



Level 1 ASD/CI

Teaching People with
Cognitive Impairments and
Autism Spectrum Disorder



CANDIDATE WORKBOOK

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Learning Objectives

Understanding Cognitive Impairments and ASD

Teaching Strategies (Fill your toolbox)

- Assessment of Abilities
- Communication
- Behaviour/Motivation
- Kinesthetic Learning

Acknowledgements

The creation of the updated ASD/CI materials was a collaborative effort which accessed knowledge and expertise from CADS Technical Committee members, CADS course conductors, specialists in learning for people with autism and experts in Adult Learning methodologies. We welcome any and all feedback.

We would like to thank the Canucks Autism Network for their contribution and support in developing resources.



Cognitive Impairments

Explore your current knowledge and understanding of cognitive impairment. Don't be afraid of getting it wrong. Take a few minutes to reflect and if you like, record these ideas in the spaces below:



What are some Cognitive Impairments?

What do you think some of the characteristics of these impairments are?

How will this affect a snow sports lesson?

Defining Cognitive Impairments

Quick Notes on Definitions:

Definitions of common Cognitive Impairments are in the CADS Ski instructor manual on pages 156-158 and the CADS SB instructor manual on pages....

Down Syndrome _____

Fragile X Syndrome _____

Learning Disabilities _____

Brain Injury _____

Learning Disability Examples

Example	Difficulty with...
Dyslexia	Reading
Dyscalculia	Math
Dysgraphia	Writing
Dyspraxia	Fine Motor skills
Dysphasia/Aphasia	Language
Auditory Processing Disorder	Distinguishing differences in sound
Visual Processing Disorder	Interpreting visual information

Brain Injury

In the table below, write whether this is a traumatic brain injury (TBI) or a Non Traumatic Brain Injury (NTBI). A Traumatic Brain Injury (TBI) is caused by an external blow to the head. A Non Traumatic Brain Injury (NTBI) is caused by illness, infection or another medical condition.

Condition or Circumstance	TBI or NTBI
Stroke	
Blast Injury	
Illness	
Brain Tumour	
Violence	
Meningitis	
Car Accident	
Concussion	

What's the Difference?

Congenital Disability: A condition existing at or before birth.

Acquired Disability: A condition that developed as a result of an accident or injury during a person's life time.

Tips to Create a Successful Learning Environment for Students with CI

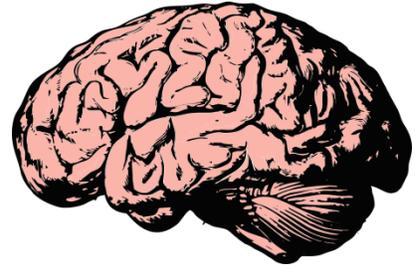
Take time to fill in some examples of how you could use these tips to create a successful learning environment.

Successful Learning Environment Tips	Examples
Create a Positive Relationship	
Clear, Simple and Concise instructions	
Give student time to Process	
Use the Doer and Feeler approach	
Celebrate often with Positive Feedback	

UNDERSTANDING ASD

ASD affects the Brain

Researchers have found visible differences between brain scans of people with ASD and brain scans of people without ASD in specific parts of the brain. Brain activity is actually different for people with ASD. What might look like “BAD BEHAVIOUR” is often just the brain processing information differently and creating atypical reactions and behaviours.



ASD Quick Facts

- Autism Spectrum Disorder – ASD
- ASD is a Neurodevelopmental disorder
- It affects:
 - 1 in 68 children (CDC)
 - 1 in 42 boys
 - 1 in 189 girls
- Nearly 5 x as many boys have ASD
- Across the spectrum there is a variability of intellectual functioning
- People with ASD are all unique and all have individual strengths and challenges.
- ASD occurs across ALL ethnic, racial and socio-economic groups



DSM 5 Diagnostic criteria

From the Diagnostic Statistics Manual 5. - This is the diagnostic criteria used by psychologists and psychiatrists to evaluate individuals.

- A. Persistent deficits in social communication and social interaction across contexts
- B. Restricted, repetitive patterns of behaviour, interests or activities
- C. Symptoms must be present in early childhood
- D. Symptoms together limit and impair everyday functioning.

Observational Activity

The group will be divided into three groups and each group will be given a question to focus on while they are watching *Sesame Street: Meet Julia*.



