

Autism Spectrum Disorder

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**School of Special
Educational Needs
Disability**



Schools of Special Educational Need

**School of Special
Educational Needs**
Disability



**School of Special
Educational Needs**
Sensory



**School of Special
Educational Needs**
Medical & Mental Health



**School of Special
Educational Needs**
Behaviour & Engagement



Session Outcomes

1. Understanding Autism

2. Assessments ??

3. Interventions ??

Understanding Autism

- 1. What is Autism**
- 2. Diversity in Autism**
- 3. Diagnosis of Autism**
- 4. Autism Facts**
- 5. Females with Autism**

What is Autism?

Autism Spectrum Disorder is a pervasive developmental disorder characterised by severe deficits in social interaction and communication, by an extremely limited range of activities and interests and often by the presence of repetitive, stereotyped behaviours. ASD is defined by a certain set of behaviours that can range from the very mild to the severe.

What is Autism?

- Autism is a **developmental disability**:

It interferes with the typical rate and patterns of childhood development

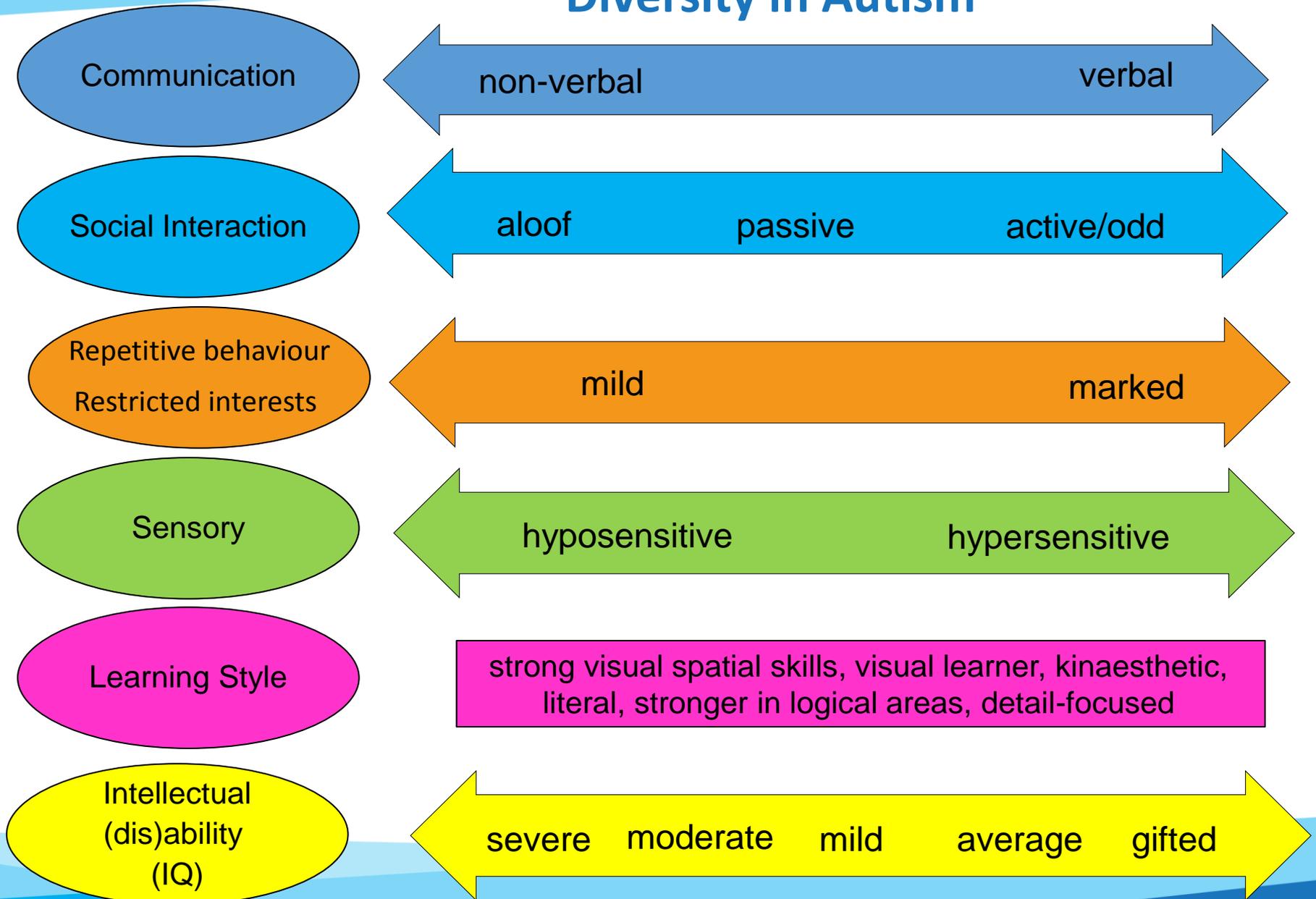
- Autism is a **spectrum disorder**:

There is a great variation in the symptoms and severity of the problems associated with it

- Autism is a **lifelong, neurological disability**:

There is no cure for autism

Diversity in Autism



Diagnosis

DSM-5 AUTISM SPECTRUM DISORDER DIAGNOSIS

PERSISTENT DEFICITS IN SOCIAL COMMUNICATION AND SOCIAL INTERACTION

- Deficits in social-emotional reciprocity
- Deficits in non-verbal communication behaviours used for social interaction
- Deficits in developing and maintaining relationships appropriate to developmental level

RESTRICTED, REPETITIVE PATTERNS OF BEHAVIOUR, INTERESTS AND ACTIVITIES

- Highly restricted fixated interests that are abnormal in intensity or focus
- Excessive adherence to routines or rituals
- Excessive resistance to change
- Stereotyped and repetitive speech, motor movements or use of objects
- Hyper or hypo sensory input or unusual interest in the sensory

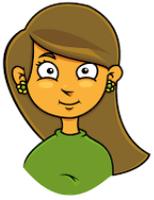
1 Requires Support

2 Requires Substantial Support

3 Requires Very Substantial Support

Facts

- **Reported incidence of Autism Spectrum Disorders: 2015: 1 per 49**
- **Families of all racial, ethnic and social backgrounds anywhere in the world are affected by autism - diagnosed four times more often in boys than girls**
- **Genetic component: 10-20% of families have 2 or more children with an ASD**
- **Bio neurological developmental disability – generally appears before the age of 3 years**
- **Impacts the normal development of the brain in the areas of social interaction, communication, social skills, and cognitive function.**
- **Often have numerous co-morbid medical conditions which may include: allergies, asthma, epilepsy, digestive disorders, persistent viral infections, sensory dysfunction, sleeping disorders and selective mutism.**
- **Some common characteristics in individuals however every person with Autism is different.**
- **Currently there is no cure for ASD, though with good quality evidenced based early intervention the severity of these diverse symptoms related to autism can be reduced**



Females with Autism

Males are four times more likely to be diagnosed with ASD than females.

Research by Autism Spectrum Australia (ASPECT) in 2013 suggests that girls with ASD often present quite differently to boys and therefore may be under diagnosed.

Boys are often more noticeably 'different' or disruptive while girls on the autism spectrum may 'mask' their limitations in social understanding, social communication and social imagination.

Another possible explanation for this difference is that diagnostic tools are based on male traits and characteristics of ASD.

Females with ASD often don't exhibit the same characteristics or traits as males with ASD.



Females with Autism



Impairments in social interaction

- Girls tend to engage in more ‘pretend play’ than boys, but for girls on the autism spectrum this may involve simply imitating or repeating play or social situations they have previously encountered.
- Girls with autism also appear more able to demonstrate complex emotions than boys.

Impairments in communication

- Girls with autism more frequently engage in echolalia than boys and at a young age this may be mistaken as more advanced communication skills.
- Echolalia involves the person repeating what was just said to them.

Females with Autism

Restricted, repetitive and stereotyped patterns of interests, activities and behaviours

- The intense special interests often found in girls with autism (such as animals, celebrities and fiction franchises) tend to more closely align with the 'mainstream' than the corresponding interests of boys with autism.
- Overall, girls may show less repetitive stereotyped behaviour than boys.

