









# **Autism Spectrum Disorders**

### Learning

- Current research
- Putting a definition to autism

### Understanding

Areas of challenge and common characteristics

### Supporting

Strategies and best practices









### Autism



#### A few words of wisdom before we start:

- "If you've met one person with autism, you've met one person with autism."
  - Dr. Stephen Shore
- "I am different. Not less."
  - Temple Grandin
- "(So-called) mild autism doesn't mean one experiences autism mildly...It means YOU experience their autism mildly. You may not know how hard they've had to work to get to the level they are."
  - Adam Walton
- "This is a FOREVER journey with this creative, funny, highly intelligent, aggressive, impulsive, nonsocial, behavioral, often times loving individual."
  - Parent of a child with Autism









#### Learning about autism

- Current Research (2020)



- Effects an estimated 1 in 54 children in the U.S.
  - 1:34 Boys
  - 1:144 Girls
- Autism Spectrum Disorder (ASD) is an umbrella diagnosis that includes:
  - Asperger Syndrome
  - Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS)
  - Autistic Disorder
  - Childhood Disintegrative Disorder







- Current Research





- Signs/characteristics of autism emerge as early as 6 to 12 months
- Can be reliably diagnosed as early as age 2
- But the average age of diagnosis is typically after the age of 4
  - With minority groups tending to be diagnosed later and less often



#### **IMPORTANT**

**Early diagnosis** and **early intervention** afford the best opportunity to support healthy development and deliver benefits across the lifespan.





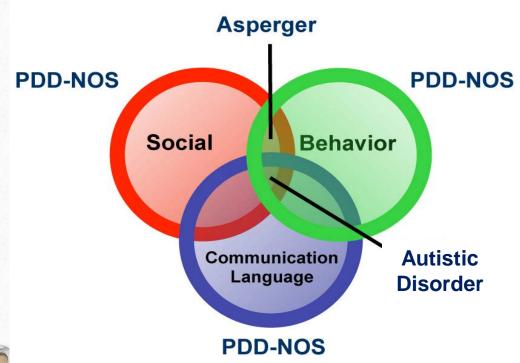






- A spectrum disorder

SPECTRUM means it will affect individuals differently and with varying levels of severity



# **Autism Spectrum Disorders**

#### **PDD-NOS**

Impaired Social Interaction

#### or

Impaired Communication

#### or

Restricted repetitive and stereotyped patterns or behaviors, interests and activities

#### **Autistic Disorder**

Impaired Social Interaction

#### and

Impaired Communication

#### and

Restricted repetitive and stereotyped patterns or behaviors, interests and activities

#### Asperger's Syndrome

Impaired Social Interaction

#### and

#### **Normal**

Communication/language development

#### and

Restricted repetitive and stereotyped patterns or behaviors, interests and activities

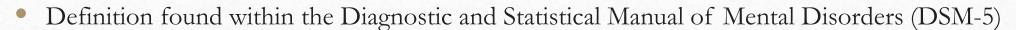






#### - Defining Autism





- Requires a comprehensive diagnostic evaluation conducted by a qualified healthcare professional (e.g., Child Psychiatrist, Child Neurologist, Developmental Pediatrician, etc.)
- Educational Determination of Eligibility
  - Criteria found within the Individuals with Disabilities Education Act (IDEA)
    - Each state has their own specific criteria to determine if a child is eligible for special education services under the category of autism
  - Autism specific testing is performed by a licensed school psychologist and/or autism specialist



A school DOES NOT diagnose a child with autism

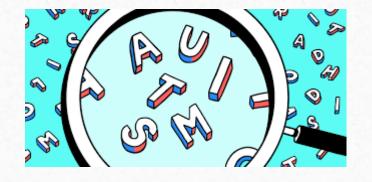






#### - Medical Definition from DSM-5

https://www.cdc.gov/ncbddd/autism/hcp-dsm.html



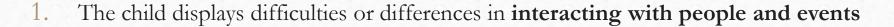
- A. Persistent or ongoing deficits in social communication and social interaction across multiple contexts or settings
- B. Restricted, repetitive patterns of behavior, interests or activities
- C. Symptoms must be present in the early developmental period
- D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning
- E. These disturbances are not better explained by intellectual disability or global developmental delay







