Equipment<ul style="list-style-type: none">○ Pots○ Pans○ Bowls○ Trays○ Spoons	
<p>4. Teamwork</p> <ul style="list-style-type: none">a. Work together in your teamb. Remember everyone has a role and pitches in to complete tasksc. Prep food for packing and labelling	
<p>5. Clean Up</p> <ul style="list-style-type: none">a. Wash all equipmentb. Put tools awayc. Clean up workstation	

Example of Visual Support for a Class Lecture

Date: _____

Course: _____

Professor: _____

Class Checklist

1. Get Ready for Class
 - a. Review Course Section Information (CSI) for overview of class content ____
 - b. Review CSI for upcoming assignments/tests ____
 - c. Ensure pre-lecture homework is complete (readings) ____
 - d. Collect all class materials
 - Laptop ____
 - Textbook ____
 - Notebook ____
 - Pencil Case ____
 - Backpack ____
2. Arrive to Class 10 Minutes Before Start Time: example - 7:50 a.m. ____
 - a. Take a seat ____
 - b. Take out supplies ____
 - Notebook ____
 - Laptop ____
 - Pencil Case ____
 - Textbook ____
 - c. Briefly review notes from previous class and what will be covered during current class ____
3. Lecture begins ____
 - a. Listen to lecture ____
 - b. Watch professor and PowerPoint slides ____
 - c. Take notes ____
 - d. Note any questions and write them down ____
 - e. Raise hand and ask question or save your for the end of class ____
4. Lecture concludes ____
 - a. Note any questions that did not get answered and ask professor (if time permits) or ask questions via email/office hour ____
 - b. Pack up supplies ____
 - c. Go to next class (if applicable) ____
5. Post lecture ____
 - a. At home or during break, review notes for completeness and to reflect on lesson ____
 - b. Start homework/assignment or study for test (if applicable) ____

Use Multiple Methods to Deliver Information

All students have different preferences when it comes to their learning. As such, varying information delivery methods will help accommodate these various styles. This aligns with the [Professors of the 21st Century Framework](#) (see note below).

Multimedia presentations that use charts, graphic organizers, videos, and interactive activities can enhance students' comprehension and memory (Zager, Alpern, McKeon, Maxam, & Mulvey, 2013).

Highlighting the presence of variability in Autism Spectrum Disorder (ASD) diagnoses, some students benefit from listening to instructions rather than reading them, whereas others prefer a written option. Their preference depends on many factors, including their ability to accurately process the information that is delivered through particular channels.

One person with ASD stated, "I can't hear you until you write it down" (Paxton & Estay, 2007). Other people with ASD may struggle with written information, and thus prefer the auditory description of steps.

Hint: Record Your Instructions Visually and Verbally

If you are requiring students to complete an assignment or activity, you might consider providing the assignment instructions in **both audio and visual forms**, and allowing students to select their preferred method to digest the information. If this is useful to students, consider allowing them to bring a recorder to class (or their mobile device), with which they may record instructions on the spot. These instructions can then be reviewed by the student at any time to reinforce the process (Zager et al., 2013). Note: If a student has the accommodation of recording their lectures on their Letter of Accommodation, they should be allowed to do so. If you are concerned about them recording their classes, please contact the Disabilities Counsellor listed on the Letter of Accommodation to discuss the accommodation.

Verify Understanding

Some students, regardless of the presence of an Autism Spectrum Disorder (ASD) diagnosis, will give false impressions of understanding required tasks. In the case of ASD, students may be able to express themselves quite well, but they may not process the information they hear or see as effectively (Freedman, 2010). As a result of their excellent language expression, we tend to assume a high level of understanding, which does not always reflect reality. Sometimes, these assumptions can prevent professors from providing effective direction or facilitating subject comprehension.

In Focus: Providing Task Instructions

It is possible that students will confirm understanding of required steps for a task but later realize that they do not know how to begin or proceed successfully. To verify understanding, professors can:

- Ask the class to review what is required of them (E.g., Ask: "To make sure that we are on the same page, in what order do you need to complete the steps?")