Secondary manifestations of autism

- Found that girls with autism exhibited more sleep problems and greater anxiety or depression than boys.
- It is possible that parents and clinicians may fail to recognise sleep problems, anxiety and depression as underlying signs of autism.

Females with Autism



Evidence for why girls may mask ASD traits

- Girls are more able to follow social actions through observation. They may be quicker to apologise and appease when they make a social error, increasing the likelihood of their anomalous behaviour being overlooked or forgotten by others.
- Girls are often more socially aware and socially driven, and so more likely to seek out play and interaction opportunities (whilst often being 'led' by peers rather than initiating activities themselves). They may have one special friend with whom they share an intense, sometimes dependent, relationship.
- As they grow in self-awareness and recognition of their 'differences', girls may take greater pains to avoid drawing attention to themselves, for example by being quiet, well behaved and compliant at school.
- Due to the complex and 'unconventional' presentation of autism in girls and women, there is a greater chance of them being misdiagnosed with conditions such as language delay, anxiety and eating disorders

Characteristics of Autism

- 1. Theory of Mind**
- 2. Executive Functioning**
- 3. Central Coherence**
- 4. Sensory Processing**
- 5. Restricted Flexibility in Behaviour**

Theory of Mind

An innate ability to understand other people as having feeling, intentions and pictures of the world that are not the same as our own.

Simon Baron-Cohen (2001)

Student may have difficulty with:

- Recognising others have intentions, needs and desires that are different from their own
- Understand the effects of their own behaviour (cause and effect)
- Empathising with others
- Understanding deception, cheating outwitting
- Interpreting other's expressions and gestures
- Understanding 'pretend' and differentiating fact from fiction
- Understanding the actions of others
(knowing what someone might do vs. understand/ interpret)



Theory of Impaired Executive Functioning

Refers to the processes that underlie purposeful behaviour such as planning, focus of attention and memory
Duncan (1986)

Student may have difficulty:

- Adapting to changes
- Managing time
- Engaging and then re-engaging if distracted
- Terminating activities and disengaging
- Planning tasks and forward planning, multi-tasking and problem solving
- Organising their environment, self and others
- Seeing problems may have more than one solution – and may revert back to what has worked in the past

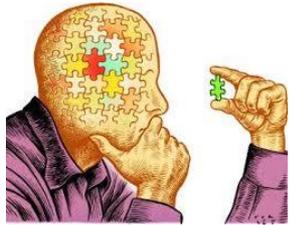


Theory of Weak Central Coherence

...students on the Autism spectrum have difficulty conceptualising to a larger whole. They tend to think in parts and do not relate their pieces of information back to a larger pattern of behaviour and thought.

(Winner 2007)

Student may have difficulty:



- Choosing and prioritising
- Recognising relevant and irrelevant info
- Working out which details are important
- Seeing connections and generalising
- Attending to new tasks
- Taking parts of information and processing it into global meaning to see the big picture
- Dealing with change (insist on sameness)

Sensory Processing



Students with ASD may be overly sensitive (hyper) and/or under sensitive (hypo) to various environmental stimuli.

They may seek or avoid certain sensations including strong smells, intense cold or hot, tastes or may feel very little pain.

For some students these stimuli may generate anxiety and distress and give rise to unexpected behaviours.

While some external stimuli may create anxiety, internal stimuli, generated by behaviours such as flapping, spinning, rocking, pacing etc., may alleviate anxiety.

Restricted flexibility in behaviour and thinking

Restricted, repetitive patterns of behaviour, interest, or activities may be reflected in:



- stereotyped or repetitive motor movements, use of objects, or speech
- inflexible adherence to routines and sameness
- rigid thinking patterns
- restricted or fixated interests that are unusually intense
- hyper or hypo (over or under) reaction to sensory input such as pain, sound, textures, smells, lights or movement

Restricted flexibility in behaviour and thinking

Students with ASD can have difficulty with rules



This can be in understanding the rules, remembering the rules or not having the flexibility to understand when the rules will apply and when they might not be as strictly enforced or not apply at all.

Many students with ASD have developed familiar rules, routines and repetitive activities that they find comforting, whilst changes, disruption and new activities can increase anxiety and cause great distress.

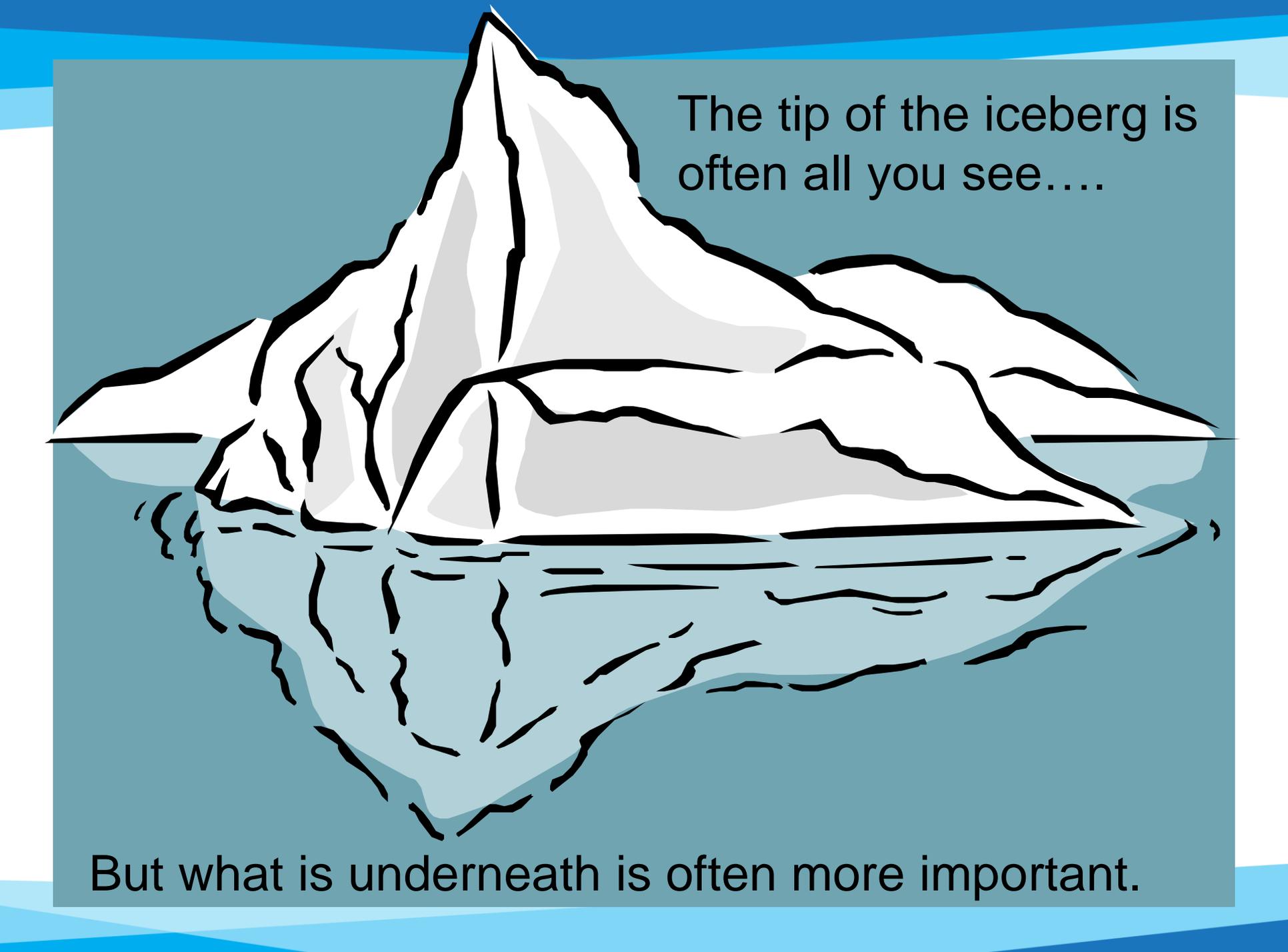
Where change leads to difficult behaviour it is important to understand the underlying reason for the behaviour.

