Best Practices for the Evaluation of Autism Spectrum Disorder in an Educational Setting

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Objectives

- Become familiar with DSM-5 and Wyoming Educational Code criteria for Autism Spectrum Disorder (ASD)
- Know early signs and symptoms for ASD
- Increase understanding of Comprehensive Evaluation components
- Identify an assessment battery to use for the evaluation of ASD in students

*Adapted in part from presentations/publications from the following organizations: California Assoc. of School Psychologists, Colorado Department of Education, Child Mind Institute, Oregon Commission on Autism Spectrum Disorder.

Prevalence Rates of ASD in WY

- WY Department of Special Education
- Special Education Enrollment by Age & Disability (Ages 6-21)
 - 2018-19 School Year (SY)= 931 (7%)
 - o 2017-18 SY = 925 (7.1%)
 - o 2016-17 SY = 905 (6.9%)
 - o 2015-16 SY = 894 (6.8%)
 - o 2014-15 SY = 828 (6.4%)

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- o 2013-14 SY = 796 (6.1%)
- 2010 11 ST = 700 (0.170)2012-13 SU

A Word About Semantics

Eligibility



Diagnosis

Educational Eligibility



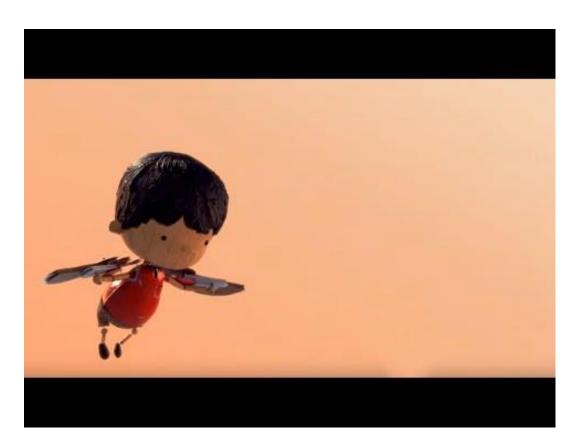
Educational Diagnosis

Educational Evaluations

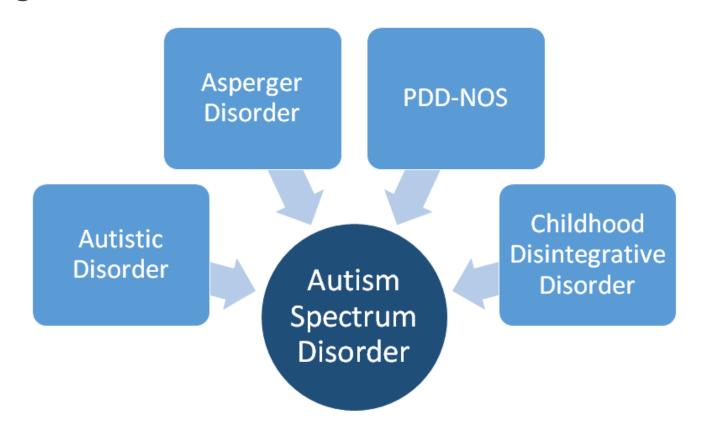


Our words matter! Do not equate these things as it confuses ourselves and families.

The World of Autism



Changes from *DSM-IV-TR* to *DSM-5*



DSM-5 ASD Criteria (299.0)

Social-Communication (All 3)

- Deficits in social emotional reciprocity
- Deficits in nonverbal communicative behaviors used for social interaction
- Deficits in developing, maintaining, and understanding relationships appropriate to developmental level

Restrictive, Repetitive Behaviors (At least 2)

- Stereotyped or repetitive motor movements, use of objects, or speech.
- Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior.
- Highly restricted, fixated interests that are abnormal in intensity or focus
- Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of environment.