- Consider encouraging the students to document these next steps in their preferred method (E.g., written, visual, or verbal format)
- Provide explicit instructions to follow in visual format (supplement oral instructions with visual ones, and keep these visible throughout the task)

Provide Notes

Any student can benefit from straightforward class notes or lecture slides that are provided by instructors.

When providing these notes, consider the following pointers:

- Make these available preferably before a lecture/class
- Emphasize their availability (as lecture slides or jot notes, depending on what you prefer)
- Provide review notes for tests/exams so that students can better structure their studying
- Direct students to notes available through any additional supports (such as textbook readings) that you believe may help the student learn material

Note Structure

- If possible, try to include visual representations of topics within the notes
- Consider adding charts, checklists or other supports for students to relate the notes to the assignment/test to which they should apply this particular information.

Attend to Big Picture

Students with Autism Spectrum Disorder (ASD) may have a tendency to be rigid in their thinking. This rigidity may result in their focusing on very specific concepts, which prevents their attending to the big picture (Paxton & Estay, 2007).

To help students understand the big picture, you can either highlight it or facilitate students to arrive at an overall understanding. While doing so, you can be explicit about the connections that can be drawn to the textbook and the world around them (Zager et al., 2013).

Remember: Emphasizing how the information applies to students' lives is essential to help them to establish or maintain interest in the topic.

Be Direct and Literal by Avoiding Idioms, Figurative Language, and Sarcasm

Students with ASD tend to have “an orientation to details and a weakness in central coherence in thinking” (Paxton & Estay, 2007, p. 55). As such, they understand statements very literally. When

idioms, figurative language, and/or sarcasm are used, the underlying meaning of these statements may not be understood as intended.

For example, if you were to tell someone with ASD to “do an assignment”, they may complete the assignment but fail to submit their completed product.

In Focus – Communications Class

In one class, a professor showed a video on the intricacies of Intercultural Communication. After playing the video, she asked, ***“What main lessons can you take away from this video?”*** While most of the class members understood the intended meaning of the question, one student put up his hand and asked, ***“What do you mean take a lesson away from a video? You can’t reach into the computer and take away a lesson — it is digital.”***

The idiom of “taking away a lesson” from a video does not make sense when understood literally. The professor did not realize her instruction could be taken literally and subsequently be misunderstood. It was ideal that the student felt comfortable enough in the class to ask this question. This allowed the question to be reworded appropriately.

Many students may not have brought up their misunderstanding. Instead, they could have remained confused regarding the request. If enough of these idioms were used and consistently misunderstood throughout the semester, the student may end up feeling quite isolated, lost, and afraid to seek assistance.

In Focus – Literal Task Completion – Menu Example

In a cooking class, a student could be asked to create an entrée with the following menu instructions:

1. Bring 2L of water to a boil in a large pot.
2. Slice 2 lbs of potatoes and add them to the water.
3. Dice 2 medium onions, 1 green pepper, and 6 garlic cloves.

Instead of chopping the potatoes while the water is coming to a boil, a student with ASD may wait until the first step is completed in its entirety before beginning step two. As such, the water will be boiling for a while before the potatoes are chopped.

To avoid this type of problem, consider adding sub-steps to instructions:

1. Bring 2L of water to a boil in a large pot.
 - a. While the water is heating up, peel 6 large potatoes.
 - b. Chop the peeled potatoes into 1-inch cubes.
2. Add the chopped potatoes to the boiling water.
 - a. Set a timer for 20 minutes.
 - b. Dice 2 medium onions, 1 green pepper, and 6 garlic cloves.

