WELCOME
TO THE INTRODUCTORY
POWERPOINT FOR THE DCN
TRAINING
BEST PRACTICES FOR
SCHOOL BASED
ASSESSMENT OF AUTISM
Objectives of this Intro

• Be familiar with DSM and Ed Code criteria of Autism

• Know the red flags for Autism

• Be aware of prevalence of Autism in the schools

• Review standard tools for eligibility assessment (including cognitive, adaptive, and rating scales)

• Review Autism specific tools, including screeners and ADOS
So that during the live training we can spend more time

• Engaging in interactive activities, including:
  – Case studies
  – Group activities

• Delving into differential diagnosis

• Analyzing assessment results

• Exploring new ways to report assessment results, including DSM-5 Report Summary Tool!
How many children are there with ASD in California schools?

CA Department of Special Education
Special Education Enrollment by Age & Disability

December 2009-2010 Reporting Cycle=59,592
December 2010-2011 Reporting Cycle=65,815
December 2011-2012 Reporting Cycle=71,702 [10.5%]
December 2012-2013 Reporting Cycle=78,624 [11.3%]
December 2013-14 Reporting Cycle=84,713 [12%]

December 2014 Reporting Cycle

90,794 Students

[+6,081 new students identified with ASD in one year!]
[12.6% of Special Education Students in CA]

Source: www.cde.ca.gov/ds
Prior to July 1, 2014

3030 (g) A pupil exhibits any combination of the following autistic-like behaviors, to include but not limited to:

(1) An inability to use oral language for appropriate communication.

(2) A history of extreme withdrawal or relating to people inappropriately and continued impairment in social interaction from infancy through early childhood.

(3) An obsession to maintain sameness.

(4) Extreme preoccupation with objects or inappropriate use of objects, or both.

(5) Extreme resistance to controls.

(6) Displays peculiar motoric mannerisms and motility patterns.

(7) Self-stimulating, ritualistic behavior.

July 1, 2014

(1) **Autism** means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, and adversely affecting a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences.

(A) Autism does not apply if a child's educational performance is adversely affected primarily because the child has an emotional disturbance, as defined in subdivision (b)(4) of this section.

(B) A child who manifests the characteristics of autism after age three could be identified as having autism if the criteria in subdivision (a)(1) of this section are satisfied.
DSM-5 CHANGE FROM DSM-IV!

One Diagnosis:
AUTISM SPECTRUM DISORDER
## DSM-5 ASD Criteria

<table>
<thead>
<tr>
<th>Social – Communication (all 3)</th>
<th>Restrictive, Repetitive Behaviors (at least 2)</th>
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</thead>
<tbody>
<tr>
<td>• Deficits in social emotional reciprocity</td>
<td>• Stereotyped or repetitive motor movements, use of objects, or speech</td>
</tr>
<tr>
<td>• Deficits in nonverbal communicative behaviors used for social interaction</td>
<td>• Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior</td>
</tr>
<tr>
<td>• Deficits in developing, maintaining and understanding relationships appropriate to developmental level</td>
<td>• Highly restricted, fixated interests that are abnormal in intensity or focus</td>
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<td></td>
<td>• Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of environment</td>
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Why the Changes?

- Diagnostic picture often changes over time
- Social and communication impairments are linked/inseparable
- Diagnosis of 3 subtypes inconsistent and unreliable
Why the Changes?

• Diagnosis of the three main subtypes found to be inconsistent and subjective
  – PDD-NOS was often the “catch all” and default diagnosis
  – Many individuals diagnosed with Asperger’s did not meet all criteria (communication impairments exist, self help skills impaired)
  – Actual diagnosis related more to clinic than actual symptoms
Review

Red Flags include:

• No babbling
• No gesturing
• Delay of or no language
• Loss of communication and social skills (25%)
• Not responding to name
• Not knowing how to play with toys
• Attending more to parts of objects than using them functionally or for pretend play
• Lack of shared enjoyment
• Lack of joint attention (3-point gaze)

For review and more specifics, see CDC and First Signs web resources
Advantages of School Model

• See the child in a natural, social environment

• See the child on several and/or regular occasions

• Can compare the child to typically developing peers

• Have an ongoing relationship with the child, family, and teacher(s)

• Have access to historical data

• Offer multiple professional expertise and perspectives
*NEW* SOCIAL (PRAGMATIC) COMMUNICATION DISORDER

*DSM-5 325.39*
• Page 51: “Individuals who have marked deficits in social communication, but whose symptoms do not otherwise meet criteria for ASD (i.e., N0 restricted, repetitive behaviors), should be evaluated for SCD.”