Sheldon and Penny



Activity 2.2 Planning matrix

	Communication	Social interactions	Rigid/repetitive behaviour	Sensory	Information processing/ learning styles
Characteristics					
Impact					
Strategies					



The tip of the iceberg is often all you see....

But what is underneath is often more important.

The Ziggurat Model

(Aspy and Grossman, 2008)

Skills to Teach

Task Demands

Structure and Visual/Tactile Supports

Reinforcement

Sensory and Biological Needs

**UCC-HF
UNDERLYING CHARACTERISTICS CHECKLIST-HIGH FUNCTIONING**

Ruth Appy, Ph.D., and Barry G. Gorman, Ph.D.

NAME: _____ DATE: _____ COMPLETED BY: _____
FOLLOW-UP DATE: _____ COMPLETED BY: _____

INSTRUCTIONS FOR COMPLETING INITIAL ASSESSMENT:

The UCC may be completed by an individual; however, the perspective of others who know and/or work with the person of focus is beneficial. Working as a team is optimal. Additionally, the team may include the individual who is the focus of the UCC as developmentally appropriate.

Each item describes behaviors or characteristics that may be exhibited by individuals with autism spectrum disorders. Please place a check beside ALL items that currently apply to the individual. Use the Notes column to describe the behavior and characteristics in more detail, provide specific examples, or indicate frequency, settings, etc.

Projected Follow-up date: _____

Area	Item	✓	Notes	Follow-Up
SOCIAL	1. Has difficulty recognizing the feelings and thoughts of others (emotions/feelings)	✓	<ul style="list-style-type: none"> Does not recognize when someone says or "let her go" After being corrected at home, she repeatedly asks her parents if they are still angry In role plays, she can accurately identify the feelings of others 4 out of 10 times 	
	2. Uses poor eye contact			
	3. Has difficulty maintaining personal space; physically intrudes on others	✓	<ul style="list-style-type: none"> Seeks peer's hair 	

INSTRUCTIONS FOR FOLLOW-UP ASSESSMENT:

Review checked and unchecked items. Use the Notes column to add further description or to indicate changes if items no longer apply, write through the check and explain changes in the follow-up column, as illustrated below.

Area	Item	✓	Notes	Follow-Up
SOCIAL	1. Has difficulty recognizing the feelings and thoughts of others (emotions/feelings)	✓	<ul style="list-style-type: none"> Does not recognize when someone says or "let her go" After being corrected at home, she repeatedly asks her parents if they are still angry In role plays, she can accurately identify the feelings of others 4 out of 10 times 	<ul style="list-style-type: none"> Accurately reported that she was being teased last week In role plays, she can now accurately identify others' feelings 6 out of 10 times
	2. Uses poor eye contact			
	3. Has difficulty maintaining personal space; physically intrudes on others	✗	<ul style="list-style-type: none"> Seeks peer's hair 	<ul style="list-style-type: none"> No longer seeks others; follows rules for respecting personal space of others

Underlying Characteristics Checklist

Individual Strengths and Skills Inventory

Ruth Appy, Ph.D., and Barry G. Gorman, Ph.D.

When designing an effective intervention plan, it is important to consider individual strengths. Please describe strengths in the following areas:

Social _____

Behavior, Interests, and Activities _____

Communication _____

Sensory _____

Cognitive _____

Motor _____

Emotional _____

Biological _____

From Appy, R., & Gorman, B. G. (2011). *The Ziggurat Model*. Shaneson Ministries, KS: AAC/Publishing. www.aacpublishing.net, used with permission.

Ziggurat Worksheet

BEHAVIOR/AREAS OF CONCERN	FOR SPECIFIC INTERVENTION PLAN (Operationalized Behaviors)	SELECTED UCC ITEMS	CHECK ALL THAT APPLY		
			A	B	C
 Sensory and Biological	Sensory and Biological Intervention:	# # # # # # # #			
	Underlying Characteristics Addressed:				
 Reinforcement	Reinforcement Intervention:				
	Underlying Characteristics Addressed:				
 Structure & Visual/Tactile Supports	Structure & Visual/Tactile Support Intervention:				
	Underlying Characteristics Addressed:				
 Task Demands	Task Demand Intervention:				
	Underlying Characteristics Addressed:				
 Skills to Teach	Skill Intervention:				
	Underlying Characteristics Addressed:				

From Appy, R., & Gorman, B. G. (2011). *The Ziggurat Model*. Shaneson Ministries, KS: AAC/Publishing. www.aacpublishing.net, used with permission.

Sensory and Biological Needs

Skills to Teach

Task Demands

Structure and Visual/Tactile Supports

Reinforcement

Sensory and Biological Needs

“The field of ASD has known for many years that the sensory processing systems of people with ASD are unusual (Schopler, 1966). We see people with very unusual food preferences, people who spend their time watching their fingers flick, or rubbing textures against their cheeks, or listening to unusual sounds very close to their ears so that they can feel the vibrations.”

Mesibov, G., Shea, V., & Schopler, E. (2004)

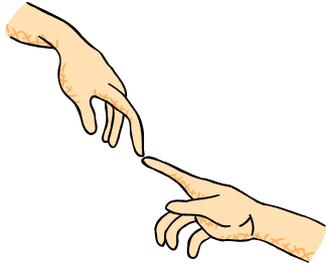
Sensory Differences

Sensory differences are not included as core symptoms of Autism, but can result in some of the greatest challenges for individuals on the spectrum, including:

- Anxiety
- Distractibility
- Over-activity
- Impulsivity
- Perseveration (a tendency to repeat the response to an experience in later situations where it is not appropriate)
- Delayed receptive and expressive language skills
- Poor social skill development
- Poor eye contact

(Aspy & Grossman, 2008)