DSM-5 ASD Criteria (299.0)

Severity Levels:

Rated for both Social Communication and Restricted, Repetitive Behaviors

Level 1 "Requiring support"

Level 2 "Requiring substantial support"

Level 3 "Requiring very substantial support"

Adopted July 1, 2010

Autism Spectrum Disorder (ASD)

(i) **ASD** means a developmental disability significantly affecting verbal and nonverbal communications and social interaction, **generally evident before age 3** that adversely affects a child's educational performance. **Other characteristics often associated** with ASD are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. ASD **DOES NOT** apply if a child's educational performance is adversely affected primarily because the child has an Emotional Disability.

Adopted July 1, 2010

Autism Spectrum Disorder (ASD)Continued:

(A) ...The initial evaluation shall be conducted by qualified professionals...and shall include recommendations for instruction from a qualified diagnostician (E.g., licensed psychologist, psychiatrist or other qualified professional). The initial evaluation process shall be comprehensive and address all areas of need resulting from the suspected disability.

Adopted July 1, 2010

(A) A student is identified as a child with ASD if 4 out of 5 following criteria are met:

(I) **Impaired communication**: The child is unable to use expressive and receptive language for social communication in a developmentally appropriate manner; lacks nonverbal communication skills or uses abnormal nonverbal communication; uses abnormal form or content when speaking; or is unable to initiate or sustain conversations with others.

Adopted July 1, 2010

(II) **Inappropriate relationships:** The child exhibits deficits relating to people; marked lack of awareness of others' feelings; abnormal seeking of comfort at times of distress; absent or abnormal social play; or inability to make friends. The child does not relate to or use objects in a age appropriate manner.

(III) **Abnormal sensory processing:** The child exhibits unusual, repetitive, or non-meaningful responses to auditory, visual, olfactory, tast, tactile, or kinesthetic stimuli.

Adopted July 1, 2010

(IV) **Impaired cognitive development:** The child has difficulty with concrete versus abstract thinking, awareness, judgement, or the ability to generalize. The child may exhibit perseverative thinking or impaired ability to process symbolic information.

(V) **Abnormal range of activities:** The child demonstrates a restricted repertoire of activities, interests, and imaginative development evident through stereotyped body movements, persistent preoccupation with parts of objects, distress over trivial changes in the environment, unreasonable insistence on routines, restricted range of interests, or preoccupation with 1 narrow interest.

Early Signs and Symptoms

- No big smiles by 6 months
- Delay in or no language
 - No babbling by 12 months
 - No phrases by 24 months
- No gesturing
- Loss of communication and social skills
- Not responding to name
- Not knowing how to "play" with toys
- Interest in parts/aspects of objects versus using them functionally or in pretend play
- Lack of shared enjoyment
- Lack of joint attention (3-point gaze)



(SCD) DSM-5 325.39

New *DSM-5* diagnosis

"Individuals who have marked deficits in social communication, but whose symptoms do not otherwise meet criteria for ASD (i.e., No restricted, repetitive behaviors), should be evaluated for SCD" (*DSM-5*, p. 51).

Associated features:

- Most common: Language impairment- characterized by history of delay in reaching language milestones along with structural language problems (historical, if not current).
- Avoidance of social interactions
- Commonly co-occurs with Attention-Deficit/Hyperactivity Disorder, behavioral problems, and specific learning disorders.

Differential Diagnosis

- Intellectual Disability
- Language Disorder/Impairment
- Attention-Deficit/Hyperactivity Disorder
- Anxiety, Depression, other Emotional Disorders
- Learning Disabilities, including Nonverbal Learning Disability.

Meet Bridget L.

