

The Neuro-Divergent Classroom

Associated Medical Conditions/Associated Challenges:

- Epilepsy
- Autism
- GI disorders
- Feeding Issues
- Sleep disturbances
- ADHD
- Anxiety
- OCD
- Down Syndrome
- Tuberous Sclerosis
- Mental Health Issues
 - Schizophrenia
 - Bi-polar
 - Behavioral/Emotional Disabilities

- Est. 40% of autistic are nonverbal
- 31% of children w/ASD also have an intellectual disability
- ½ of those with ASD wander or bolt from safety
- Nearly 28% of 8 years olds w/ASD have self-injurious behaviors
- Drowning remains a leading cause of death for children with ASD and accounts for 90% of deaths associated with wandering or bolting by those age 14 and younger

3 Options for Adaptive Catechesis:

1. Mainstream -
2. Individual Instruction -
3. Special Programming -

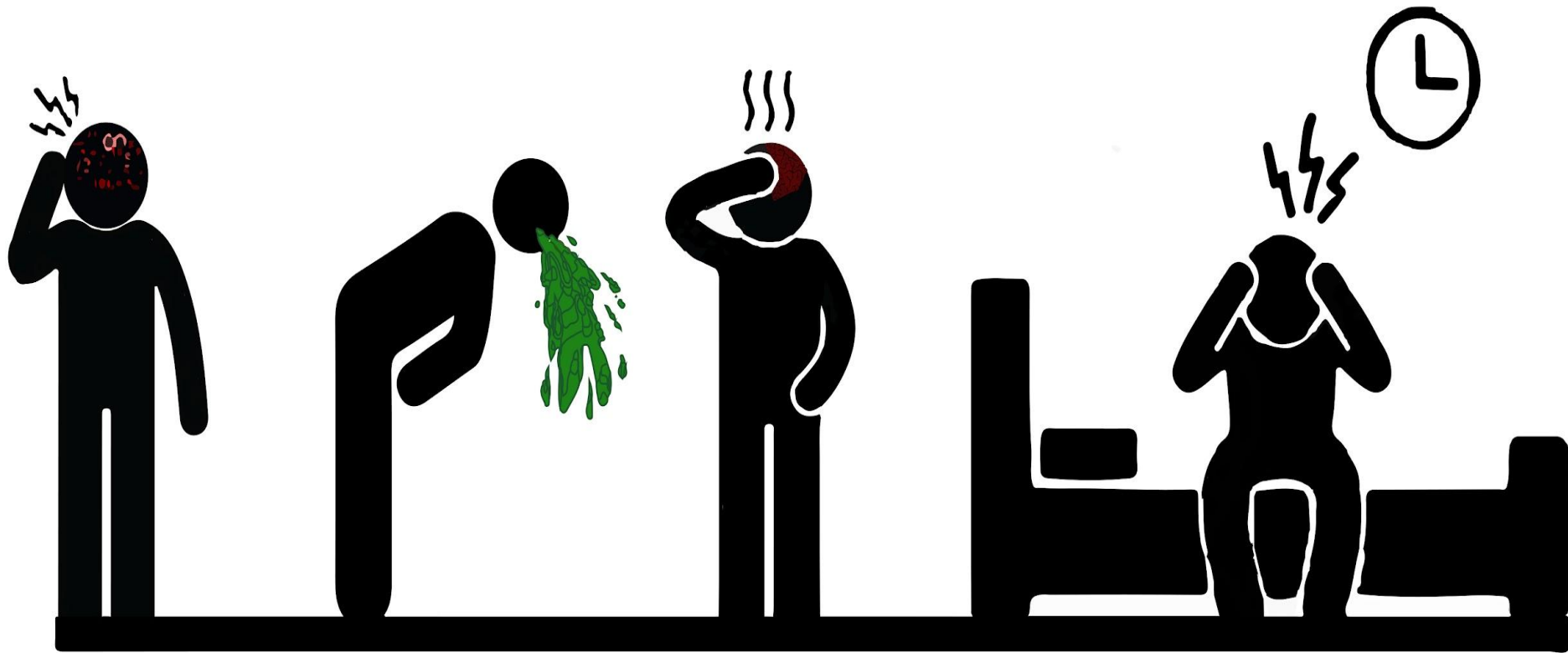
Things to keep in mind....