The Sensory Systems



Touch

Tactile System



Sight

Visual System



Smell

Olfactory System



Taste/Oral Motor

Gustatory System



Hearing

Auditory System



Movement and Balance

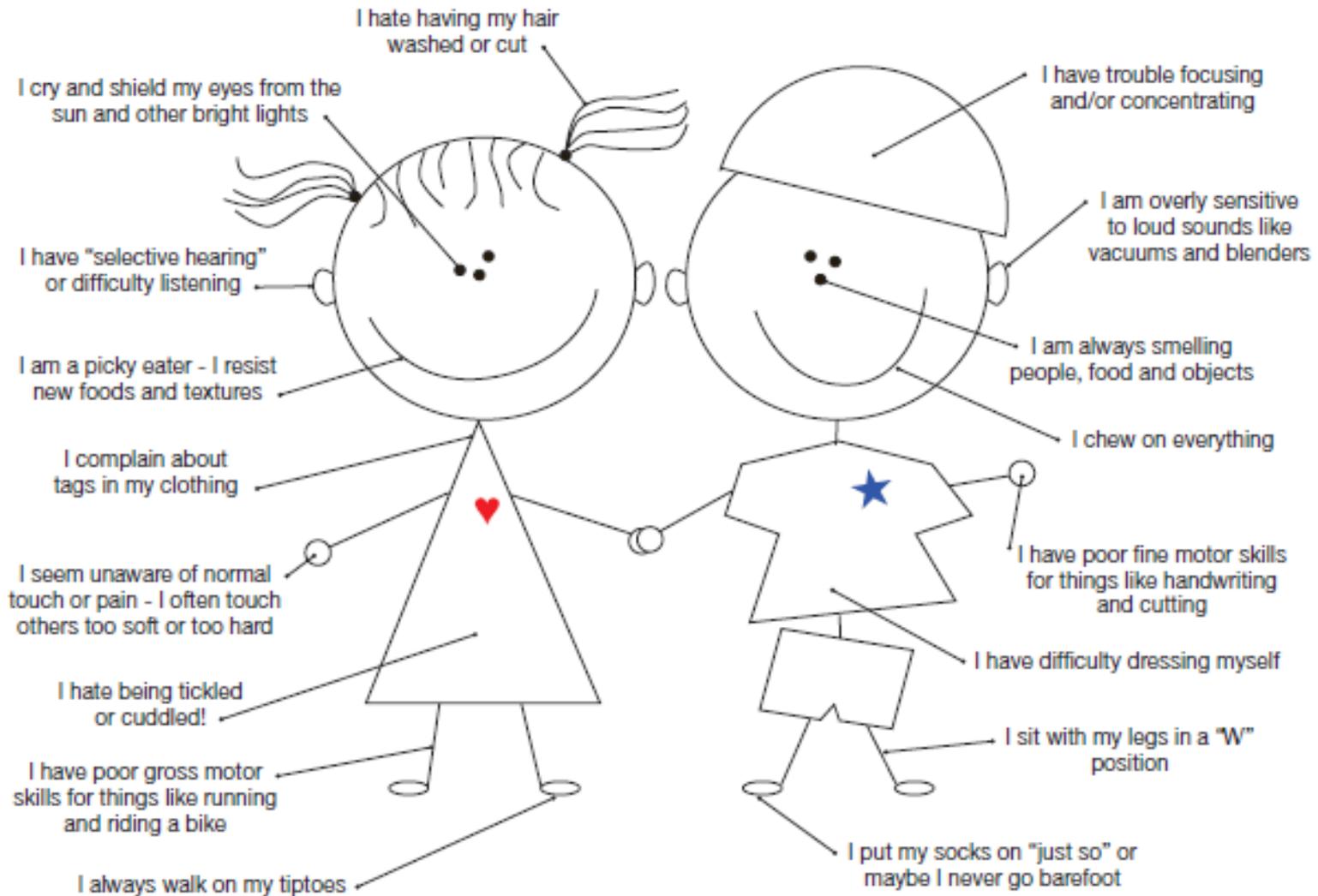
Vestibular System



Body Awareness

Proprioceptive System

DO YOU KNOW ME?



Addressing Sensory Dysfunction

- Determine the needs – hyper / hypo
- The sensory diet must be specific to the individual and planned from a sensory profile (with advice from an OT)
- Needs met = ready for learning
- Structured sensory breaks are timetabled
- Create opportunity throughout the day to engage in sensory breaks
- Heavy work activities work well

Sensory Diet

- A planned and scheduled activity program designed to meet the child's specific sensory needs
- Incorporate naturally occurring opportunities for children to get the sensory stimulation they need
- Interventions need to occur in **ALL** of the individual's environments

NOTE: Assessments must be completed and interventions must be supervised by a trained Occupational Therapist.

However, classroom teachers and EA's can be trained to implement the PLAN on a daily basis.

Addressing sensory differences at school



4 Levels of Breaks

Level 1:

Continue to participate in activity while receiving support (tactile support, deep pressure, give information about when task will be finished)



Level 2:

Disengaging attention while physically remaining at activity (book, fidget toy). Prompting for participation or requests for attention are not made.



Level 3:

Allow to leave activity while remaining in physical context such as classroom.



Level 4:

Leave the immediate environment to engage in a regulating activity



Biological Considerations

A person who is overwhelmed, in pain or hungry can not respond to an otherwise excellent intervention plan...

- **Pharmacotherapy**
- **Hunger**
- **Pain**
- **Fatigue**
- **Illness**
- **Nutrition**

Assessments

To ensure students on the autism spectrum are included and succeed in school, it is important that those working with them are aware of their individual interests, abilities and learning and support needs.



Assessment is an ongoing process and should be used both to assist in the planning process, and to evaluate the effectiveness of the strategies used to support students.

Some of the information collected will also be used in consultation with families and any external agencies which may be involved.

The Process of Assessments

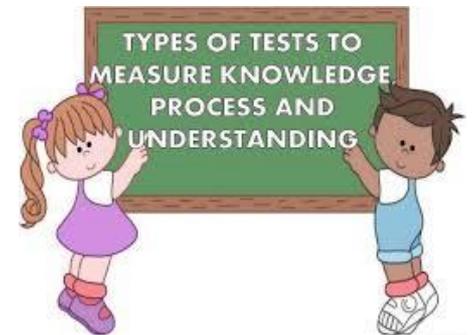
Students on the autism spectrum, like all students, come from diverse cultural, linguistic and socio-economic backgrounds.

They come to school with different skill sets and experiences.

Teachers use a variety of assessments to analyse and evaluate how each student in their class is progressing with learning.

The types of assessment that teachers use to assess learning include:

- **Input from the student and their family**
- **Criterion based curriculum assessment**
- **Curriculum based assessment**
- **Student work samples**
- **Observation**
- **Teacher professional judgement**



The Process of Assessments

For students on the autism spectrum additional assessment approaches may be needed

This may include student's strengths and needs in:

- participation and interaction in group situations
- responding to and engaging in different types of learning activities
- perceptual differences
- sensory differences
- flexibility of thought
- social imagination
- social relationships
- communication - expressive and receptive



The Process of Assessments



It is important to assess how the student functions both within the classroom and the wider school environment.

It is not enough to focus only on 'within student' factors.

Assessment of the school environment provides understanding of the situations and triggers that may result in increased student anxiety and/or difficult behaviour.

This can include:

- **Predictability of the environment**
 - **How ASD friendly the school is**
- **Peer groups and staff member interactions**
- **Physical environment and sensory impacts**

The Process of Assessments

Child's name: _____ Date: _____

	HOW DOES YOUR CHILD?	WHY ARE YOU WORRIED?	WHO/WHAT CAN HELP?
Communicate			
Socialise			
Behave			
Cope (sensory)			
Learn			
Take care of self			

supporting school age students on the autism spectrum
 Australian Government Department of Education and Training
 peac Partnerships between Education and the Autism Community
Autism Spectrum Australia (Aspect) Autism SA Autism Queensland Flinders University SA www.positivepartnerships.com.au

Visual Planning Matrix



supporting school age students on the autism spectrum

Planning Matrix

Name: _____

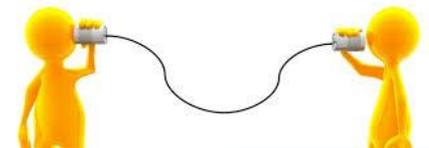
Date: _____

	Communication	Social Interaction	Repetitive Behaviours and Restricted Interests	Sensory Processing	Information Processing / Learning Style
Characteristics	1.	1.	1.	1.	1.
	2.	2.	2.	2.	2.
Impacts	1.	1.	1.	1.	1.
	2.	2.	2.	2.	2.
Strategies	1.	1.	1.	1.	1.
	2.	2.	2.	2.	2.

Assessing Communication

Does the student have:

- Difficulty with the production of sounds (articulation)
- Voice problems (tone, pitch)
- Fluency problems
- Difficulty understanding spoken or written language (receptive language)
- Difficulty expressing themselves to communicate (expressive language)
- Dyspraxia or severe phonological disorders
- Pragmatics or social language –understanding and using the social conventions to interact with others



Assessing Communication

A student on the autism spectrum may experience difficulty with one or more of the following areas of language and communication

Assess if the student has difficulty with:

- Vocabulary
- Formulating sentences
- Using grammatical structures
- Understanding concepts
- Following directions
- Using language in unfamiliar or new situations
- Talking fluently on a wide range of topics
- Using variation in tone when speaking
- Interpreting non-verbal forms of communication such as gestures, facial expressions, use of eye contact and posture
- Interpreting tone and volume of voice
- Understanding conversation rules such as turn taking and staying on topic
- Understanding metaphor, jokes, sarcasm and other abstract language
- Understanding the meaning of language



Assessing Social Interactions

Schools are social environments where it is necessary to interact with a large number of people in different contexts.



After considering these skills, priority should be given to teaching those skills which will most assist the student in their everyday interactions

Assessing Social Interactions

Does the student

- **Misinterpret the behaviour of others**
- **Respond inappropriately, make personal comments, borrow equipment without asking, follow their peers inappropriately**
- **Appear socially isolated, disinterested**
- **Actively seek social interaction but in unusual ways**
- **Have difficulty making and maintaining friendships**
- **Lack understanding of the social rules of interaction**
- **Exhibit distress and anxiety when peers act unpredictably**



Assessing Social Interactions

Does the student show age appropriate social skills, such as:

- Accepting responsibility for their own behaviour
- Asking questions appropriately
- Saying please and thank you
- Taking turns
- Seeking attention in an appropriate manner
- Following directions
- Asking permission first
- Asking for help appropriately
- Accepting consequences for choices



Assessing Social Interactions



How does the student deal with feelings?