Writing Tip: *When creating lists, it is best to chunk large tasks into subtasks that do not exceed nine steps. Doing so will ensure the doer does not get overwhelmed and lose sight of the end goal.*

In Focus – Literal Task Completion – In-class Lecture Assignment Example

In a lecture class, a student could be asked to complete an in-class assignment. Consider these step-by-step instructions:

1. Read over the assignment instructions once through.
 - a. While reading the assignment, try to determine the general goal or purpose of the assignment.
2. Read over the assignment again a second time.
 - a. Break down the assignments into steps.
 - b. Highlight key points.
 - c. Ask the professor for clarification, if needed.
3. Start the assignment.
 - a. Follow the steps
 - b. Review instructions after each step.
4. Complete the assignment
 - a. Edit work
 - b. Review instructions and compare to completed assignments
 - c. Ensure all steps are complete
 - d. Submit

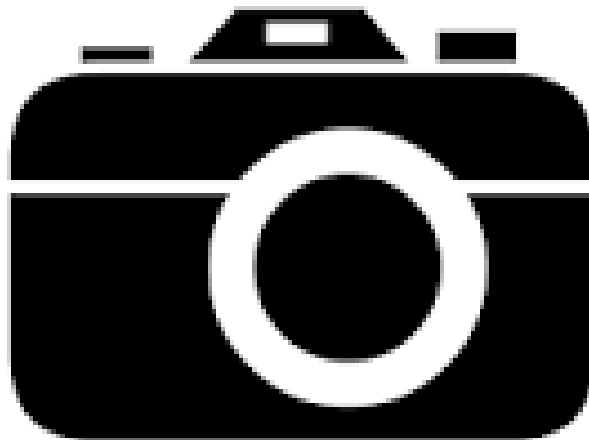
Use Videos for Recurring Demonstrations

Do you have activities in your class that recur every semester with very little change?

Have you considered making a video demonstration of particular tasks such as deboning a fish or cutting a particular hairstyle?

Creating videos for recurring demonstrations would be useful since it capitalizes on the strengths students with ASD have in the area of visual processing. It can also be valuable for any student who may have trouble processing all required information during a demonstration to provide them additional time to solidify their understanding. Posting these videos to Brightspace in advance allows students to prepare for in-class presentations and review them while studying for exams. This would help the students to anticipate what to expect in the classes and consider their appropriate behaviour/response in advance. As such, they will need to spend less time processing and interpreting the experience, and may be able to focus better on the task (Hendricks, Smith, & Wehman, 2009). The videos can also be used as a tool to facilitate students' memory and understanding of the process.

The next time you do a demonstration for a task, consider recording the demonstration so that it can be used for several semesters to come.



Provide Scripts for Commonly Addressed Issues

When asking for help in particular areas, it can sometimes be difficult for students with ASD to find the right words or express their needs appropriately (Wolf et al., 2009). A student with social skill difficulties may not know how to approach faculty according to established social norms. As such, they may benefit from pre-made scripts to request/provide specific information.

For example, students sometimes hesitate to submit their Letters of Accommodation (LOAs) for a variety of reasons, one of which being that they are not sure how to broach the subject. In this case, consider uploading the following script to your Brightspace sections as a reference for students submitting their completed LOA.

Letter of Accommodation Script – Post in Brightspace Shells

Hi! My name is _____ and I am in your _____ class.

Would you mind if we took some time to talk about my learning needs in your class?

When taking classes, I have benefitted from the using the following strategies to stay on track with assignments and course learning:

-
-
-

Here is my Letter of Accommodation. As it describes, I am allowed the following accommodations:

-
-
-

Would you be able to work with these accommodation requirements?

I really appreciate your support and look forward to taking your class this semester!

Requesting Extensions

If you have a class or department policy that allows for extensions so long as students provide sufficient advance notice, it may be helpful to provide a script that students can use to request an extension. You can upload to your Brightspace sections.

Request for Extension Script – Post to Brightspace Shells

Hi _____

Would it be possible to get an extension for the _____ project?

The reason I need this extension is:

I will be able to submit the finalized project by _____.






Can you please let me know whether or not you can approve this extension?