From the Handbook for Adaptive Catechesis by Michele E. Chronister, MA



ANXIETY

Excessively worried, fatigued, restless, takes a long time to do something, panics



Hyperactivity

Disinhibition



Disorganization

Forgetfulness

distractedness

Inattention

Impulsive

3 Types of ADHD

1. **Predominantly Hyperactive/Impulsive ADHD** – (once called ADD) is a subtype of attention deficit hyperactivity disorder that often manifests as limited attention span, distractibility, forgetfulness, or procrastination.
2. **Predominantly Inattentive ADHD** – lack of focus and attention are the primary symptoms, not hyperactivity
3. **Combined Type ADHD** – when inattention, hyperactivity, and impulsivity go hand-in-hand

Those with ADHD focus internally to excess.

It's as if their regulator is broken, and they can't refocus on the next idea but stay stuck on the previous one.

How can we help?

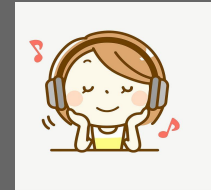
- Prompt them to reflect on the current subject. Use questions or prompts i.e. What does this remind you of? What personal experience have you had that relates to this topic?
- Set a timer for a reasonable amount of minutes.
- Give them an outline of the class, Adding graphic organizers or visual representations for auditory input
- There needs to be a physical manifestation of her thinking: a short paragraph, a mind map, structured notes, or a 3D representation for each questions made with playdoh or legos.
- Post expected learning outcomes



External Attention Factors

You can't take everything out of the classroom but what can you modify?

- Put colored filters over lights
- Use headphones with white noise or nature sounds
- Have physical activities during breaks
- Frequent short breaks
- Play bilateral music
- Close the door



How do you make a memory?

Encoding/Input: When you hear, see, feel, smell, or touch something and then you put it in your brain to store. Types: Auditory, Visual, Tactile and all 3 together.

Storing: This is how you retain information. It goes from encoding to working memory to long term memory.

Retrieving: How you remember information. Types:

A. Recall (instant - i.e. 2x2); Recollection (when you bring together pieces of information - *i.e. what happened at your wedding or a family occasion*)

B. Recognition when you identify specific information by comparing what you see with what you've stored - *i.e. recognize a face of someone you haven't seen for a while.*

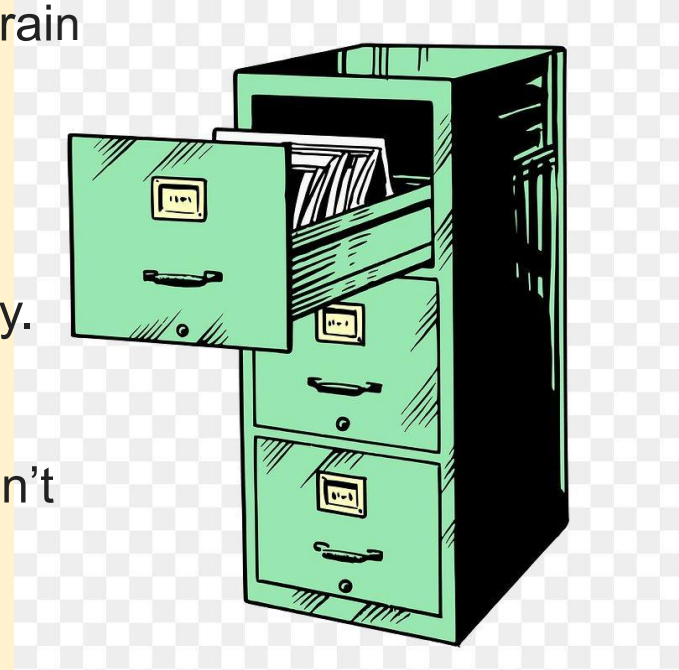
Long term memory: the storage component. i.e. it's like storing new info on your hard drive but have to remember what you labeled it to find it again. It is strengthened by relevance and emotion.

Why do those with ADD forget? Struggle with memory.

Input issue: Information never found its way to the brain

Processing: The information went into the brain but may it not have been really understood it so it didn't get put in the right folder. So it's not stored successfully.

Output: The information went in, it was stored but can't remember the password to get back in.