- **Resolve conflict with assertion rather than aggression**
- **Cope with taunts and verbal/physical threats/aggression from others**
- **Deal with losing/frustration/making a mistake/insults in an appropriate manner**
- **Stay calm with others**
- **Show awareness of own and others feelings**
- **Deal with anger and frustration**



Assessing Social Interactions

Does the student show age appropriate conversational skills:

- Joining a group activity already in progress
- Complimenting others
- Initiating conversation with others
- Staying on topic
- Talking to adults, peers and younger children appropriately
- Greeting family, friends and others appropriately
- Respecting personal space
- Taking turns speaking
- Approaching others in socially acceptable ways
- Understanding body language



Assessing Social Interactions



Does the student need help in:

- **Grooming and hygiene?**
- **Appropriate use of social media?**
- **Work place skills?**
- **Skills for dating and relationships?**



Assessing Social Imagination

Social imagination allows us to understand and predict the behaviour of other people.

In assessing social imagination, identify whether the student can:

- Attempt new work and accept that they will make mistakes or not know everything at the beginning.
- Accept that other people may not be interested in their special interest
- Plan, sequence, prioritise and organise
- Engage in imaginative play and activities with new scenes and endings
- Engage in activities requiring imagination
- Cope in new or unfamiliar situations
- Cope with changes in routine
- Anticipate what is likely to happen next
- Understand the thoughts, feelings, motivations and actions of other people



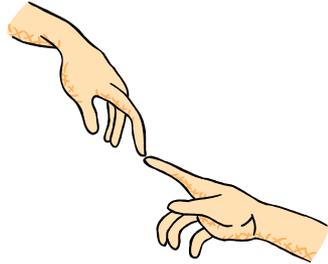
Assessing Flexibility in Behaviour and Thought

Consider the extent to which the student:

- Sticks rigidly to established routines e.g. always wanting to go through the same sequences of actions in the same places
- Has difficulty generalising skills from one setting or context to another
- Has difficulties in understanding the concept of danger
- Has strong areas of interest in specific topics to the exclusion of other general knowledge
- Has strong rote memory skills and prefers subjects that focus on facts and figures
- Has difficulty thinking, writing or playing creatively (role playing, making up a new ending, creative rather than factual writing)
- Has an obsession with mechanical objects and how they work e.g. motors, engines, trains, watches
- Can prepare for change and plan for the future

Assessing Sensory Processing

Hyper and Hypo-Sensitivities



Touch

Tactile System



Sight

Visual System



Smell

Olfactory System



Taste/Oral Motor

Gustatory System



Hearing

Auditory System



Body Awareness

Proprioceptive System



Movement and Balance

Vestibular System

Over or hyper-sensitive

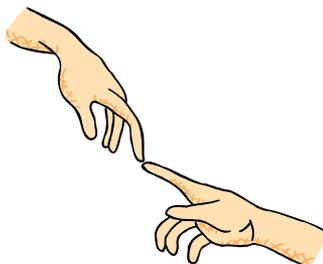
Does the student:

- dislike certain clothing or fabrics
- resist getting hands messy
- dislike wearing hats
- resist hugs and kisses
- dislike light touch

Under or hypo-sensitive

Does the student?

- need strong touch to respond
- try to handle or touch everything
- insist on holding an object
- touch too forcefully
- crave touch or be clingy



Touch

Tactile System

Over or hyper-sensitive

Does the student:

- find many common tastes and smells repulsive
- become overwhelmed by everyday smells
- gag or vomit easily
- dislike many common foods



Smell

Olfactory System

Under or hypo-sensitive

Does the student?

- tend to smell or taste everything
- seek out strong smells and tastes
- identify people and objects by their smells
- put inappropriate objects in their mouth, smell everything or lick things



Taste/Oral Motor

Gustatory System

Over or hyper-sensitive

Does the student:

- react emotionally to unexpected movement
- resist movement activities
- get dizzy and nauseous with simple movement
- feel a strong need to sit or keep feet on the ground

Under or hypo-sensitive

Does the student?

- move constantly
- crave movement - rocking, climbing, falling or spinning
- show lack of fear or impulsivity without regard for safety
- rarely get dizzy
- have difficulty sitting still



Movement and Balance

Vestibular System

Over or hyper-sensitive

Does the student:

- place their body in strange positions
- have difficulty manipulating small objects (e.g. buttons)
- turn their whole body to look at something

Under or hypo-sensitive

Is the student?

- unaware of body position in space
- awkward and clumsy
- floppy with poor muscle tone
- constantly pushing, pulling, banging, crashing



Body Awareness

Proprioceptive System

Over or hyper-sensitive

Is the student:

- sensitive to loud noises
- hearing frequencies that others cannot hear
- distracted by background noises
- agitated in large noisy groups

Under or hypo-sensitive

Does the student?

- speak loudly
- turn volume up loud
- hum or make vocal noises constantly
- enjoy objects or activities that have distinct sounds



Over or hyper-sensitive

Does the student:

- have sensitivity to bright lights, sunlight and/or certain colours
- have acute vision
- have an aversion to direct eye contact
- squint or look with peripheral vision

Under or hypo-sensitive

Does the student?

- fixate visually on a moving object
- seek intense visual stimulation such as bright lights
- enjoy turning lights on and off
- love mirrors, shiny objects or reflective surfaces



Sight

Visual System

Assessing Perceptual Difference

Perceptual difficulties do not describe problems with eyesight or hearing but the brain's ability to make sense of and understand what is seen and heard.



Perceptual difficulties can hinder a student's ability to analyse and make sense of the information that they take in through their eyes and ears.

These visual and auditory processing difficulties will affect a student's ability to analyse and make sense of the world.

Assessing Perceptual Difference

Does the student have difficulty:

- With left and right, in, out, on, under, next to
- Differentiating between or reversing letters such as d and b
- Planning and organising objects for an activity
- Completing puzzles, dot to dots, partially drawn pictures
- Keeping their place on a page
- Sequencing numbers or letters
- Copying work from one place to another
- Sorting and organizing personal belongings
- Filtering out visual distractions
- Finding a specific item in a cluttered desk
- With hidden picture activities
- Remembering sight words
- Matching shoes or socks

perception





Assessing Behaviour



Difficult behaviours can be managed by understanding and changing antecedents where possible.

More appropriate behaviours can be taught that will continue to meet the student's needs.

When students display difficult behaviours an analysis of the consequents often reveals that they are being inadvertently positively reinforced for their behaviour.

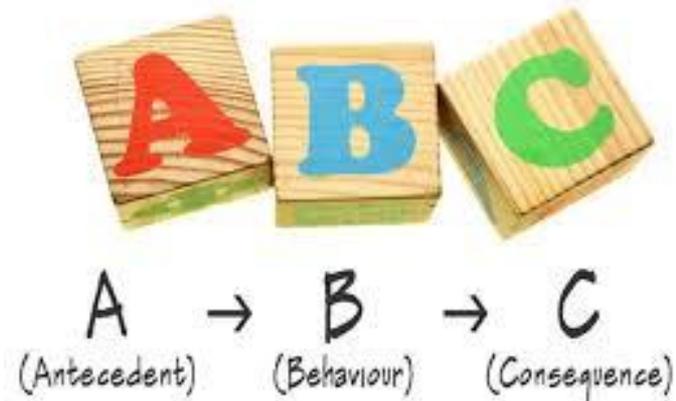
This is particularly true for older students where the reaction of the peer group to the student's behaviour is often more important to them than the response of their teachers.

A-B-C Analysis

An A-B-C analysis can assist in assessing the behaviour of concern

It involves the analysis of the following three elements in a sequence of behaviour

Antecedents, Behaviour, Consequence



A-B-C Analysis

Antecedents

Antecedents are the events, situations or actions that occur before a specific behaviour.

Careful observation can help to assess if there are specific triggers that increase the likelihood of the difficult behaviour occurring.

Observe and assess:

1. **Where was the student before the behaviour (environment)?**
2. **When did the behaviour occur (day and time of day)?**
3. **What was the activity or situation?**
4. **Who was there?**

In contrast, setting events, also known as precipitating factors, typically have some distance/time between them and the behaviour.