#### - WI Educational Criteria



- 2. The child displays problems which extend beyond speech and language to other aspects of **social communication**, both receptively and expressively
- 3. The child exhibits delays or regressions in motor, sensory, social or learning skills
- 4. The child exhibits abnormalities in the thinking process and in **generalizing** (processing info)
- 5. The child exhibits unusual, inconsistent, repetitive or unconventional responses to sounds, sights, smells, tastes, touch or movement (sensory processing)
- 6. The child displays marked **distress over changes**, insistence on following routines, and a persistent preoccupation with or attachment to objects







### Part 1 – Learning about autism - Common Characteristics





Unusual, inappropriate and/or repetitive play with toys or objects



Little or no language; may use gestures to get needs met





Lack of eye contact

Oversensitivity or undersensitivity to



Lack of awareness of Danger





passiveness

Difficulty handling changes in routine



Unusual attachment to objects



Inappropriate laughter or crying





Difficulty or inability to relate to children or adults



Over-sensitivity or under-sensitivity to sound







- Main Areas of Challenge

#### Social Interaction

 Deficits in developing relationships and understanding social contexts, emotions, social rules, etc.

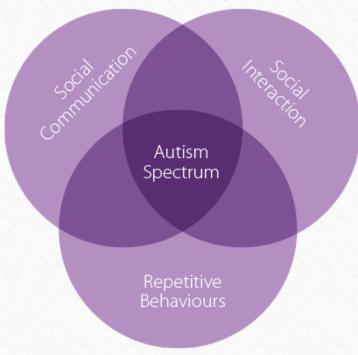
#### Social Communication

Deficits in verbal and nonverbal communication

#### Restricted or Repetitive Behavior

- Engage in stereotyped or repetitive movements, play, speech, etc.
- Insistence on sameness, inflexible adherence to routine, and ritualized patterns

# The characteristics within each area overlap











### **Transition Activity**

Learning about Autism → Understanding Autism

You learned about the definitions, common characteristics, and areas of challenge for people with autism, but what does this mean for your classroom or program?



Take some time to think about your answer.



On the next slides we will look at and discuss how some of the common characteristics within the 3 main areas of challenge might impact your classroom or teaching.









#### Resource for the following slides

- I recommend signing up for the website Autism Navigator it's a free site that has great information, including a set of videos showing some of the red flags associated with autism
  - https://autismnavigator.com
- On the following slides, you will notice that some of the examples have a link to a video followed by a number and letter. This means that if you follow the link (once you are signed into the site), you will see that the page has a couple videos and at the bottom there are numbers. The number I use refers to the page and the letter lets you know if it is the video on the left or right.
  - Example (video) 2R = the second page of videos and the video on the right







#### Understanding autism

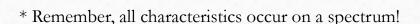
#### - Challenges with Social Interaction

How might this look in your classroom or program?

- Little or no response to their name (https://resources.autismnavigator.com/asdglossary/#/section/33/underReactive) 2R (Luke at 28 months)
- Aversion to displays of affection (cuddling, hugging, etc.) \*
- Difficulty understanding or recognizing emotions (their own or a peers)
- Unaware of social norms (e.g., sharing, showing objects of interest, personal space, etc.)
- Difficulty responding appropriately to or understanding social situations
- Difficulty engaging in reciprocal/back and forth interactions (<a href="https://resources.autismnavigator.com/asdglossary/#/section/13/gestures">https://resources.autismnavigator.com/asdglossary/#/section/13/gestures</a>) 2 Both (Sam) (e.g., returning a smile, playing peek-a-boo, conversing, responding to a question, etc.)
- Limited use and understanding of non-verbal communication (e.g., eye contact, facial expressions, gestures, body language, etc.)
- Difficulty sharing focus or following the focus of someone else (joint attention)
  - Trouble following another person's finger point or eye-gaze
     (https://resources.autismnavigator.com/asdglossary/#/section/10/sharingIEA)

     2 Both (Jimmy and Caleb) Notice the differences













### Understanding autism

### - Challenges with Social Communication

How might this look in your classroom or program?