What are some of Julia's strengths?

What things are challenging for Julia?

What are some tactics used to support Julia?

Challenges associated with ASD – Please use the space below for note-taking.

Social Skills

Communication

Restricted or Repetitive Behaviours

Sensory Sensitivities

Frequently Associated Challenges

Meet Stephen Wiltshire

Watch the short video clip about Stephen Wiltshire, a talented artist with an exceptional memory. Think about what you would like to ask him to make a snowsports lesson more successful.

AOT – Ask, Observe, Test – Assessment of Abilities

Ask Questions, Observe and do Tests to discover information about the student's:
Diagnosis, Balance, Mobility and strength

Specifically for students with ASD and CI

- ✓ Find ways to Connect with your student
- ✓ Determine Best Communication strategies
- ✓ Discover Motivation and Support Strategies
- ✓ Learn about possible Triggers



What are some key questions for the parent/care-giver of a child with ASD or CI?

Communication Strategy Definitions

Talk Less – Do More _____

Use Show and Say strategies _____

Avoid Yes/No questions _____

Give time to Process _____

Match their Communication Style _____

Say it Back to me _____

Communication Activity

You will be given 90 seconds to write down how to tie your shoes in the fewest number of words possible.

Number of words used: _____ Would this be enough information for success? _____

Behaviour/Motivation Strategies

Think about: When could you use this strategy in a snow sports lesson?

How do you adapt this to a snow lesson environment without the physical tool?

Behaviour/Motivation strategies	
First/Then	
Token Boards/Points System	
Countdown Strip	
Timer	
Breaks	
Choices	
Visual schedule	
Video Modelling	
Social Script	
Wait cards	
Stop and Go cards	

Kinesthetic Learning Strategies

Stop and Think:

Why am I using this tool?

What are the safety Concerns?

Adaptive Tools	
Hands-on Technique	
Tethers	
Tip Connectors	
Pole	
Hoop/ski-pal/sno-wing	
Slider and Rider-bar	

Adaptive Tools

Should tools be used as a safety device?

How are tools used to manage fear?

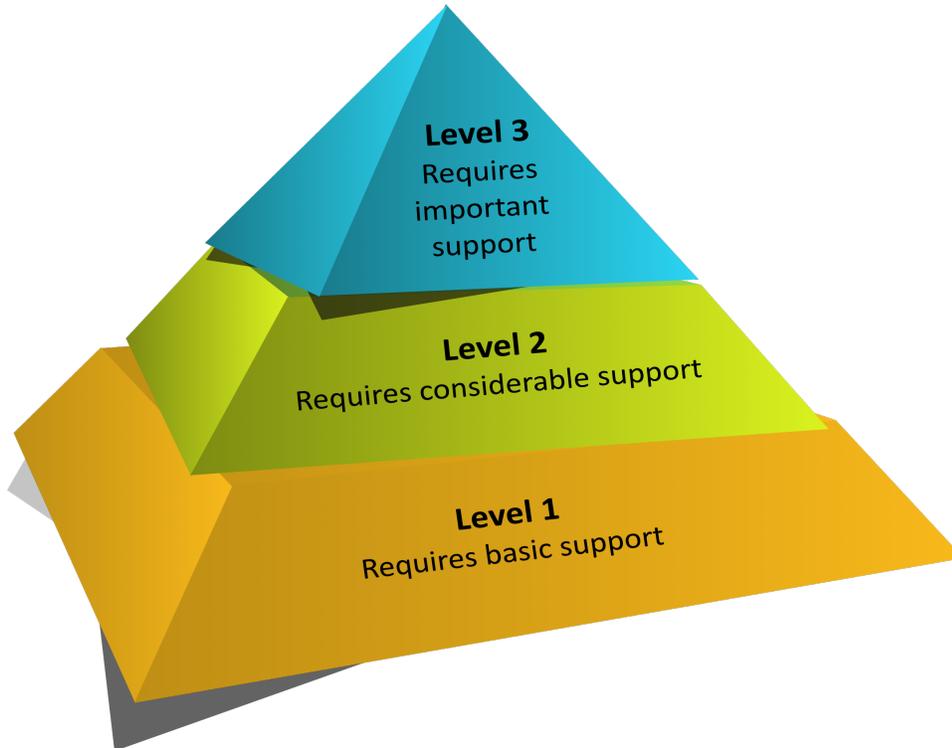
How do we test the success of the tool?