Thank you!

Provide Resources for Students to Develop More Independent Problem Solving Skills

People with ASD tend to have a need for immediate support. When experiencing an issue, it may be very difficult for a student to focus on other important tasks before overcoming the issue that is most pressing on their mind. As such, consider including a document in your Brightspace sections that instructs students on where they can access relevant information when needed. An example of such a document is provided below.

What If?

Question	Starting Point for Answer
What if I need to contact my professor?	<ul style="list-style-type: none"> I can e-mail him/her at @algonquincollege.com and expect a response within 24 hours.
 What if I don't understand course material or need help with an assignment?	<ul style="list-style-type: none"> I can go to my professor's office hours, which are: Date: Time: Location: I can ask a classmate I can book a peer tutor through http://www.algonquincollege.com/peer-tutoring/
 What if I don't know an assignment's due date or the date of a test ?	<ul style="list-style-type: none"> I can look it up on Brightspace. Go to [INSERT COURSE] → Course Information Tab → Course Section Information Document (CSI) If I have questions, I can ask my instructor
 What if I start feeling uncomfortable in class?	<ul style="list-style-type: none"> I can speak with my instructor about it after class and come up with an exit strategy for future classes so that my professor is not worried and I do not disturb my classmates.
 What if my computer, Internet, or Algonquin Network ID are not working?	<ul style="list-style-type: none"> I can contact Algonquin's ITs: <ul style="list-style-type: none"> Room: Student Central Phone: (613) 727-4723 ext. 5555 E-mail: 5555@algonquincollege.com Online Help Centre: http://www.algonquincollege.com/itshelp/
What if I know that I will not finish an assignment on time?	<ul style="list-style-type: none"> I need to _____
 What if no one shows up for class?	<ul style="list-style-type: none"> I can check Brightspace and my Algonquin e-mail for announcements and updates to see if: <ul style="list-style-type: none"> Class was cancelled Room was changed I can e-mail my instructor for clarification

Classroom Management



Managing Behaviours

The beginning of the semester is an essential time to establish clear boundaries for in-class behaviours. Throughout your class time together, you can review and adapt them as necessary to ensure the community class goals continue to be met.

If you have time, consider creating these expectations with your class so that they feel ownership and involvement in their learning, and better understand your expectations.

Discuss ideal behavior as well as what is not acceptable in classes.

Provide Boundaries for Engagement

Even when clear boundaries are set for behavioural expectations at the beginning of the semester, difficulties may arise in a students' functioning that disrupt the class and require redirecting.

One such difficulty that can be common in students with ASD is their level of engagement in classes. You may see some students who are withdrawn and unwilling to participate, whereas others will participate quite actively (Wolf et al., 2009).

Establish Ground Rules:

If students are participating too actively (i.e., wanting to answer every question or asking a substantial number of questions during class), you can engage the student in a discussion to establish ground rules for participating.

Your conversation may go as follows:

"You have a lot of great information and questions to share during class. It is wonderful to hear your opinion and understand your perspective. However, I would also like the other students to be able to participate. Could we please work together to set some ground rules for our class to make sure that other students have the chance to answer and ask questions as well?"

Example ground rules:

- You may answer two questions during class
- You may ask three questions during class
- Any other questions can be written on a cue card and asked during the 5 minute period right after class or during 15 minutes of the professor's office hour

Establish Cue Card Tracking Strategy:

If the student has trouble remembering how many times they have asked/answered questions in class, one strategy is to give them a tracking sheet, which can be kept on their desk (Wolf et al., 2009). Should they not feel the need to keep a record of each tracking sheet, it can be laminated.

Answered Question (check off each box once completed)	Asked Question (check off each box once completed)	
✓	✓	✓
✓	✓	
<i>Additional Questions to Ask After Class or During Office Hour:</i>		
1.		
2.		
3.		
4.		
5.		