- Difficulty forming speech sounds, use exaggerated sing-songy tone, self-talk, etc.
- May repeat or echo words/phrases without real meaning (https://resources.autismnavigator.com/asdglossary/#/section/23/repetitiveSpeech) 2L (Mara)
- May be able to recite knowledge but not use it functionally
- Difficulty understanding meaning of words or sentences
  - Difficulty answering questions or following directions (<a href="https://resources.autismnavigator.com/asdglossary/#/section/36/languageImpairment">https://resources.autismnavigator.com/asdglossary/#/section/36/languageImpairment</a>) 2R (Jamaal)
- Tend to name items or objects instead of using language to interact
- May use you as a tool to get needs met instead of using words
- Difficulty expressing their needs with words, correct language, or using a point/gesture (<a href="https://resources.autismnavigator.com/asdglossary/#/section/28/unusualObjects">https://resources.autismnavigator.com/asdglossary/#/section/28/unusualObjects</a>) 1R (Ryan)
  - May say "You want water?" instead of "I want water?"
- Appear to be unaware when people talk to them (https://resources.autismnavigator.com/asdglossary/#/section/36/languageImpairment) 6R (Sarah)
  - Like they're in their own world









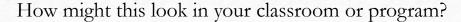


### Understanding autism

#### - Challenges with Repetitive Behaviors

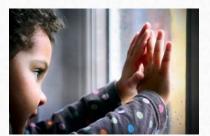






- Engage in repetitive behaviors
  - e.g., hand flapping, spinning, rocking, making sounds etc.
- Highly restricted interests (https://resources.autismnavigator.com/asdglossary/#/section/29/intenseInterests) 1R (Ethan)
  - Trains, vacuums, specific colors, etc.
- Fixation on tiny details to the point of distraction/disruption
- Difficulty adapting to change (https://resources.autismnavigator.com/asdglossary/#/section/39/challengingBehaviors) 3L (Robby)
  - Examples: daily schedule, the order things are done, how a toy is being played with, etc.
- Reliance on routines, rules and repetition
- Order or line up toys instead of playing with them
- Unusual or intense reactions to sensory input (https://resources.autismnavigator.com/asdglossary/#/section/32/overReactive) 3L (Cole)
  - e.g., touch, sounds, smells, tastes, textures, lights, etc.
- Trouble participating in pretend play or using imagination
   (https://resources.autismnavigator.com/asdglossary/#/section/17/sharingPlay)

   2 Both (Jacari and Ethan) Notice the differences









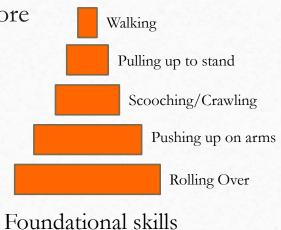
### Supporting autism

- Understanding child development



- Child development is a process every child goes through
- Most children learn or reach developmental milestones during predictable time periods
  - Example: Ages and stages of development
- Milestones develop in a sequential manner, building on the one that came before
  - A child should have certain skills in place before he or she develops newer, more complex skills
  - These are often called foundational skills

What happens if a foundational skill is skipped or missed?









#### 0

### Supporting autism

- Understanding child development

### Activity

While watching the video, keep in mind the following:

- The common characteristics of autism
  - Child development and milestones

Video - Serve and Return Interaction Shapes Brain Circuitry



https://developingchild.harvard.edu/resources/serve-return-interaction-shapes-brain-circuitry/



What might this video say about how we understand children with autism?





# Supporting All Children - Milestones and Red Flags

https://www.cdc.gov/ncbddd/actearly/milestones/index.html http://www.collaboratingpartners.com/wmels/

	Social Communication	Red Flags for Autism
6 Months	Knows familiar faces; responds to sounds; responds to name (serve and return)	Shows little or no affection for caregivers; doesn't respond to sounds around him
9 Months	Uses fingers to point at things; copies sounds and gestures of others  Uses fingers to point at things; copies sounds and point; doesn't respond to own name; doesn't follow point; doesn't seem to recognize familiar peop	
12 Months	Is shy or nervous with strangers; responds to simple spoken requests; uses simple gestures	Lacks awareness of danger; doesn't point to things; doesn't learn or use gestures (waving, shaking head no); may lose skills they once had
24 Months	Points to things/pictures when named; says sentences with 2-4 words; knows names of familiar people	Doesn't copy actions/words; doesn't follow simple instructions; doesn't know what to do with common things (fork, phone)
36 Months	Shows affection for friends; names a friend; carries on a conversation using 2-3 sentences; takes turns	Speaks mostly in single words; enjoys solitary play; doesn't make eye contact