Social (Pragmatic) Communication Disorder
SCD Development and Course

- Rarely diagnosed before age 4 years. Milder forms of the disorder may not become apparent until early adolescence when language and social interactions become more complex.

- Outcome is variable from substantially improving to difficulties persisting into adulthood.

- Even among those who have significant improvement, the early deficits in pragmatics may cause lasting impairment in social relationships and behavior—and, also, in acquisition of other related skills such as written language.
SOCIAL (PRAGMATIC)
COMMUNICATION DISORDER

A. Persistent difficulties in social use of verbal and nonverbal communication as manifested by all the following:

1. Deficits in using communication for social purposes (e.g., greeting, sharing information) in a manner appropriate for the social context

2. Impairment of the ability to change communication to match context or needs of listener (e.g., talking differently in class then on the playground, talking differently to adult than child, avoiding use of overly formal language)
3. Difficulties following rules for conversation and storytelling (e.g., taking turns, rephrasing, using verbal and nonverbal signals to regulate interaction)

4. Difficulties understanding what is not explicitly stated (making inferences, nonliteral or ambiguous uses of language—humor, idioms, metaphors, multiple meanings)
B. The deficits result in functional limitations in one or a combination of the following:

- Effective communication
- Social participation
- Social relationships
- Academic achievement
- Occupational performance

C. The onset of symptoms is in the early developmental period

**BUT** deficits may not become fully manifest until social communication demands exceed limited capacities
D. The symptoms are not attributable to another medical or neurological condition or to low abilities in the domains of word structure and grammar, and are not better explained by ASD, ID, global delay, or another mental disorder.
ASSOCIATED FEATURES SUPPORTING SCD DIAGNOSIS

• 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 ADHD, behavioral problems, and specific learning disorders
ASD Assessment Tools

Common assessments tools include:

• ADOS-2
• Autism specific rating scales
• Education Code checklist
• DSM-5 criteria form/checklist
• Pragmatic and theory of mind tasks
• Other system?
Differential Diagnosis

Other disabilities that can be confused with ASD:

• Intellectual Disability *
• Language Disorder / Impairment *
• Attention Deficit Hyperactivity Disorder *
• Anxiety, Depression, Emotional Disorder *
• Learning Disabilities, including Nonverbal Learning Disabilities

* These can also co-occur with ASD
Best Practice Assessment Framework

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<tbody>
<tr>
<td>Review</td>
<td>Interview</td>
<td>Observe</td>
<td>Test</td>
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Review

Review records:

– Early childhood records for red flags
– Preschool data and reports
– Cum file, including teacher comments
– Special education file
– Previous assessment reports and treatment summaries
When reviewing reports and other records, where there might be a doubt of ASD, ask:

• What is the cause of student’s difficulties (i.e., social interaction, cognition, short attention span)?
• How valid are these results?
• Historically, what were the signs associated with ASD?
• What diagnoses best explain the student’s profile?
• What additional information is needed to determine the student’s disabilities?
Review

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For review and more specifics, see CDC and First Signs web resources
Resources from CDC

• CDC milestones (and quiz):

• CDC Autism signs and symptoms

• CDC Autism Case Training
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Parent Interview

Parent input is crucial:

- Detailed developmental history
- Behavioral concerns
- Communication delays and concerns
- Friendships and social skills
- Use a combo of informal and structured interviews
Autism Questionnaires, Scales and Screeners
CHILDHOOD AUTISM RATING SCALE-2
CARS-2
Questionnaire for Parents or Caregivers (QPC)