(Age 10)





Comprehensive Assessment, according to IDEA, NASP, and APA Ethical Guidelines

- 1. Assessment tools are chosen and used so that they are not racially, sexually, or culturally discriminatory.
- 2. Assessments must be conducted in the language and form most likely to yield accurate information on what the student knows and can do academically, developmentally and functionally unless the assessment plan indicates why it is not feasible to provide or administer.
- 3. For students with Limited English Proficiency the assessment instruments are selected and administered in a manner that ensures that the assessment measures what is intended rather than the student's English language skills.
- 4. For students with sensory, motor, or speaking impairments the assessment instruments are selected and administered in a manner that ensures the assessment measures what is intended rather than the student's sensory, motor, or speaking skills.
- 5. Assessment tools and strategies are selected to provide information on the student's specific areas of educational need.

Comprehensive Assessment continued...

- 6. Assessment instruments are reliable and have been validated for the purposes for which they are going to be used.
- 7. Assessments are only conducted by qualified professionals.
- 8. No single measure or assessment is used as the sole criterion for determining whether a student has a disability. The assessment covers all areas related to the student's suspected disability and all areas of need.
- 9. A variety of assessment tools and strategies should be used to gather relevant functional and developmental information about a child. '
- 10. Assessment results should be provided in written language that is understood by the consumer.
- 11. Reports should emphasize meaning and make recommendations that help the readers in their work with children

NASP Best Practices for Comprehensive ASD Evaluation

- A multidisciplinary approach should be used
- Parent/teacher/student interview
- Conduct behavioral observations across several environments
- The NASP Best Practices Series autism assessment authors recommend school psychologists use a structured autism observation method (e.g., ADOS-2) and autismspecific checklists or rating scales for school-based assessments
- Areas that are typically evaluated included in clinical and school-based evaluations are speech/language/communication, cognitive/intelligence, adaptive behavior, occupational therapy/sensory, behavioral, and academic

Oregon Example: ASD Evaluation Required Components

- 1. Records review
- 2. Developmental History
- 3. Parent/Caregiver Interview (current and historic Bx)
- 4. Three Observations in multiple env'ts across 2+ days
 - Must include: Direct interaction (i.e., structured observation); With 1+ peers in unstructured setting
- Social Communication Assessment
- Standardized Autism Identification Instrument
- 7. Medical assessment or health examination (Health/Physical Factors)
 - a. Required for initials (birth to 5 years); Team decision for school-aged (5 to 21 years)
- 8. Vision and Hearing Screening
- 9. Additional assessments to determine impact of disability
- 10. Additional assessments to determine needs

Common mistakes in ASD assessment

- Examiner is not knowledgeable about general developmental milestones
- Not using multiple informants
- Using multiple informants, but not synthesizing/explaining similarities and differences
- Atypical behaviors in observations and other assessments are described as typical (over-normalizing...)
- Not "digging" deeper into student's perceptions of relationships
- Missing subtle symptoms that have a lasting impact
- Not taking history and/or mental health issues into account
- Over-reliance on standardized assessments no functional skills information
- Limited "optimal" or typical environmental observational opportunities
- Rigidity in thinking about what a child with ASD "looks like"
- Confusion over educational achievement/performance
- Using measures that are not appropriate/valid/reliable



ASD Assessment Instruments

- Autism Diagnostic Observation Schedule 2nd Edition (ADOS-2)
- Autism specific rating scales
- DSM-5 criteria form/checklist
- Pragmatic and Theory of Mind tasks

Commonly Used Tools for Autism Assessments

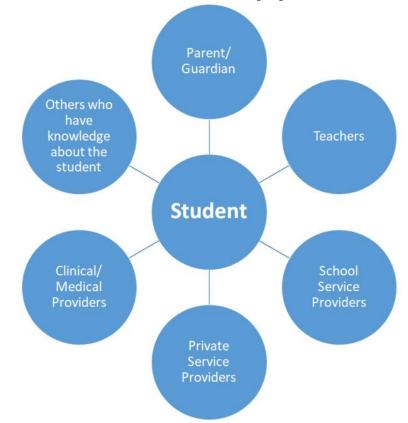
Assessment	Sensitivity	Specificity
Autism Spectrum Rating Scale (ASRS)	0.94	0.92
Childhood Autism Rating Scale, 2nd Ed. (CARS-2)	0.81	0.87
Gilliam Autism Rating Scale, 2nd Ed (GARS-2)	.3853	0.58
Autism Diagnostic Interview, Revised (ADI-R)	0.90	.97
Autism Diagnostic Observation Schedule, 2nd Ed. (ADOS-2)	.9195	.8494