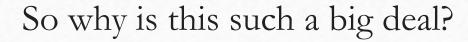




### Supporting autism

- Understanding child development





- If you don't understand development, you can't help children progress!
  - It allows you to know what skills and behaviors are **appropriate** for the children in your care
    - Expectation (age/stage) vs Ability (skill level)
  - It provides a roadmap for what skills come before or after
    - Allows you to walk a skill backward or forward so that you can create learning opportunities that support a variety of needs/skills (e.g., scaffolding)









### Supporting autism

- Understanding child development

First and foremost – These are NOT recommended strategies



#### Negative strategies:

- Are painful, both physically and mentally, and demeaning to the child
  - Examples include spanking, hitting, yelling, criticizing, dragging by the arm, etc.
  - If an adult is using this type of strategy, we need to **immediately** educate and guide them in learning positive strategies that are appropriate for the child's age
- Tend to be a response to the way **YOU'RE** feeling at that moment
- Put a significant strain on the child/adult relationship
  - Trust, respect and safety are diminished

Research shows that these strategies actually increase a child's aggressive behavior by providing them with an undesirable model







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### Supporting autism

### - Understanding child development

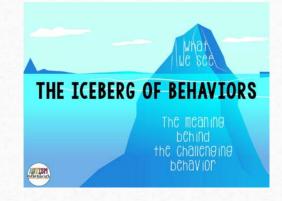
#### Positive Strategies:

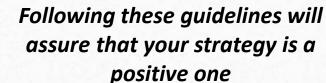
- Focus on supporting and/or reinforcing appropriate behaviors
- Are designed around the **purpose/reason** for the behavior (The WHY of behavior)
  - Remember, the reason behind most behaviors is.....Communication
  - What are they trying to tell you or get you to understand?
- Are individualized to each child's needs, interests, abilities, etc.
  - Developmentally Appropriate Practice (DAP)
  - Universal Design for Learning (UDL)

#### Any strategy you choose should:

- Respect the child for the skills they have
- Recognize the hard work the child is doing
- See the child's full potential (their whole self)













### Supporting autism

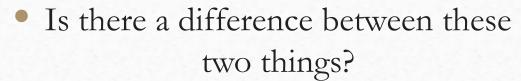
- Understanding child development





#### Tantrum vs Meltdown

 Take a minute to write down a few words that describe each term (e.g., what each looks like, why they happen, etc.)













### Supporting autism

- Understanding child development

#### **Tantrum**

- \* "Want" directed
- \* Purposeful/driven by a goal
- \* Need/want audience
- \* Aware of your presence
- \* Use protective/safety factors
- \* Resolves if goal is accomplished

Age: 1 to 5 years

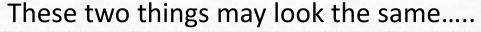


#### Meltdown

- \* Reactive mechanism, usually a reaction to being overstressed, overwhelmed, or dysregulated
- \* Not goal dependent
- \* Continues without attention
- \* Safety may be compromised
- \* May require assistance to gain control

**Age: Through adulthood** 





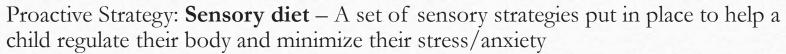




- Children experiencing a meltdown

Meltdowns usually come to an end because of:

- 1) Fatigue (child tires out)
- 2) A change in sensory input (regulation)



- Touch/Deep Pressure fidgets, bear hugs, back scratches, weighted blanket, heavy work activities, exercise ball, etc.
- Movement/Proprioception swinging, rocking, jumping, running, spinning, etc.
- Listening/Auditory listen to music, humming, white noise, quiet place, wearing headphones, etc.
- Looking/Vision look at mobiles, colored lights, wear sunglasses, picture book, etc.
- Smell/Taste/Oral chew gum, using appropriate chewy's, essential oils, eat sweet or sour foods, crunchy or chewy snacks, blow bubbles, scented lotion, etc.



