Continue your Learning

ASD Levels of Severity

These are the diagnosis levels in accordance with the DSM 5.

The severity code is a guideline to indicate the amount of support needed for an individual:



ASD – The Diagnosis Umbrella

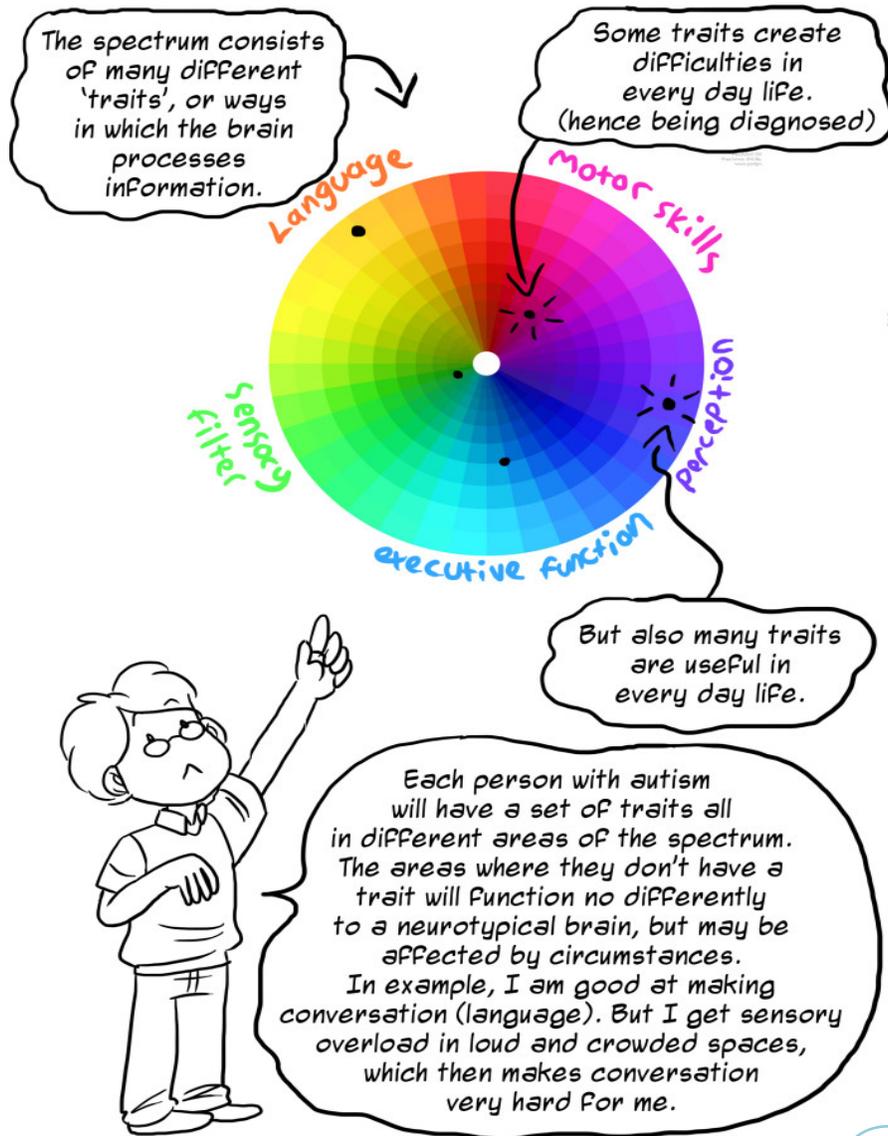
Previous diagnoses are all under the umbrella of the Autism Spectrum Disorder (ASD) diagnosis.

- Asperger's syndrome
- PDD-NOS: Pervasive Developmental Disorder Not Otherwise Specified
- Autistic disorder
- Childhood Disintegrative Disorder



Prior to the release of the Diagnostic Statistics Manual 5 in 2013, there were a number of different diagnoses that no longer exist which now fall under the umbrella of the ASD Diagnosis. These labels are no longer in use, but it is possible you may come across someone who still uses or identifies with one of these labels.

Understanding the Spectrum – A Comic Strip Explanation



"[Stereotyping leads to] underestimating the skills of autistic people or not believing someone [who is on the spectrum]."