• First part of CARS-2 system
• Questions organized by main areas of behavior related to autism, i.e. communication, emotions, sensory, play, and routine
• Parent rates each item by current severity, or whether item was a problem in the past
• Does not result in score but assists in identifying parents’ areas of concern
CARS-2 QPC Examples

• Responds to facial expressions, gestures, and different tones of voice
• Directs facial expressions to others to show emotions he/she is feeling
• Follows another person’s gaze or points toward an object that is out of reach
• Shows a range of emotional expression that match the situation
• Understands and responds to how another person may be thinking or feeling
• Uses toys or other materials to represent something they are not
CARS-QPC
Examples

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IF YOU DECIDE TO USE AN AUTISM RATING SCALE OR SCREENER WE SUGGEST:

- **CARS-2 QPC**
- **GARS-3: Gilliam Autism Rating Scale, 3rd Edition**
- **Social Communication Questionnaire (SCQ)**
- **Social Responsiveness Scale- 2 (SRS-2)**
- **Autism Spectrum Rating Scales**
CAVEAT: ASD Screeners

• **Identify** those children in need of an in-depth assessment or further diagnostic evaluation
• **Over-identify** by design
• Are subject to **rater bias**
• Often **not psychometrically strong**
• **Do not make a diagnosis**
• A cutoff score indicates that there is a **certain likelihood** that the individual has ASD
GARS-3

- 2014; items and subscales reflect DSM-5 criteria for ASD
- Ages 3-22; 5-10 minutes
- Frequency-based rating scale completed by parent, teacher, or caregiver
- Consists of 56 items describing the characteristic behaviors of persons with autism grouped into six subscales (Restrictive/Repetitive Behaviors, Social Interaction, Social Communication, Emotional Responses, Cognitive Style, and Maladaptive Speech)
- Yields standard scores, percentile ranks, severity level, and assesses the probability of autism spectrum disorder and the severity of the disorder
- Caveat: Be very cautious in using with individuals who may have ID—small norm sample and higher scores
**SRS-2**

- Updated in 2012-parent and/or teacher rating scale
- 65 Likert items; 15-20 minutes to complete
- Preschool version is ages 2 ½ to 4 ½
- Overall score, two *DSM-5* compatible scales, 5 treatment areas
- **Caveat:** beware of rater bias; parents tend to rate higher
- Purports to identify ASD and “subclinical autistic traits”
- An elevated score can reflect other disorders (SLI, ID or ADHD)
- “For preschoolers especially, it is important to consider whether SLI or ID contributes to suspected deficits” (Manual, page 19)
SCQ

• Parent screener, consisting of 40 true/false ratings
• Published in 2003
• 10 minutes to complete
• Two versions
  ✓ Lifetime – for initial screening purposes; single cut-off score
  ✓ Current – for identified individuals; use to measure progress
• Forms available in Spanish
• High validity with ADI-R
• For ages 4+, but developmentally above age 2
• Current research indicates that SCQ is less accurate for children under 36 months (Oosterling et al., Journal of Child Psychiatry and Psychiatry, 2010)
• You can review current SCQ version online

PRAGMATIC LANGUAGE SKILLS CHECKLISTS

Include:

- *Children’s Communication Checklist-2 (CCC-2)* (Beginning age 4)

- *Clinical Evaluation of Language Fundamentals-5 (CELF-5)*
  - Pragmatics Profile (Beginning age 5)

- *Pragmatic Language Skills Inventory (PLSI)* (Beginning age 5)
EXAMPLES OF OPEN-ENDED QUESTIONS

• When did you first become concerned? What were your 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?
• What are his favorite toys and games?
PARENT INTERVIEW

Additional examples of open-ended questions

• Describe what he did/does with toys and how he played/plays?  (Probe for pretend, sequencing, variety, interactions with dolls, animal or action figures)
• What does he look like at the park or recess?
• 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?
• When and how does he interact with others?
• How does he respond when other children approach or invite him to play?
PARENT INTERVIEW