### - Children experiencing strong emotions

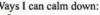
- Validate the child's concerns or emotions their reaction may not make sense to you, but that doesn't mean it isn't real for them
  - "I can see that you're angry that our schedule has changed." (name their feeling)
    - Give them words to use when they are struggling (social emotional language)
      - Jason, if you're feeling sad, you can say, "sad" or "I crying"
    - Try describing what you are seeing/how you know they are feeling a certain way
      - I see a mad face; you're crying or trying to hit or throwing things
- Proactive Strategy Help them understand what's going to happen next to help relieve their anxiety
  - Visual timers or reminders
    - We have 3 minutes until we clean up or when the sand runs out, it's time for circle
  - First/Then
    - Let them point to a picture of something that will help them calm down (e.g., a fidget, quiet space, etc.) (First Story – Then Fidget)





R	ecognizing	Feelings
	Looks like:	Feels like:
Embanassed		I feel like everyone is looking at me, I feel confused
Angry	0	Things are not going my way, I feel bad inside. I feel grumpy.
Upset	100	i fec unf. appv i need son-eone it listen to my problem and help me solve it.
Нарру		I feel good inside! People are treating me nicely, and I am enjoying others.
Calm	0	I feel quiet and peaceful. Nothing is bothering me.











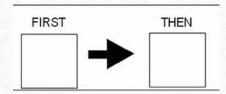














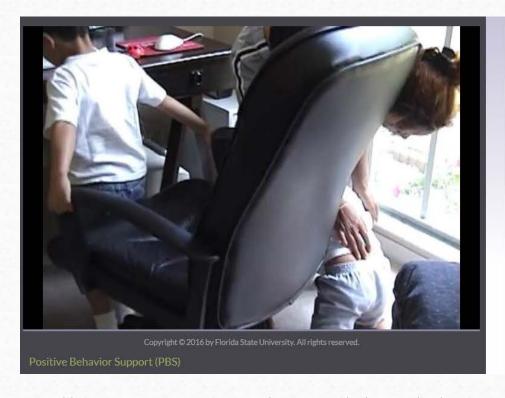


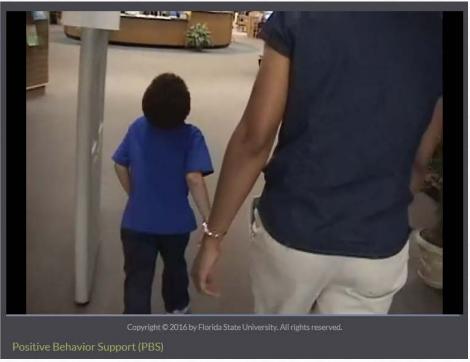




## Children experiencing strong emotions

## - A Deeper Look





https://resources.autismnavigator.com/asdglossary/#/section/51/pbs



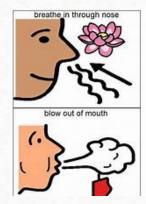




- Children experiencing strong emotions

#### Teach self-regulation and de-escalation strategies

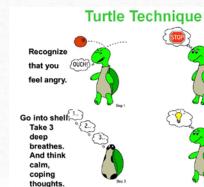
- The Incredible 5-Point Scale
- The Alert Program How does your engine run?
- Tucker Turtle
- Deep breathing, counting to 10
- Provide choices



#### Teach social skills

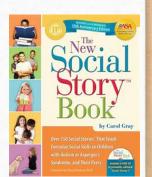
- Create social/scripted stories to explain expectations and build skills and awareness
- Act out scenarios or model appropriate behavior





















- Children having difficulty with new skills

#### Pre-teach skills

• You can't expect a child to do something they may not know how to do

E.g., Following a new routine, playing appropriately with peers or toys, trying new things,

Washing hands

Rub hands with soan

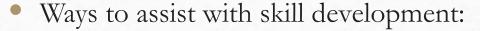
Water on

Hands wet

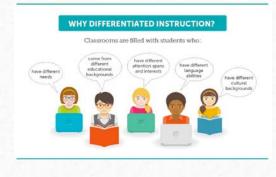
Rinse

Water off

taking turns, etc.