Rebecca Burgess
(Understanding the Spectrum – Freelance Comic Artist)



Although it is often assumed that individuals with ASD prefer isolation and low social contact, many people with ASD are intensely aware of their social disconnectedness and appear to wish it could somehow be different (Attwood, Tony, 2000)

Many people with ASD or CI also experience:

- Stereotypes
- Negative perceptions
- Discrimination
- Anxiety/Depression

Children and young people with Learning Disabilities are more likely to experience mental health than the general population (FPLD, 2002; Emerson, 2003; Allington-Smith, 2006)

Glossary of Terms

The ski and snowboard manual both have an extensive glossary of terms related to disability. The following are some additional definitions not included in the manuals.

Adaptive Behaviour/Adaptive Development

Adaptive development is the development of a set of adaptive behaviours or adaptive skills, sometimes referred to as life skills. These are the skills and behaviours needed to perform everyday tasks and get along in the world with the greatest amount of success and least amount of conflict. These skills are what allow adults to live independently in their communities. They include basic living skills such as bathing, cooking, cleaning; using transportation or technological devices; understanding concepts of money and time; understanding interpersonal skills, safety and social responsibility; and how to follow rules, laws, routines and schedules.

Aspergers Syndrome

A diagnosis no longer in use. People with average or above average IQs who have social skills challenges, communication challenges and restricted and repetitive interests.

Atlanto Axial Instability:

A congenital spinal defect in the top two cervical bones, which can only be identified by x-ray. It causes excessive movement between the cervical bones, which can lead to damage of the spinal cord and in extreme cases death. Occurs in approximately 10-25% of individuals with Down Syndrome. Medical clearance is required for students with Down Syndrome before they participate in a high impact sport like skiing or snowboarding to ensure they do not have Atlanto Axial Instability.

Brain Tumor

Collection or mass of abnormal cells in or close to your brain. Many different kinds. May be cancerous or noncancerous. Can disrupt proper brain function and lead to brain damage or be life threatening. May affect everyone differently.

Childhood Disintegrative Disorder

Normal development occurs for the first 3 years of life, then regression happens and there is the presence of features associated with ASD and a severe functional impairment.

Joint hypermobility

Joint hypermobility or loose joints refers to increased flexibility in the joints. This may look like elbows or knees bending backwards or wrists and finger joints bending further than usual.

Low Muscle Tone

Someone with low muscle tone may have fine and gross motor challenges, poor posture and difficulty remaining attentive. To move their muscles requires more energy, so they may tire quickly and give up easily. Many people with low muscle tone also have joint hypermobility.

Meningitis

An infection which causes inflammation of the membranes surrounding the brain and spinal cord. There are several different types which can be mild or severe and life threatening.

PDD-NOS Pervasive Developmental Disorder – Not otherwise specified

A diagnosis no longer in use. Presents like Autism but not as severe an impairment.

Stereotyped Movements

These are physical movements that are repetitive, rhythmic, and may be ritualistic. Examples include body rocking, hand-flapping or prolonged staring at objects, hands or fingers.

Resources

Here are some important and interesting resources to increase your understanding.

- Dear Future mom, world Down Syndrome Day: VIDEO
<https://www.youtube.com/watch?v=Ju-q4OnBtNU>
- Not Special needs, World Down Syndrome Day: VIDEO
<https://www.youtube.com/watch?v=kNMJaXuFuWQ>
- I CAN share My Story Trailer - Canucks Autism Network: VIDEO
<https://www.youtube.com/watch?v=7c4CkwTPMVk>
- What is autism? Scottish Autism: VIDEO
<https://www.youtube.com/watch?v=K7JbMEyPxHs>
- Canucks Autism Network: WEBSITE
<https://www.canucksautism.ca/>
- Understanding the Spectrum - a comic strip explanation (in full): COMIC
<http://the-art-of-autism.com/understanding-the-spectrum-a-comic-strip-explanation/>
- Fact Sheet 17 – Autism and Anxiety: FACTSHEET
http://www.positivepartnerships.com.au/sites/default/files/images/fact-sheet/fact_sheet_17_autism_and_anxiety_feb2017.pdf
- Canucks Autism Network – resources page – visual supports
<https://www.canucksautism.ca/awareness-training/helpful-resources/>