• How does he communicate his feelings to you and others?
• How does he respond to others when they are sad or upset?
• Describe any sensitivities (sound, touch, texture, food) and lack of sensitivity (pain, temperature).
• How does he respond to changes in routines and schedules?
• Are there any things he seems to have to do in a particular way or order?
• What motivates him?
• What do you enjoy doing together?
ADDITIONAL PARENT INPUT

• Ask parents to describe:
  o Child’s strengths and special skills
  o Behaviors during birthday parties and celebrations
  o Daycare/preschool experiences
  o How outings in the community look like (stores, restaurants, church, visiting relatives or family)
CLASSROOM DIFFICULTIES

• Attention
• Transitions between activities
• Understanding abstract concepts
• Generalizing skills and concepts
• Performing upon request
• Motivation to perform
• Reading comprehension
• Problem solving skills
• Fine motor, writing and drawing skills
Other Areas Impacting Learning:

- Language processing
- Following directions
- Processing speed
- Executive Functioning
- Social Interaction
- Theory of mind
- Sensory regulation
- Emotional regulation
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</table>
Observe in Multiple Settings

• Arrival at school
• Recess / Snack Time
• Lunchtime
• Whole class activity
• Group activity
• Individual activity
• Working with a peer
• Departure
• PE, art, music, library, assembly, fire drill.
• Transition / passing period
OBSERVATION COMBINED WITH SOCIAL INTERACTION USING THE AUTISM DIAGNOSTIC OBSERVATION SCHEDULE, SECOND EDITION (ADOS-2)
ADOS-2

- Standardized clinical tool intended for individuals suspected of having ASD
- Structured assessment of communication, social interaction, and play or imaginative use of materials
- Includes 5 Modules; each is intended for individuals of different developmental and language levels ranging from toddlers with little or no language to verbally fluent, high functioning children, adolescents or adults.
ADOS-2 Continued

- Examiners set up a series of social “presses” which provide multiple opportunities for students to engage in typical social interaction or exchanges
- Scoring is based on qualitative analysis
- Results in a classification, not a diagnosis
- Yields total cut-off scores for “Autism” and “Autism Spectrum” and “Non Spectrum
- Toddler module gives level of concern
ADOS-2 Protocols

*new and improved*

- Specific hierarchy of presses included on protocol (e.g. response to joint attention)

### 6 Response to Joint Attention

**Focus of Observation:**
- Does the child follow a shift in gaze alone or follow a shift in gaze when it is accompanied by pointing?
- Pay attention to the child’s behaviors when playing with the remote-controlled toy, including eye contact, vocalizations, requesting, shared enjoyment, initiations of joint attention, and pretend play (e.g., hugging or kissing the toy animal).

#### Hierarchy of Presses

1. Orient the child’s body toward your face, if possible.
   - Up to five attempts should be made to attract the child’s attention toward your face before administering the activity.
   - If the child’s attention is NOT obtained, you should still proceed through the hierarchy of presses, including activation of the toy.
2. Say: “(Child’s name), look!” (exaggerate your gaze shift).
3. Say: “(Child’s name), look at that!” (exaggerate your gaze shift), up to two times.
4. Say: “(Child’s name), look at that!” (with a gaze shift and a point), up to two times.
5. Activate the toy.
### Module Selection Guidelines

<table>
<thead>
<tr>
<th>Expressive Language Level</th>
<th>Chronological Age Range</th>
<th>ADOS-2 Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Speech up to and including Simple Phrases</td>
<td>12 to 30 months</td>
<td>T</td>
</tr>
<tr>
<td>Phrase Speech up to Fluent Speech</td>
<td>31 months and older</td>
<td>1</td>
</tr>
<tr>
<td>Fluent Speech</td>
<td>Any age</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Child/Younger adolescent</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Older adolescent/adult</td>
<td>4</td>
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</table>
ADOS-2
Why Use It?