- *Draw to illustrate (convert words into pictures)
- *Emotional Connection;
- *Multisensory input
- *Repeat new information again and again
- *Recite
- *Review immediately
- *Condense the information into key words and write it down
- *Require mastery before going on
- *Mnemonics-imagination, association and location *
- *Role play- acting out a scenario;
- *Typically we remember the beginning and end so study the middle
- *Visualize - pictures stick better than words
- *Underline or highlight key points



**How can
we help
memory
issues?**



What is Autism???

Autism is a Spectrum Disorder (ASD)

Autism is known as a “spectrum” disorder because **there is wide variation in the type and severity of symptoms people experience**

- Each person has a distinct set of strengths and challenges
- The way each autistic person learns, thinks and problem solves can range from highly skilled to severely challenged.
- Each person with ASD’s daily living skills can also vary - ranges from lots of support to independent living



At any age



What to look for in a young child with autism?

- May show unreasonable fears to new situations
 - Resists or become upset not only with changes to daily routine but also changes in furniture placement
 - Have difficulty showing appropriate fear toward strangers
 - Has trouble with imaginative play
 - Have sometimes aggressive behavior
 - Make loud repetitive noises
 - Trouble walking correctly - often will walk on their toes or the balls of their feet
 - Have limited responses to pain or changes in temperature
 - Can be self abusive
 - Not all children with autism show all the signs. Many who don't have autism show a few.
-
- Loss of previously acquired speech, babbling or social skills
 - Persistent preference for solitude
 - Delayed language development
 - Difficulty understanding other people's feelings
 - Echolalia: Persistent repetition of words or phrases
 - Restricted interests
 - Repetitive behaviors (flapping, rocking, spinning, etc.) Sometimes this is they way they comfort themselves in new situations

Signs of High-Functioning Autism



Difficulty with social communication & interaction



Hypersensitivity to sensory "assaults"



Extreme focus on specific topic of interest



Difficulty with changes in routines



Challenges with empathy



Engaging in stereotype, repetitive behaviors

Thinking styles in Autistic People

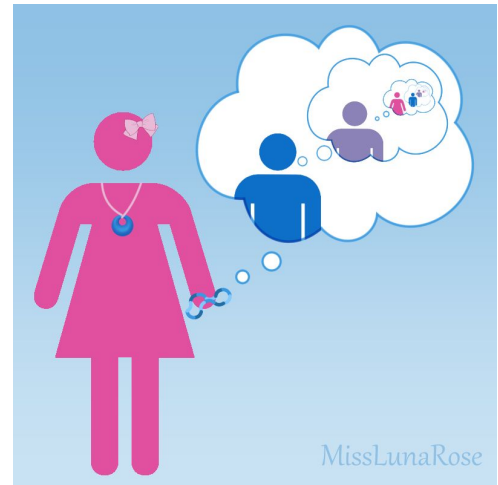
by Marin Silverant at Embrace Autism

Visual Thinkers = think in pictures and see things - either in the mind or physically to process information. Visual thinkers may have a photographic memory. I.e. Temple Grandin

Verbal/logic Thinkers = tend to be good at learning languages, and have an affinity for words, literature, and speech. They love to make lists, and will often memorize (mundane) things i.e. Packer schedules, timetables & routes, etc.

Music and math (“pattern) thinkers = tend to find meaningful patterns in both meaningful and meaningless data. Think of a composer who works toward a pattern that is musically/mathematically sound when creating music. Some find that geometry can describe chords, rhythms, scales, etc.

<https://www.youtube.com/watch?v=UKhg68QJlo0>



Bottom-up, analytical, lateral, and associative thinkers

Bottom up thinking - a process of taking in details and building up from there. They take in the details then come up with the concept. I.e Temple Grandin with her designs. Most people are the opposite - we gather from our prior knowledge.

Top down thinker - sees a set of symptoms and fits it into a prior box. Since an autistic person is constantly bombarded with sensory information in multiple ways they can process a greater amount of information.

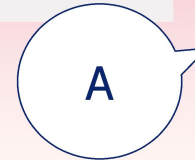
Associative thinker = Where one concept connects to another

Analytical thinkers = autistic people tend to reason in a more logically consistent manner than neurotypicals.

Lateral thinkers = autistic people tend to be excellent problem solvers; 40% faster at it.