These events can occur at home or elsewhere but may trigger the behaviour in school.

Setting events can be difficult to control but awareness of them may help to pre-empt further difficulties.

A-B-C Analysis

Antecedents

Consider if any of the following may be a setting event or antecedent for a student which will lead to challenging behaviours

Physical wellbeing

- medication problems
- when the student is tired
- chronic health or pain
- hunger

Environment and routines

- change to routine
- routine interrupted
- new routine or activity
- change in staff or caregivers

Learning and self-regulation

- learning difficulties
- difficult or new learning activity
- frustration or anger
- poor organisation by family or student
- non-typical sensory needs

Social and emotional

- irritable, anxious or depressed
- in trouble earlier at home or previously at school
- fought, argued or was bullied at an earlier time
- changes to living arrangements
- relationship difficulties within the student's peer, school or family group
- trauma experienced by the student or someone close to them

A-B-C Analysis

Behaviour

This is a description of the behaviour itself based on observation.

Consider whether the behaviour is problematic and if there is more than one problematic behaviour. Prioritise which to address first.

When describing a behaviour ..

- **be specific**
- **be accurate**
- **state what the student actually does or says (their actions - not their intent, emotional state or possible motives)**
- **avoid judgemental language**



EG. 'Darren banged his hands on his desk' rather than 'Darren showed anger'



A-B-C Analysis



Consequence

Consequences are the events that immediately follow a behaviour, in contrast to the longer term consequences.

It is the immediate consequence which normally impact on behaviour rather than the long term consequences.

The impact of consequences are important because if they are positive the student is likely to continue the behaviour.

What each student perceives as positive or negative consequence will differ.

Specific behaviour

Shouting out rude comments to other children while moving around the school

Possible reasons:

- Trying to communicate – mimicking other children – but getting it wrong
- Student actually enjoys the attention they get through their behaviour
- Experiencing ‘sensory overload’
- Anxiety/Confusion in an unstructured setting
- Lacking social interaction skills
- Anxiety about change (of lesson)
- Anxiety about crowds
- Over-sensitive to activity
- Over-sensitive to noise
- Inappropriate reaction to others
- Unaware of others’ feelings
- Unaware of social rules

Assessing the Physical Environment

The main principles to consider are how clearly space is defined for particular activities, and how free work areas are from distraction.

A cluttered, noisy environment will inevitably generate problems.

For all students you should be satisfied that:

- The room layout is appropriate for the age group with suitable furniture
- There are areas specifically laid out for particular activities e.g. mat time, rewards, work
- There is adequate storage, including provision for students to store their own belongings
- The room has a welcoming feel and is comfortable to work in



Assessing the Physical Environment

Specifically for learners on the Autism Spectrum:

- Are there clearly defined areas where individual students can work without distraction or interference?
- Are any other work areas clear and suitably arranged for the activities in question?
- Is it clear what activities are to happen in a given area?
- Is it clear where any necessary equipment is located?
- Are there helpful displays which will help to guide activity?
- Is there any signage which might confuse?
- Is the physical environment appropriate to the sensory/perceptual profile of the student e.g. lighting, noise levels, background noise etc?

Assessing the Need for Adjustment

Does the student require assistance with :

- **Physical environment**
- **Teaching and Learning**
- **Assessment Tasks**
- **Relationships and Interactions**
- **Transitions**
- **Communicating effectively**
- **Personal organisation**



Assessing the School Environment

In your school and classroom are there times where student anxiety might be increased because of changes to:



timetables
lesson structure
playground activities and routines
staff
friendship groups
classroom layout
the student's desk or belongings
transition routines
rules
expectations (especially during assessments)



Other Factors to Consider

Other factors might include:

- independent living skills
- health and wellbeing
- independent travel
- social safety awareness
- sex education and relationships
- fine motor skills
- gross motor skills
- concentration difficulties
- other needs



Interventions



Developing Communication Skills

Effectively teaching social communication skills means providing a motivating context or situation that is:

Socially interactive and requires participation at some level
Providing many opportunities for communication
Developmentally appropriate to the student

Effective Communication can be achieved through the student and the adult using a variety of modes including:

Direct physical contact – taking a person's hand or pushing an object away
Gestures – pointing or looking at the person
Vocalisation or speaking – making noises
Signing including AUSLAN (Australian Sign Language)
Using objects – handing a person a cup for drink
Using photos to identify needs and wants
Pictorial – drawings
Written language

Augmentative and Alternative Communication Systems (AAC)



Unaided communication systems

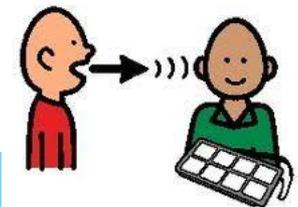
Facial expressions, gestures, mime, key word signing, AUSLAN

Low technology systems

Communication boards, books and objects, photographs, switches, written words

High Technology Systems

Electronic communication aids, computers and specialised software

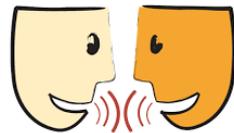


Face to Face Communication

When communicating with students with ASD it is important to be at their level.

Establish eye contact as an acknowledgment that you are beginning to communicate, but don't insist it continuing

Many students with ASD are confused by the way in which pronouns are used, particularly the word 'you' which they may interoperate as referring to the speaking rather than to themselves.



Teacher Language

Use language literally and avoid use of figurative language.

Language needs to be used clearly and simply

It is good practice to use the student's name initially to gain their attention, and as part of an instruction to avoid confusion

Use language as a series of verbal prompts to achieve the behaviour you are seeking

For example

Don't say :

“ Stop playing with that equipment Dave it's time to go home and the taxi is waiting”

Do say:

“Craig – taxi”



Developing Social Relationship Skills

Social interaction is often an area of significant difficulty for students with ASD.

Difficulty in understanding the perspective of others – **the lack of a “Theory of Mind”** – makes social interaction and the formation of friendships particularly challenging.

As a result, many students with ASD will need explicit and regular teaching of social and friendship skills through modelled, guided and independent practice.

This teaching may be required at each stage of development.



Developing Social Relationship Skills



Developing Social Relationship Skills

Circle of Friends

Circle of Friends is an approach that is used to support students with a wide range of needs and can be used to support students with ASD to develop their social and relationship skills.

It involves establishing a group of 6 to 8 students, drawn from the student's class, who meet together with the student, supervised by an adult facilitator.

The aim is to:

- reach a mutual understanding of the social challenges facing the student
- create a support network for the student, both in and out of school
- provide the student with encouragement and recognition for progress
- work together with the student on identified difficulties and possible solutions and to put these into practice



Developing Social Relationship Skills

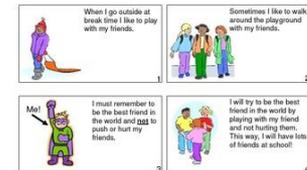
Social Stories

- to provide positive feedback to a child so that s/he can recognise their own appropriate skills and behaviour (affirming stories)
- to help prepare for a new experience
- to help a child accustom themselves to a situation and to respond appropriately
- to help prevent extreme reactions which stem from a lack of social understanding and difficulty with imagination

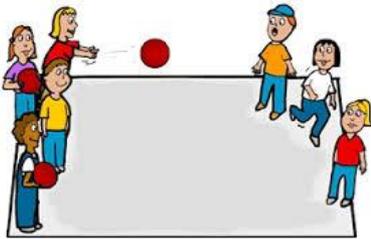
Features of Social Stories

- written for an individual about a situation s/he finds difficult
- based on careful assessment
- use writing suited to the language and vocabulary levels of the child
- written in the first person and present or future tense
- Social stories have been used with students with autism both to support social relationships, and to tackle specific behaviour problems.
- Being language based the evidence suggests that social stories are more effective with those students with better language comprehension.