- Psychometrically strong
- Captures ASD-specific behaviors
- Creates context to observe diagnostic behaviors
- Takes into account expressive level and age of child
- Yields rich clinical data (qualitative & quantitative)
- Interesting materials
- Can supplement other observations
ADOS-2
CAVEATS

• Requires extensive training, practice, and routine use

• Scores based on behavior exhibited during administration only

• Results in classification, not diagnosis

• Can be challenging to match child with the appropriate module; use of an incorrect module can result in over or under classification
Watch this five minute video if you would like to see an Autism assessment, including parts of an ADOS administration (you will need to get a login in and password)

• http://autismspeaks.player.abacast.com/asdvideoglossary-0.1/player/firstsigns
Observation-structured systems

Childhood Autism Rating Scale, Second Edition (CARS2)

Includes:

• Standard Version Rating (ST)
• High Functioning Rating Scale (HF)
• Questionnaire for Parent / Caregiver (QPC)
<table>
<thead>
<tr>
<th><strong>CARS2-QPC</strong> Questionnaire for Parent/ Caregiver</th>
<th><strong>CARS2-ST</strong> Standard Version Rating</th>
<th><strong>CARS2-HF High Functioning Version Rating Scale</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>An initial form/ questionnaire that can be given to parents</td>
<td>Behavioral ratings based on observations and interviews</td>
<td>Behavioral ratings based on observations &amp; interviews</td>
</tr>
<tr>
<td>4 pages of ratings, 1 page of open-ended questions</td>
<td>15 items addressing the functional areas using a 4-point scale</td>
<td>15 items addressing the functional areas using a 4-point scale</td>
</tr>
<tr>
<td>Not scorable</td>
<td>Equivalent to original CARS</td>
<td>More specific to higher functioning autism</td>
</tr>
<tr>
<td>Good to give as pre-interview, then follow up</td>
<td>For under age 6 or over age 6 with IQ&lt;80, notably impaired</td>
<td>For ages 6+, with IQ of 80+, relatively good verbal skills</td>
</tr>
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</table>
## CARS2 Rating Scale Items

<table>
<thead>
<tr>
<th>Standard Version Rating</th>
<th>High Functioning Version Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relating to People</td>
<td>1. Social Emotional Understanding</td>
</tr>
<tr>
<td>2. Imitation</td>
<td>2. Emotional expression &amp; Regulation of Emotions</td>
</tr>
<tr>
<td>3. Emotional Response</td>
<td>3. Relating to People</td>
</tr>
<tr>
<td>5. Object Use</td>
<td>5. Object Use in Play</td>
</tr>
<tr>
<td>6. Adaptations to Change</td>
<td>6. Adaptation to Change/Restricted Interests</td>
</tr>
<tr>
<td>10. Fear or Nervousness</td>
<td>10. Fear or Anxiety</td>
</tr>
<tr>
<td>11. Verbal Communication</td>
<td>11. Verbal Communication</td>
</tr>
<tr>
<td>15. General Impression</td>
<td>15. General Impression</td>
</tr>
</tbody>
</table>
CARS2 Advantages

Use of CARS2-ST as:

• a guide when you are observing child and throughout the RIOT process

• a tool to collaborate with your team members

• at end of assessment to analyze and integrate data
CARS2 Advantages

• Good psychometric qualities, i.e. reliability, validity, norms
• Lots of research
• Moderate to strong correlations with gold standard instruments (i.e., ADOS, ADI-R, etc.)
• HF version contains data related to up-to-date constructs, e.g. Theory of Mind
1. Social-Emotional Understanding

Social-emotional understanding addresses a person's cognitive understanding of others' communication, behaviors, and differing perspectives. The dimensions of social understanding that are included in this item are the ability to read the nonverbal cues of others and the ability to take another person's perspective. This item does not reflect whether someone has friends or is in a relationship. Rather, it deals with a person's ability to perceive and articulate how another person may feel or what his or her perspective may be on a given situation.

1. **Age-appropriate social-emotional understanding.** Clearly understands facial expressions, gestures, tone of voice, and body language of others. Able to understand that others may have a different perspective and what that perspective may be.

2. **Mildly impaired social-emotional understanding.** Responsive to most facial expressions and expressions of emotion in others' gestures and body language, but these cues may need to be slightly exaggerated. More subtle expressions such as mild sarcasm, doubt, or ambiguity are sometimes not understood. The ability to take another's perspective is inconsistent.