- Break the skill into smaller, more achievable parts (e.g., task analysis, scaffolding, etc.)
- Differentiated Instruction
  - Tailoring instruction to meet individual needs
- Use prompting and fading strategies (modeling, imitation, etc.)
- Use the child's strengths and interests to motivate learning
- Allow for flexibility or choice, but within certain parameters













### - Children having difficulty communicating



If behaviors stem from difficulty communicating, then figuring out how to meet this need is critical

- When thinking about introducing a communication approach:
  - Use what you know about the child (e.g., their abilities, interests, etc.) to develop a functional and effective way for them to communicate
  - Use what works Visual supports, sign language, gestures, approximations, assistive devices, etc. (combinations are ok whole language approach)
  - Make it generalizable across a variety of settings (e.g., child care, home, community, playground, etc.)
- Proactive Strategy Visual schedules/supports
  - Help organize the child's day (or individual activities) into smaller, more manageable, steps or chunks of time
  - Help to reinforce expectations you have for the child within activities or routines (e.g., we keep our hands to ourselves, etc.)





**INDIVIDUAL PLANNERS** 

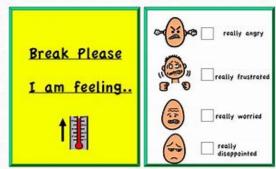








- Children using inappropriate behavior
- Teach a More Appropriate Replacement Skill
  - Replacement skills need to serve the **same function** as the challenging behavior
    - Instead of hitting to get out of a difficult task, the child learns to request a break
  - Replacement skills need to get the reinforcement to the child reliably and effectively
    - Usable by anyone (no need to be complicated)
    - Functional and reinforceable across settings
  - Replacement skills need to be quick and easy to access
    - The way a child would request a break needs to be available immediately
    - If it's easier to hit than to find the break card or a communication device, then that's what the child will do





























- Children who use appropriate behavior





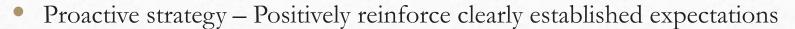
It's so important that we recognize and acknowledge the good stuff kids do!

- Positive Reinforcement or Encouragement (more on next slide)
  - Encouraging statements point out specific facts but don't evaluate them.

• "I noticed how you kept your body in control when you didn't get to color with your favorite green crayon. You must feel really proud of yourself"

VS.

• "I really like your picture. Great job!"



- "We're going to clean-up in one minute. What do we do when it's time to clean-up?" (stop playing, put toys/materials away, etc.)
- "What can you do to make sure you are safe when it's time to line up for outside time?"









#### - Children who use appropriate behavior

Is it ok to reward a child for the good work they do?

Of course, but there are different ways to go about doing it.

- Intrinsic vs Extrinsic motivation
  - Intrinsic (internal) motivation doing something to please themselves
  - Extrinsic (external) motivation doing something to please others
- Encouragement vs Praise
  - Encouragement Non-judgmental, reinforcing language (point out the facts)
    - E.g., "You really worked hard putting those toys away." "I bet you're proud that you finished that puzzle."
  - Praise Focuses on what the adult thinks or feels
    - E.g., "I love your block tower!" "You did a great job!"



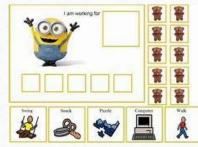






- Children who use appropriate behavior
- Reward Strategies:
  - If you use one, you must be specific about what the child is receiving the reward for
    - Examples:
      - For completing a task, the child gets to choose a special activity or gets to take a sensory break
        - Think about ways to link encouragement with the reward
      - Use a token economy where the child earns tokens that add up to something the child really likes or enjoys doing
      - Give them an extra squeeze or a High Five





REMEMBER
In a reward
system, we
don't take
things away.