A Word of Caution About ASD Screeners

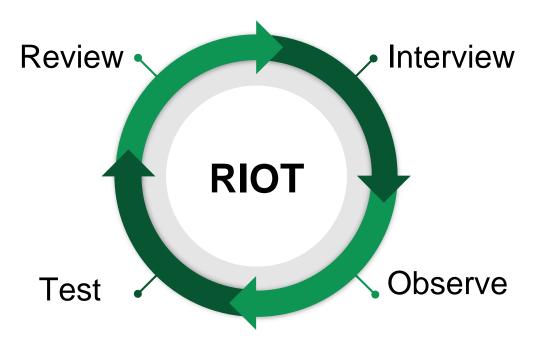
- Serves to identify students in need of further, more in-depth assessment
- Over-identifies by design
- Subject to rater bias
- Often not as psychometrically strong
- Do not use in isolation to make diagnosis
- Cutoff scores indicate there is a certain likelihood that the individual has ASD (or symptoms associated with ASD)

A Multidisciplinary and Collaborative Approach

An interactive process
where team members work
together to share
knowledge and expertise
to best help the student
reach their full potential



RIOT: A Cross-Validation Approach / Comprehensive Assessment Model



Consider adding: student strengths, cultural factors, and student-environment interactions when interpreting results

RIOT: Review

Review: Preschool records, school cumulative files and health files, prior assessments, outside assessments and treatment summaries

- Signs of behavior patterns present in early childhood
- History of social communication/interaction deficits
- Signs of other risk factors (e.g., sibling or other relative with autism)
- Potential complicating factors (e.g., trauma history, head injury)

RIOT: Interview

Child

- Ability to build rapport and connect socially
- Eye-contact, voice, restricted reciprocal interactions
- Social experiences

Parents/Guardians

- Structured developmental history/formalized questionnaires
- History of restricted/repetitive behaviors and social communication difficulties in early years
- Structured and semi-structured clinical interview format
- Functional skills in the community and at home

Teachers

- Social communication
- Self-advocacy/initiation behavior
- Patterns of restricted interests and/or repetitive behaviors
- Classroom adaptive skills
- Academic achievement and performance

Importance of Parent/Guardian Input

Informal and/or structured interviews can be used to gather information about:

- Detailed developmental history (more on next slide)
- Current adaptive functioning
- Behavioral concerns
- Communication delays and concerns
- Friendships/Social skills

Developmental History: We must inquire about...

- Child's prenatal and birth history
 - Including prenatal exposure to alcohol, prescription and non-prescription medication, other drugs. Mother's access to prenatal care.
- Meeting of developmental milestones
- Socialization and behavior patterns
- Health and physical/medical history
- Family and environmental factors
- Home and educational performance
- Trauma or significant stress experienced by the child/family
- Display of characteristics of any additional or behavioral problems
- Pattern (or lack) of characteristics beginning in early development

Developmental History continued...

Other critical factors:

- Events or physical factors that would lead team to look at other disability categories
- Prenatal or environmental factors that would lead team to look at other disability categories
- Possible medical/physical conditions that would lead team to require a medical statement

Examples:

- Student with head injury
- Student with history of significant trauma

Other Interviewing Tips

- Reassure. The purpose is to gather information that will lead the education team to the right supports for their child.
- While it is incumbent upon us to ask, the interviewee may opt not to respond (this is okay).
- A full history may not be available. This is just one part of an overall picturetry to gather as much information as possible
- Be sensitive in report writing. Follow protocol for what, and how, information is disseminated
 - FERPA and Confidentiality considerations

Examples of Open-Ended Questions (Parent/Guardian)

- When did you first become concerned? What were you concerns? What are your current concerns?
- How did your child's development differ from that of his siblings?
- How does he let you know when he needs something? How did he let you know when he first started communicating?
- Tell me about his imitation skills; Does he spontaneously copy what you do or do you have to teach him? When did he begin imitating you? How did this look?
- What are his interests?
- When and how does he interact with others? What does this look like?