3. **Moderately impaired social-emotional understanding.** Shows an understanding of facial expressions, tone of voice, and body language only when these cues are exaggerated. Is likely to ignore or misunderstand expression or perspective of others.

4. **Severely impaired social-emotional understanding.** Demonstrates virtually no ability to understand appropriate facial expressions, gestures, tone of voice, or body language. Unable to recognize that the perspective, understanding, or expression of others might differ.
11. Verbal Communication

This is a rating of two facets of the person's speech and language skills, and is best evaluated by a direct interaction with the person. This item includes verbal oddities—such as formal language, unusual tone or inflection, and repetitive or made-up phrases—and the ability to carry on a reciprocal conversation.

1. Normal verbal communication, age and situation appropriate. Able to carry on an age-appropriate conversation with another person, he or she is able to respond to others' overtures while also adding additional information in at least a four-element sequence. No evidence of unusual speech inflection, volume, or tone. No evidence of made-up words or repetitive or rote phrases.

2. Mildly abnormal verbal communication. Conversation exchanges are more limited than expected for this age. Occasional use of made-up words or repetitive, rote phrases. At times may display unusual vocal intonation or rate of speech. Ratings at this level indicate that the person has problems with conversation or verbal oddities, but not both.

3. Moderately abnormal verbal communication. Minimal initiations of conversation during direct interaction. Verbalizations include overly formal language or repetitive phrases. Little reciprocal conversation; may talk on own topic but little sense of interaction. Vocal intonation or rate of speech often unusual. Some use of unusual words or repetitive speech. Some apparent difficulties in carrying on a reciprocal conversation and displays some type of verbal oddity.

4. Severely abnormal verbal communication. Inability to have a conversation with another person. May respond to specific questions, but does not engage in a to-and-fro conversation. Does not initiate communication. Language may be overly formal or pedantic. Marked abnormal speech inflection or tone. Frequently uses made-up words or repetitive phrases. Significant difficulties in both areas of expressive communication—reciprocal conversation and verbal oddities.
12. Nonverbal Communication

This item rates all forms of nonverbal communication. While both use of and response to nonverbal cues are considered, greater emphasis is placed on their use. Attention is given to the use of gaze to regulate and understand interactions and the use of facial expressions and gestures in combination with verbalizations for a variety of communication functions—instrumental, descriptive, and emphatic.

1. **Normal use of nonverbal communication, age and situation appropriate.** Uses a variety of facial expressions and instrumental, descriptive, and emphatic gestures that are well integrated with verbalizations. Responds to facial expressions and gestures from others. Gaze is used to regulate interactions with others.  
   1.5

2. **Mildly abnormal use of nonverbal communication.** Uses instrumental gestures such as pointing or reaching to indicate wants. Descriptive gestures are used infrequently and are not well coordinated with verbalizations. Responds to very obvious facial expressions or gestures from others. May show too little or exaggerated facial expressions at times, though generally shows appropriate expressions. Inconsistent in use of gaze to regulate interaction with others.  
   2.5

3. **Moderately abnormal use of nonverbal communication.** Facial expressions are often flat or exaggerated. Uses limited instrumental gestures, and these gestures are not well integrated with verbalizations. Rarely uses descriptive or emphatic gestures. Shows limited response to nonverbal communication from others. Joint attention is rare, as the person seldom uses or responds to gaze or gesture as a means of sharing attention to an object or activity.  
   3.5

4. **Severely abnormal use of nonverbal communication.** Facial expressions are either flat or exaggerated. Does not use instrumental, descriptive, or emphatic gestures and shows no awareness of nonverbal communication from others. No evidence of using gaze to regulate activities with others.
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</table>
• Cognitive

• Processing

• Behavioral
  – Adaptive
  – Executive Functioning
  – Theory of Mind
  – Social Emotional
Test

After Review-Interview-Observe (RIO), determine:

– What areas to directly assess or test
– Who will assess what areas
– How much formal testing is needed
– How to maximize testing validity
Select Instruments

• Be very familiar with your testing tools

• Select instruments in child’s developmental and behavioral range with adequate basal and ceiling
STUDENTS WITH ASD TEND TO HAVE DIFFICULTY WITH REQUISITE TEST TAKING BEHAVIORS:

- Attention span
- Pointing response
- Response on demand
- Imitation
- Desire to please
UN “TEST”ABLE...