Being a friend



Developing Social Relationship Skills



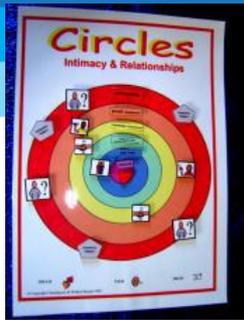
Team Games



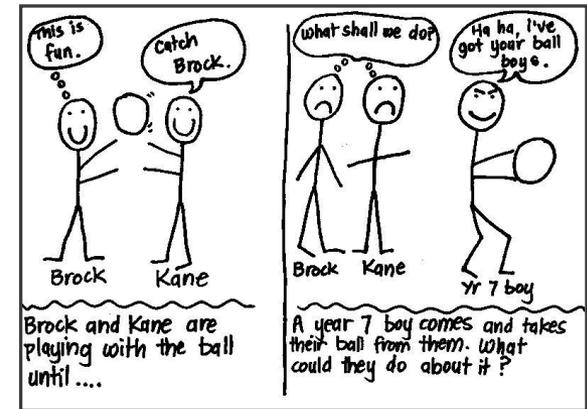
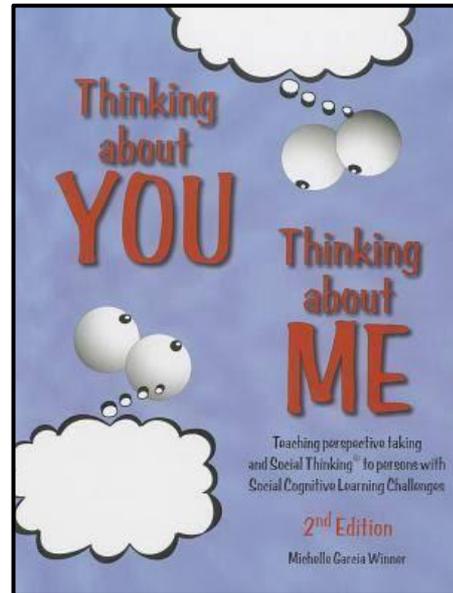
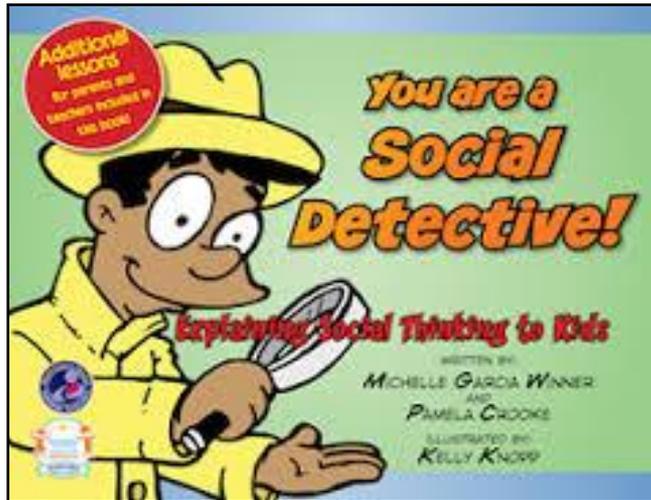
Team games may be problematic due to difficulties with the team element but also because some students may have an aversion to physical contact or may indulge in inappropriate physical contact.

However team games and sport can be used to build social relationships by using this context as an opportunity:

- for explicit teaching of social skills - rehearsal first
- to practice skills in pairs
- for further practice of skills in small groups and then the whole class with support



Socialisation

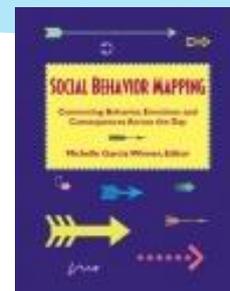


socialthinking.com

jillkuzuma.wordpress.com



Social Behaviour Mapping



- Tools of Social Thinking
- Offers cognitive behaviour strategy to teach individuals about the specific relationship between behaviors, others' perspectives, others' actions (consequences) and the student's own emotions about those around him or her
- Most effective for students with solid language skills
- Teach how our own behaviors, expected and unexpected, impact how others feel about us, ultimately treat us which then affects how we feel about ourselves
- Expected Behaviors are the ones that help a student learn and be seen in a positive light by his peers and educators.
- Unexpected behaviors are those that cause a student to be perceived as inappropriate by peers and may cause frustration to those who try to support them.

Supporting Flexible Thinking

Students with ASD often learn and use information in chunks and may require support to link the chunks and details together into a coherent whole.

They may become immersed in whatever specific 'chunk' they are focusing on and find it difficult or impossible to link this to the other elements in the setting.

This difficulty in perceiving the whole can lead to problems dealing with tasks which involve a sequence of actions.

Getting to a particular place at the right time with the correct books and equipment can be difficult, or recognising what is needed to do a specific task and the process from starting to successful completion.

This is seen as a deficit in executive functioning, or more commonly as 'organisational difficulties'.



Supporting Flexible Thinking

Successful completion of a sequential task involves:

- recognising what is needed to carry out a specific task and the processes involved from starting the task to completing the task
- understanding cause and effect, sequencing and using working memory
- being able to plan ahead and predict possible outcomes from actions



Supporting Flexible Thinking

Strategies which help students could include:

- linking what the student already knows, or is interested in, to what needs to be learned, thereby supporting comprehension
- breaking down a task into small steps - rather like a recipe: these are the ingredients needed, the utensils and appliances; then step 1...The student also needs to know what the finished product (successful outcome) looks like
- increasing physical participation using gesture, actions and role play
- incorporating special interests to increase motivation and engagement
- offering choice boards and using timers
- explicitly teaching students how to request help or clarification
- providing visual structures that demonstrate routines and sequences to support the student's understanding about transitions from one task or place to another
- providing shorter, intense activities with movement breaks to increase engagement in learning tasks

Supporting Sensory and Perceptual Difficulties

Sensory differences may lead to behavioural challenges for students at school, home and in the community.



Teachers and other staff supporting students with ASD need to:

- be very aware of the learning environment and what changes may be necessary
- have planned and prepared for potential problematic situations involving sensory stimulation, especially, but not limited to, noise, smells and touch
- have adjustments in place that could involve positive sensory experiences

Supporting Sensory and Perceptual Difficulties

Consider the following strategies where appropriate or if the learner demonstrates specific needs

- introduce activities to support the development of the vestibular system: throwing and catching balls, walking on balance beams
- break down all gross and fine motor activities into smaller, manageable tasks with visual cues for the completion of the activity, such as a STOP sign or FINISH line
- teach the concept of personal space by modelling appropriate distances. E.g. use an arm's length as a rule
- teach how to navigate around different spaces and obstructions in the learning environment, e.g. use coloured tape for boundaries



Movement and Balance
Vestibular System



Body Awareness
Proprioceptive System

Supporting Sensory and Perceptual Difficulties

Consider the following strategies where appropriate or if the learner demonstrates

- tell the student what to expect before going to noisy or crowded places
- provide ear plugs or headphones
- design a screened learning area in the classroom that enables the student to be away from some sources of noise and unwanted visual stimulation
- reduce some external sounds by shutting doors and windows

Sight



Visual System

Hearing



Auditory System

Supporting Sensory and Perceptual Difficulties

Some students with ASD may limit themselves to either fairly bland or very strong tasting foods.

Teachers should be aware of these dietary differences and collaborate with parents/carers to ensure that a balanced diet is in place.



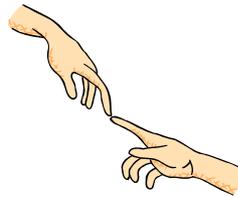
Taste/Oral Motor

Gustatory System

Supporting Sensory and Perceptual Difficulties

Consider the following strategies where appropriate or if the learner demonstrates

- gradually introduce different textures to the student to touch and experience
- parents can consider turning clothes inside out, removing seams or tags or labels
- allow the student to wear clothes that they are comfortable in where possible



Touch

Tactile System

Supporting Sensory and Perceptual Difficulties

Consider the following strategies where appropriate or if the learner demonstrates

- establish which smells are likely to provoke a negative reaction
- reduce strong odours as much as possible
- use unscented liquids in the classroom
- you may need to make the learning environment as odour-free as possible.



Smell

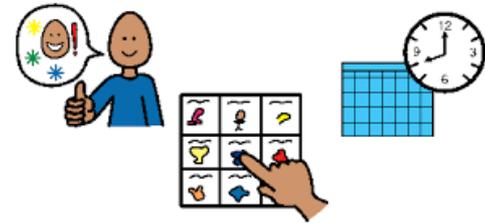
Olfactory System

Using Visuals and Other Prompts

A prompt is a cue given to a student to help them respond in a particular way.