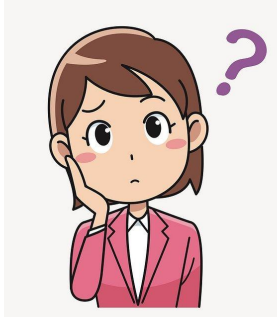
I.e. Temple Grandin references her ability to design equipment for the cattle industry and her ability to test run it in her imagination similar to a virtual reality computer program. Another example, to form the concept of "orange" she sees many different orange objects - oranges, pumpkins, orange juice and marmalade.

A	AA
AA	AA
AAA	AA
AAAA	AA
AA AA	AA
AA AA	AA
AA	AAAA
AA	AAA
AA	AA



Behavioral Disabilities

- An inability to learn that cannot be explained by intellectual, sensory or health factors.
- An inability to build or maintain satisfactory interpersonal relationships with peers and teachers
- Inappropriate types of behaviors or feelings under normal circumstances.
- A general pervasive mood of unhappiness or depression.
- A tendency to develop physical symptoms or fears associated with personal or school problems.”(Code of Federal Regulations, Title 34, Section 300.7(c)(4)(ii)



For a person with an emotional disturbance, you facilitate learning in the following ways:

1. Be sure you clearly state and discuss the rules with the participant, as well as the participants parents or caregivers.
2. Focus on what you want the participants to do, rather than what you do not want them to do.
(For example, say “Please walk: instead of “Don’t run.”
3. Be sure the participants and his/her parents or caregivers clearly understand the consequences for inappropriate behaviorsj and displays of emotion.
4. Ask the parents or caregivers what consequences they apply when a behavior/action occurs at home, school.

9 REASONS TO USE VISUALS

www.northstarpaths.com

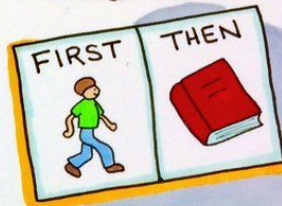
@kwiens62



- VISUALS ARE PERMANENT
(SPOKEN WORDS DISAPPEAR)



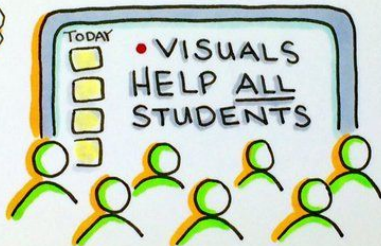
- VISUALS ALLOW TIME
FOR LANGUAGE PROCESSING



- VISUALS PREPARE
STUDENTS FOR TRANSITIONS



- VISUALS HELP KIDS
SEE WHAT YOU MEAN



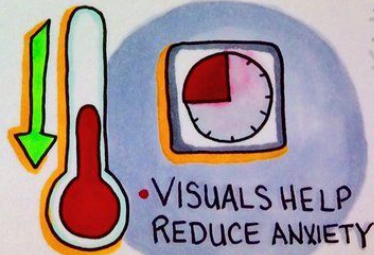
- VISUALS HAVE NO ATTITUDE
• NO TONE • NO FRUSTRATION
• NO DISAPPROVAL



- VISUALS HELP
BUILD INDEPENDENCE



- VISUALS ARE TRANSFERABLE
BETWEEN ENVIRONMENTS
AND PEOPLE



- VISUALS HELP
REDUCE ANXIETY

When writing the lesson, and prepping for class are we teaching from multiple learning styles?

THE 7 STYLES OF LEARNING

VISUAL (SPATIAL):

You prefer using pictures, images, and spatial understanding.

- Use images, pictures, color and other visual media to help you learn
- Use color, layout, and spatial organization in your associations, and use many 'visual words' in your assertions.
- Use mind maps
- Replace words with pictures, and use color to highlight major and minor links

AURAL (AUDITORY-MUSICAL):

You prefer using sound and music.

- Use sound, rhyme, and music in your learning
- Use sound recordings to provide a background and help you get into visualizations
- When creating mnemonics or acrostics, make the most of rhythm and rhyme, or set them to a jingle or part of a song
- If you have some particular music or song that makes you want to 'take on the world,' play it back and anchor your emotions and state.

VERBAL (LINGUISTIC):

You prefer using words, both in speech and writing.

- Try the techniques that involve speaking and writing
- Make the most of the word-based techniques such as assertions and scripting
- Record your scripts using a tape or digital audio recorder (such as an MP3 player), and use it later for reviews
- When you read content aloud, make it dramatic and varied
- Try working with others and using role-playing to learn verbal exchanges such as negotiations, sales or radio calls

PHYSICAL (KINESTHETIC)

You prefer using your body, hands and sense of touch.