#### THANK YOU!

- The following pages contain resources that can help further your understanding of autism
- For more information on supporting children with special needs within your early care and education program, please visit:

https://dcf.wisconsin.gov/youngstar/eci







## Autism Spectrum Disorder

### - Resource Page

Autism Speaks – Statistics and Facts

https://www.autismspeaks.org/autism-statistics

ASD Toddler Initiative (Learning Modules)

• https://asdtoddler.fpg.unc.edu/learning-modules.html

CDC – Autism Spectrum Disorder

https://www.cdc.gov/ncbddd/autism/index.html

Autism Focused Intervention Resources & Modules (AFIRM)

https://afirm.fpg.unc.edu/node/137



#### Autism Navigator

https://autismnavigator.com/

#### Child Mind Institute

https://childmind.org/guide/guide-to-austism-spectrum-disorder/

#### First Words Project

https://firstwordsproject.com/16-by-16-lookbooks/









### Resource Page

#### Social Stories

- https://vkc.vumc.org/assets/files/tipsheets/socialstoriestips.pdf
- <a href="http://csefel.vanderbilt.edu/resources/strategies.html">http://csefel.vanderbilt.edu/resources/strategies.html</a> (includes other social emotional strategies)
- https://www.andnextcomesl.com/2017/03/how-to-write-social-stories.html



#### Emotional Intelligence and self-regulation

- https://www.naeyc.org/resources/pubs/yc/mar2017/teaching-emotional-intelligence
- https://eclkc.ohs.acf.hhs.gov/school-readiness/effective-practice-guides/emotional-behavioral-self-regulation-know

#### Task Analysis – Breaking a Task into Smaller, More Manageable Steps

- <a href="https://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/TaskAnalyis\_Steps\_0.pdf">https://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/TaskAnalyis\_Steps\_0.pdf</a>
- https://www.verywellfamily.com/teach-self-care-skills-to-children-with-special-needs-4128821







### Resource Page



#### Challenging Behaviors

- https://www.autismspeaks.org/sites/default/files/2018-08/Challenging%20Behaviors%20Tool%20Kit.pdf
- <a href="http://blog.brookespublishing.com/10-ways-to-support-the-behavior-and-learning-of-students-with-asd/">http://blog.brookespublishing.com/10-ways-to-support-the-behavior-and-learning-of-students-with-asd/</a>
- <a href="http://blog.brookespublishing.com/10-modifications-for-learners-with-sensory-issues/">http://blog.brookespublishing.com/10-modifications-for-learners-with-sensory-issues/</a>
- http://blog.brookespublishing.com/19-tips-on-supporting-positive-behavior-social-skills-calendar-giveaway/
- <a href="https://ibcces.org/blog/2016/07/15/behavior-strategies/">https://ibcces.org/blog/2016/07/15/behavior-strategies/</a> (for children with autism)
- <a href="https://challengingbehavior.cbcs.usf.edu/index.html">https://challengingbehavior.cbcs.usf.edu/index.html</a> (pyramid model)

#### Sensory

- https://www.sensorysmarts.com/sensory-diet.pdf
- https://www.inclusivechildcare.org/sites/default/files/courses/swf/Sensory%20Intervention%20Strategies%20and%20Environmental%20Adaptations.pdf









### Resource Page

#### Visual Supports

- <a href="http://csefel.vanderbilt.edu/modules/module3b/handout2.pdf">http://csefel.vanderbilt.edu/modules/module3b/handout2.pdf</a> (challenging behavior)
- <a href="https://www.ctdinstitute.org/sites/default/files/file\_attachments/TnT-News-VisualSupports-Oct12.pdf">https://www.ctdinstitute.org/sites/default/files/file\_attachments/TnT-News-VisualSupports-Oct12.pdf</a> (toddlers)
- https://fpg.unc.edu/sites/fpg.unc.edu/files/resources/presentations-and-webinars/Take a look visual supports for learning.pdf

#### Create Visual Supports for a Child

• <u>https://connectability.ca/visuals-engine/</u>

#### Developmentally Appropriate Practice

https://www.naeyc.org/resources/topics/dap/3-core-considerations

#### Encouraging the Good Stuff

• <a href="https://childcare.extension.org/encouragement-is-more-effective-than-praise-in-guiding-childrens-behavior/">https://childcare.extension.org/encouragement-is-more-effective-than-praise-in-guiding-childrens-behavior/</a>