Consider Environmental Sensitivities

An individual's perceived comfort is very important to their adaptive functioning. Accounting for the need to feel comfortable, the need to take breaks (be close to exits), the need to feel sensory stimulation or avoid it, as well as the need to minimize distractions can help enhance perceived comfort of students during classes.

Sensory Sensitivities

A common feature in ASD is sensory sensitivities (Wolf et al., 2009). Some individuals with ASD may be over-sensitive to stimuli whereas others may be under-sensitive. For people who are over-sensitive, sensorial input can be experienced in an "exaggerated and even painful" way (Wolf et al., p. 24). This can significantly impact the learning of a student.

Put yourself into the situation of being next to a person who has applied a strong-odor perfume that you dislike. You may be able to eventually adjust to the odor, but at first, it likely assaulted your senses. If someone with ASD's experience of this perfume is exaggerated, the assault on their senses may be impossible to overcome. Not being able to adjust to the smell but having to remain in the environment can result in the student feeling extremely stressed. Their functioning would likely be impaired as a result.

Various stimuli can be difficult for people with ASD to deal with, in part due to their differences in processing information. "Lights and classroom noise such as that from air conditioners and heaters, or

fans on LCD projectors, can be physically painful. Students with severe sensory issues must work hard to keep control when their senses are bombarded” (Wolf et al., 2009, p. 24).

To help students with sensory sensitivities, consider the following:

- **Alter Environment or Stimuli**
 - For example, if the lights in the classroom are disturbing, consider testing out the different lighting options to determine whether a better option is available
 - If the LCD projector’s fan is overstimulating to a student:
 - Consider allowing the student to bring ear plugs to class
 - Establish a signal with the student for determining when it is necessary to remove the ear plugs/replace them
- **Encourage Use of Strategies/Tools**
 - Students with ASD can sometimes use sensory tools to help reduce anxiety that stems from overstimulation. Tools as simple as stress balls or sunglasses can help students with ASD deal with some overstimulation. In more severe cases, the student should be referred to disability support services.
- **Allow for Breaks When Possible**

Make an Effort to Understand

As stated above, having ASD is sometimes compared to living in a different country with entirely different social rules. While some behaviours that students with ASD may display can be difficult to deal with, it is best make an effort to understand the student as an individual rather than the behaviour in isolation (Wolf et al., 2009).

Below is a table of problematic behaviours that can be interpreted by faculty and service providers negatively. However, our initial interpretation may not align with the underlying reasoning and may prevent our understanding of students’ functioning.

Behaviour	Potential Interpretation	Potential Reason
Missing an appointment	Negligence	Student may be avoiding a perceived difficulty
Missing an assignment submission	Negligence or disinterest in material	Student may have difficulty managing stress
Shouting out in class, interrupting others, or monopolizing conversations	Disrespectful and rude	Student would like to make sure opinion is heard
Questioning and/or focusing on an unrelated topic	Socially awkward	Student has difficulty understanding social cues

Behaviour	Potential Interpretation	Potential Reason
Late submissions of assignments	Negligence	Student is unsure of how to request an extension and has difficulty keeping track of assignment due dates
Mimicking what others say	Disrespectful and rude	Benefits from repetition to process information
Laying head down on desk/work station	Rude or overly tired	Student is experiencing an intolerable sensory overload

(Table adapted from information found in Wolf et al., 2009)

Be Cautious of Causal Attributions

The table above includes potential reasons for particular behaviours. **They are not conclusive and cannot be generalized to particular situations or students.** As with many issues in the classroom, even when we think we know what is causing a particular behaviour, our conclusions could be incorrect. Relying on our assumptions can sometimes lead to harmful misinterpretations, so maintaining an open mind is essential.

Allow Yourself to be Patient

Students will not use all of the resources you provide to them, which is common in most classes. While students need to put in the effort to learn, those with ASD will benefit from repetition, redirection, and strategic support. What works for one student may or may not work the same way for others. Being accepting of this is essential to avoid personal frustration as you are working in the educational environment.

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