Prompts can be:

- Visual
- Auditory
- Gestural
- Physical
- Verbal



It is important to remember that verbal directions are momentary but visuals can be there as long as they are needed.

For this reason they must be actively used as part of an explicit teaching model by both teacher and student.

Visual information can be referred to as often as needed and this allows for longer processing time

Developing an ASD Friendly Learning Environment

General strategies which might be employed include:

- providing visual structure
- using rule-based activities
- less reliance on teacher talk
- explicitly teaching the rules of social contact
- giving plenty of warning of changes to routine
- providing support for play, and other unstructured times
- establishing regular routines and planning in advance for change
- managing classroom noise levels in order to avoid unnecessary anxiety
- providing opportunities to practice dealing with the unexpected to build resilience



Developing an ASD Friendly Learning Environment

Having explicit class rules such as:

- 1. Listen when others are talking**
- 2. Follow directions from the teacher**
- 3. Work quietly and do not disturb others**
- 4. Keep hands, feet and objects to yourself**



Supporting Transitions

It is important to remember that:

Children with ASD prefer regular routines and may resist change.

Difficulties with organisation and sequencing means problems can arise when changing rooms and activities and locations

As a result plenty of warning should be given to changes to routine

Transition from one learning environment to another needs very careful management for students with ASD.

Transition can include beginning school, a change of school, a change of teacher, a change of class or even a change of subject



Supporting Transitions

Transition from primary to secondary schooling is a time of uncertainty for many students, but it can be particularly difficult for students with ASD.

Considering which strategies have worked and adapting these to a new setting is an important aspect of transition planning when a student is moving schools for any reason.

This should include the student, parent/carer and staff and this shared learning should be central to any transition arrangements.

It is important to involve the student in deciding how best to provide them with support.

Giving the student the opportunity to be part of the process will contribute to a positive transition.

Student reviews should give students the opportunity to feedback on the support arrangements and the adjustments being used.

Supporting Transitions

Planning meetings are necessary to plan for a student's specific needs as they transition from one school setting to another.

The most appropriate forum for these meetings is the school's learning and support team which should include, where appropriate the:

- *classroom and learning and support teacher*
- *stage supervisor or year advisor*
- *the school's educational psychologist*
- *other professionals as required*



Supporting Transitions

The development of a transition plans enables schools to effectively:

- identify what personalised learning and support a student may require at each transition point
- inform any individualised adjustments they may need
- support a student with disability and additional learning needs to access stage appropriate curriculum outcomes



Curriculum Adjustments in the Classroom

If students cannot learn the way we teach, can we teach the way they learn?

Some students, who have a disability or additional learning needs, will require adjustments to their stage appropriate teaching and learning programs and to assessment tasks, to enable them to demonstrate their knowledge and skills.

These adjustments should be:

- Intuitive
- Founded on good practice
- Based on a sound knowledge of the specific needs of their students
- The result of a desire to meet the full range of student needs

Developing Resilience and Coping Skills

Some possible strategies include:

Have realistic expectations

Model appropriate coping strategies

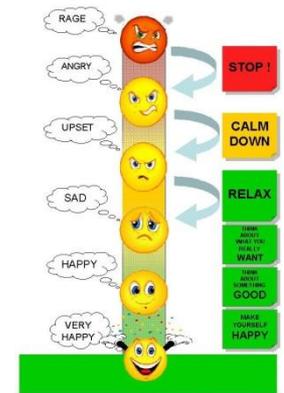
Have a break out area or activities

Explicitly teach the student how to ask for help or request

Use a feelings thermometer

Provide sensory calming activities where appropriate

Teach and support self-regulation every day



Self Regulation

- a person's ability to do what needs to be done to achieve the optimal state for any given situation

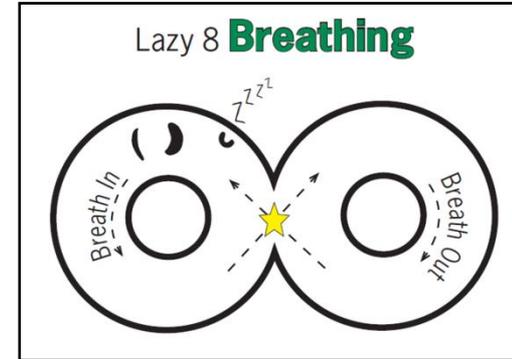
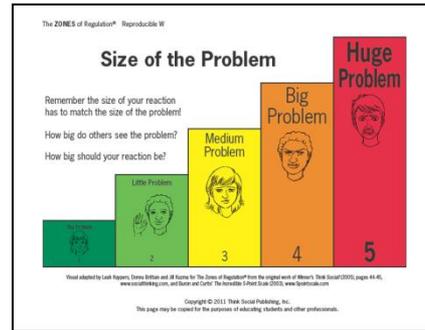
Three neurological components :

- Sensory processing
- Executive functioning
- Emotional regulation

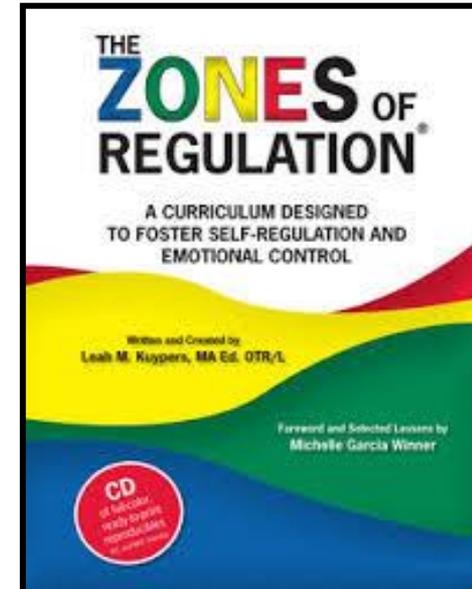
Students often act out because they **DON'T KNOW HOW** to make better choices.

We need to **TEACH** them :

- To recognise their emotions
- Tools to help to calm themselves
- Gain skills in their ability to think about others
- Figure out what social expectations are in any given setting
- To learn self control, self management, anger control and impulse control



	How I feel!	What I can do
5	Panic has set in!	See my teacher. Take a 2 minute walk in the room.
4	I know this stuff but I can't remember.	STOP. Put down my pencil. Put head down and breathe for 30-60 seconds.
3	This test is so hard!	Breathe and try to relax.
2	Okay-I have questions I might double check.	Slow down! Read carefully and look for things I know.
1	Calm- I know this	Keep going!



Developing Collaboration Between Home and School

Collaborative partnerships within the school and with parents/carers are fundamental in improving outcomes for students with ASD by:

- enabling parents to convey their unique views and understandings of their child's needs
- positively improving the student's perception of school because their parents and teachers are working together to support them
- encouraging consistent expectations at home and at school
- increasing parental understanding of their child's schooling
- providing a depth of knowledge and understanding about each student



Developing Collaboration Between Home and School

Schools are effective in developing and maintaining collaborative partnerships with families when:

- school leaders champion inclusive practices
- staff work collaboratively
- staff recognise and understand the importance and benefits of collaborative practice
- staff have the skills and resources to facilitate collaboration



Keep things as predictable as possible.

Welcome different ways of communicating with others (sign language, using pictures, using gestures).

Even if an individual with autism isn't looking directly at you, still talk to them, they are often still listening to what you are saying

Give lots of warnings before changes are going to occur.

Teach how to behave in certain situations (e.g. library = quiet).

Allow time to take breaks if things become too overly stimulating.

Keep in mind that a person with autism has trouble reading body language and social cues, be patient and understanding

An individual with autism may take things very literally and ask a lot of questions about what you say. Be careful about jokes

Do not ask the same question over and over again (3 attempt rule). If you ask a question more than once, keep the phrasing the same

Allow take up time - they might need extra time to process things that are said to them, or directions that are given

Try to make questions that you ask individuals with autism or information that you give them as specific and direct as possible. Broad/vague questions will be difficult.

Please assist by signing the registration form

Thank you

Contact Details

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