More Examples of Open-Ended Questions

- What did/does his play look like? (Probing for pretend, sequencing, variety, interactions with dolls, animal or action figures).
- What are his interests? What are his favorite toys and games?
- Tell me about his friendships and interest in other kids? How does he play with other kids?
- How does he get along with his siblings?
- What does he look like at the park or recess? How does he respond when other children approach or invite him to play?
- How does he communicate his feelings to you and others? How does he respond when others are upset or sad?
- Describe any sensitivities (sound, tough, texture, food) and lack of sensitivity (pain, temperature).
- How does he respond to changes in routines and schedules?
- Are there things he seems to have to do in a particular way or order?
- What motivates him/her? What do you enjoy doing together?

Additional Parent Input

Ask parent to describe:

- Strengths and special skills
- Behaviors during birthday parties and celebrations
- Daycare/preschool experiences
- What community outings look like (e.g., stores, restaurants, church, etc.)

Teacher input is also important!

- Strengths/concerns
- Behavioral concerns
- Communication delays and concerns
- Friendships/Social skills
- Attention
- Transitions
- Understanding abstract concepts (e.g., reading comp, math)
- Generalizing skills and concepts
- Motivation to perform
- Classroom adaptive skills
- Problem solving skills
- Fine motor, writing, and drawing skills

"Interview" Rating Scales

Adaptive Functioning

- Individuals with ASD typically have adaptive skill deficits
- Comprehensive examples: Vineland-3, Adaptive Behavior Assessment Scale, 3rd Ed. (ABAS-3)

Social Communication and Skills Development

 Examples: Social Communication Questionnaire- Current or Lifetime (SCQ), Social Responsiveness Scale, 2nd Ed. (SRS-2), Social Skills Improvement System (SSIS)

"Interview" Rating Scales continued

Behavior and Social-Emotional Functioning

- Evaluation of behavioral difficulties and social skills as manifested by poor emotional regulation, limited coping strategies, self-awareness, insight, perspective taking, flexibility
- Broad-Band Examples: Behavior Assessment System for Children-3 (BASC-3), Child Behavior Checklist (CBCL), Social Skills Improvement System (SSIS), Beck Youth Inventories-2 (BYI-2)
- Narrow Band Examples: Multidimensional Anxiety Scale for Children (MASC)

Other Areas of Difficulty Impact Learning

- Language processing
- Following directions
- Processing speed
- Executive Functioning
- Social Interaction
- Theory of Mind
- Sensory regulation
- Emotional regulation

RIOT: Observations

Observe child in multiple settings, over multiple days:

- Arrival and departure from school
- Transition/passing period
- Recess/Snack Time
- Structured and unstructured activities, including whole class, group, and individual activity
- Classroom and non-classroom settings (e.g., PE, art, music, library, assemblies, fire drills)
- With adults and peers
 - Where is the child experiencing difficulty? Why?
 - Where is the child successful? Why?