- Focus on the sensations you would expect in each scenario
- For assertions and scripting, describe the physical feelings of your actions.
- Use physical objects as much as possible
- Keep in mind as well that writing and drawing diagrams are physical activities
- Use role-playing, either singularly or with someone else, to practice skills and behaviors

SOLITARY (INTRAPERSONAL):

You prefer to work alone and use self-study.

- You prefer to learn alone using self-study
- Align your goals and objectives with personal beliefs and values
Create a personal interest in your topics
- When you associate and visualize, highlight what you would be thinking and feeling at the time
- You drive yourself by the way you see yourself internally
- Modeling is a powerful technique for you
- Be creative with role-playing
- Your thoughts have a large influence on your performance and often safety

SOCIAL (INTERPERSONAL):

You prefer to learn in groups or with other people.

- Aim to work with others as much as possible
- Role-playing is a technique that works well with others, whether its one on one or with a group of people
- Work on some of your associations and visualizations with other people
- Try sharing your key assertions with others
- Working in groups to practice behaviors or procedures help you understand how to deal with variations

LOGICAL (MATHEMATICAL)

You prefer using logic, reasoning and systems.

- Aim to understand the reasons behind your content and skills
- Create and use lists by extracting key points from your material
- Remember association often works well when it is illogical and irrational
- Highlight your ability to pick up systems and procedures easily
- Systems thinking helps you understand the bigger picture
- You may find it challenging to change existing behaviors or habits
 - If you often focus from analysis paralysis, write 'Do It Now' in big letters on some signs or post-it notes



Help them to learn basic skills like the ones here by modeling them.

How could other students or an aide in the classroom help here?

Would teaching these skills to a class from a Catholic point of view like a virtue?

Pragmatic Skills

1. Maintaining eye-contact
 - While attending to the speaker
 - While answering questions
 - While commenting
2. Social greetings
 - Responding to greetings
 - What's up?
 - How are you?
 - Initiating greetings
 - Hello/Goodbye
 - What's your name?
3. Conversation starters
 - Excuse me, but...
 - I would like to tell your about...
 - Can you help me with...
4. Wait your turn to speak
 - During lecture time
 - In conversations
5. Giving others a chance to speak
 - Share a personal experience or comment on a topic
 - Ask a peer a question about the topic
 - Wait for the speaker to finish before adding to the conversation
6. Topic maintenance
 - Only talk about one topic at a time
7. Ask questions when confused
 - Ask questions related to the lesson
 - Ask questions while conversing with peers
8. Terminating conversations
 - See you tomorrow
 - See ya later
 - I have to go now
 - Bye

Time Out

by: Sasha Hallagan

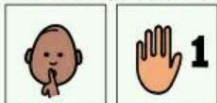
© Communication
by Meyer-Johnson
Rights Reserved
Schwide. Used with
Boardmaker™ is a
Meyer-Johnson LLC.



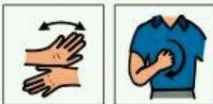
I had bad behavior and I got a time out.



What should I do in a time out? I should not yell, talk, or run away.



I will sit quietly and wait. I will not talk or ask when my time out is finished.



An adult will tell me when my time out is finished, I need to say sorry. I can leave time out now.



If I have good behavior in time out it will go fast. I need to keep having good behavior so I don't have another time out.

What is a Social Story?

Social stories help autistic children understand social situations, actions, and emotions. They also help children practice self-care techniques and safety skills.

Be careful of an *Emotional Shutdown*

Don't Blame them! We don't want to shut them down. Stop the negativity. Be patient and put yourself in their situation.

Instead:

*Provide supports (checklists, visual reminders, phone calls, alarm clocks, sticky notes, or nonverbal communications)

*Search out opportunities for them to shine: Let them become an expert at something.

*Help them to keep track of when they are successful: Data chart.



“Learn that not only do we have something to give to these individuals, but they truly have much to give to us.”



Called & Chosen - Working with Neurodivergent students in the classroom

Christina Spindler, Director of Journey

cspindler@wbparishes.org

262-338-2366

Check out our website: Journeyprogram.org

A ministry of the Catholic Parishes of Washington County that Educates and Empowers those with Special Needs in their Faith

FAITH * SERVICE * COMMUNITY