Observation Examples

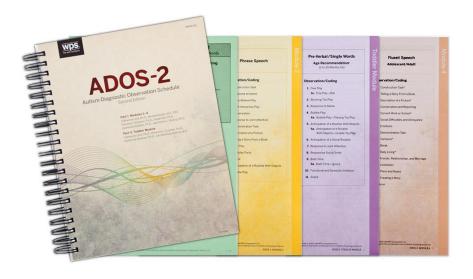
Social Interaction and Communication	Restricted/Repetitive Behaviors
 Ability to initiate/sustain social interactions (reciprocal communication) Failure to initiate or respond to social overtures Eye contact (too much or too little) Ability to express or read emotions Tone of voice/rate of speech Difficulty with idioms or pragmatic language One-sided conversations "Directing" play 	 Selected or narrow interests Need for routines and samess Difficulty with transitions Fine and/or gross motor difficulties Stereotypical behaviors: hand flapping, rocking, posturing, etc. Other sensory seeking or stimulating behaviors (e.g., body spinning, visual stimulation, non-lethal self-injury.)

Systematic Direct Observations

Informal	Formal
 Anecdotal/Naturalistic Time sampling Behavior recording (e.g., frequency, duration, etc.) Environmental/Setting 	 BASC-2, Structured Observation System Behavior Observation of Students in Schools (BOSS) Childhood Autism Rating Scales-2 (CARS-2) Autism Dlagnostic Observation Schedule-2 (ADOS-2)

Autism Diagnostic Observation Schedule, 2nd Ed. (ADOS-2)





Autism Diagnostic Observation Schedule, 2nd Ed. (ADOS-2)

Structured observation combined with social interactions

Strengths:

- Psychometrically strong
- Pulls for ASD-specific behaviors
- Creates context to observe diagnostic behaviors
- Takes into account expressive language level and age of child
- Obtain very rich clinical data (both qualitative and quantitative)
- Yields total cut-off scores for "Autism," "Autism-Spectrum," and "Non Spectrum"

Autism Diagnostic Observation Schedule, 2nd Ed. (ADOS-2)

Cautions:

- Requires extensive training
- Requires practice and routine use
- Scores based on behavior exhibited only during administration
- Results in a classification, not a diagnosis
- Use of incorrect module can results in over or under classification

RIOT: Test

Standardized assessment tools alone **ARE NOT** sufficient in diagnosing or assessing fully for ASD.

Don't forget data from the RIO (Review-Interview-Observe)

After that determine:

- What areas need to be directly assessed or tested?
- How much formal/standardized testing is needed?
- How do we maximize the evaluations overall validity?

A word about test taking behaviors

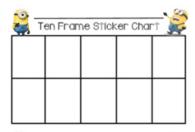
Students with ASD tend to struggles with the following test taking behaviors:

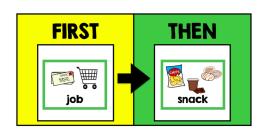
- Attention Span
- Response on demands
- Imitation
- Motivation
- Desire to please



Assessment support tools and strategies

- Give Choices
- Front loading
- Visual Schedule
- First, Then card
- Sticky Pads
- White Boards
- Timer
- Tally Marks
- Praise and/or Tangible reinforcers (i.e., stickers)
- Game/Play/Movement Breaks
- Fidget items
- Snacks (if allowed)







Cognitive Assessment

- All instruments are not created equally
- Choose test that taps into child's current abilities and developmental level
 - Consider how "low" the floor is for lower functioning students
- Measure both verbal and nonverbal skills
- Identify pattern of strengths and weaknesses

Cognitive Assessments

Preschool

- Differential Ability Scales, 2nd Ed., Early Years
- Mullen Scales of Early Learning
- Bayley Scales of Infant and Toddler Development, 3rd Ed (Bayley-III)

School Age

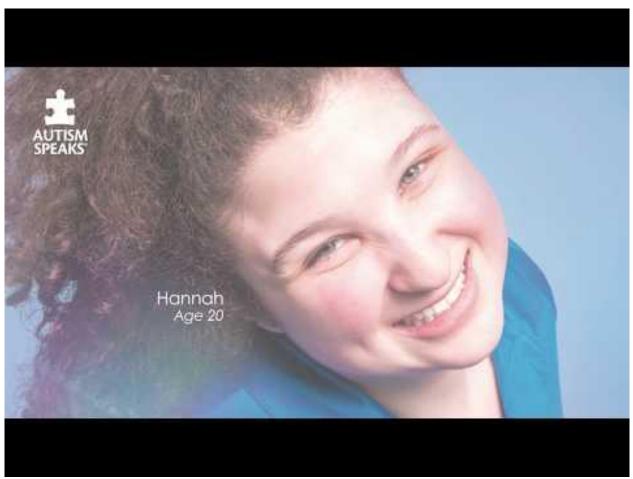
- Differential Ability Scales, 2nd Ed., School Age
- Kaufman Assessment Battery of Children, 2nd Ed. (KABC-2)
- Wechsler Intelligence Scale for Children, 5th Ed. (WISC-V)
- Woodcock-Johnson, Test of Cognitive Abilities, 4th Ed. (WJ-IV COG)
- Stanford-Binet Intelligence Scales, 5th Edition (SB-5)
- Leiter International Performance Scale, 3rd Ed. (Leiter-3)
- Comprehensive Test of Nonverbal Intelligence, 2nd Ed. (CTONI-2)

Strengths-Based Feedback

- Growth Mindset
- Empower students/families and instill hope
- We want to be honest, but also kind and compassionate
- Accuracy vs. Sensitivity (Realism vs. Hope)
- Highlight strengths and weaknesses
- Use parent/guardian and child's name throughout the meeting
- Emphasize child's future independence and supports they might need
- Avoid jargon

Meet Hannah G.

(Age 20)



Wyoming Specific

- American Autism Association: https://www.myautism.org/autism-resource-map/categories/wyoming
- Parents Helping Parents of Wyoming / Parent Information Center (PIC):
 http://www.wpic.org/services-resources
- Wyoming Institute of Disabilities (WIND): http://www.uwyo.edu/wind/

Autism Speaks (https://www.autismspeaks.org)

- 100 Day Kit: https://www.autismspeaks.org/tool-kit/100-day-kit-young-children
- Toolkits (Dental, Sleep, Blood Draw, Haircut, Medicine decision making, etc.):
 https://www.autismspeaks.org/family-services/tool-kits
- Autism Apps: https://www.autismspeaks.org/family-services/autism-apps
- Resource Library: https://www.autismspeaks.org/resource-guide
- Community Connections: <u>www.autismspeaks.org/family-services/community-connections</u>
- Autism Safety Project: Information for hospital emergency staff and first responders <u>www.autismsafetyproject.org/site/c.kuIVKgMZIxF/b.5058283/k.BE40/Home.htm</u>

Hands in Autism: www.handsinautism.org

- E-Learning (includes web modules, podcasts, webcasts, how-to videos, and other training videos):
 https://handsinautism.iupui.edu/training.html#.XFiuEFxKiUk
- Templates for visual supports and strategies http://handsinautism.org/tools.html
- Information on ASD: http://handsinautism.org/information.html
- Templates for academic activities: http://handsinautism.org/academia.html
- Templates for non-academic activities: http://handsinautism.org/kidscorner.html

Developmental Milestones

- CDC Birth to 5 milestones, videos, concern, Autism case training for professionals: https://www.cdc.gov/ncbddd/actearly/index.html
 - Autism Case Training (Videos): https://www.cdc.gov/ncbddd/actearly/autism/video/module1.html
- CDC Autism signs and symptoms: https://www.cdc.gov/ncbddd/autism/facts.html

Social Thinking (Michelle Garcia Winner)

- www.socialthinking.com
- Social Emotional Curriculum:
 - Incredible Flexible You/We Thinkers! (http://www.socialthinking.com/Products/WeThinkersVolume1DeluxePackage

Social Stories (Carol Gray)

https://carolgraysocialstories.com/social-stories/

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Questions?

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THANK YOU
FOR
YOUR ATTENTION