Maybe...But NOT

UN“ASSESS”ABLE

Photo © National Autism Association
AHEAD TO MINIMIZE TESTING FRUSTRATION

• How can I reduce this child’s anxiety?
• What and how much control can I give back to the child?
• **Use** the student’s **visual strengths**

• **Alternate** difficult tasks with tasks/tests/items that are less challenging

• **Offer choices** of order of tasks

• **End before** the student is exhausted
SUPPORTIVE TOOLS AND STRATEGIES

• Visual Schedule
• Sticky Pads
• White Boards
• Time Timer
• Tally Marks
• First-Then cards
• Call tasks “warm-ups” rather than “tests”
• Reinforcers/Sticker Charts
• Game/Play/Movement Breaks
USE INDIVIDUAL SCHEDULES TO ASSIST TESTING AND TRANSITIONS

FIRST/THEN CARD
BUILD A SCHEDULE FOR TEST ACTIVITIES USING COLORED STICKY NOTES
—ADD PICTURES or WORDS
White Board
BUILD IN OPPORTUNITIES FOR CHOICES

• The assessor presents choices/pictures of choices that are all test items or activities but asks student, “What do you want to do first?” or “What do you choose?” or “Your turn to pick,” etc.

- Draw lines
- Body Parts
- Stack/Count/Copy Designs
- Match colors/Build/Count
USE A TIME TIMER™

• Let him/her know how long the activity will last—and reduce student anxiety.
FIRST

do puzzle

THEN

Play with train
"BREAK TIMES" ARE ASSESSMENT OPPORTUNITIES!
Cognitive Profile

• Wide range of cognitive abilities
• Uneven and difficult to quantify
• Per CDC, 31% have significant cognitive impairments and meet criteria for ID
• Strengths often include rote memory and visual perception
• Weaknesses often include abstract reasoning, seeing the “big picture”, generalization
Cognitive Profile

• Profiles can change over time; keep in mind that standardized test scores lack stability for all children under 5, and probably even less so for individuals with ASD
Cognitive & Processing Profile

Learning and Memory

– Strengths:
  • Rote memory
  • Visual perception
  • Memory for objects and paired associations
  • Recall of details and facts
  • Procedural memory

– Weaknesses:
  • Memory for faces
  • Working memory
Cognitive

• Do not confuse splinter skills with overall cognitive functioning

• Distinguish rote memory from other areas of cognition and processing
Cognitive Assessment

Guidelines for Test Selection:

- Use instruments you are most familiar with
- Choose a test that taps into the child’s current abilities and developmental level
- Measure both verbal and nonverbal skills
Cognitive Assessment

Recommended Tools for child functioning at preschool level:

- Mullen Scales of Early Learning (0-68 months)

- Ordinal Scales (best for developmental age < 3)
  - Non standardized, very flexible administration
  - May be hard to place performance in development stage

- Developmental Assessment of Young Children-2 (0-5 years); incorporates observation, interview and direct assessment

- Psychoeducational Profile-3 (6 months-7 years); subtest 1 measures problem solving, verbal naming, sequencing, visual motor integration.
Cognitive Assessment

• Additional recommendations:
  
  – Validate with multiple sources, i.e. observations, developmental norms, and information provided by caregiver(s) and teacher(s)
  
  – Consider using age equivalent scores/ranges instead of or in addition to standard scores
  
  – Monitor progress, and keep in mind that scores at younger age are less stable
Cognitive Assessment

Other Recommended Tools:

- DAS-II (2-6 to 17-11) subtest; children
  - Picture Similarities with ASD understand and enjoy matching format; can do item analysis of perceptual vs. conceptual items

- KABC-II (3-18)
  - Story completion subtest is like the old WISC Picture Arrangement which taps into social reasoning
  - Atlantis is often fun or interesting for the child because of the colorful pictures of sea creatures and flowers
  - Knowledge or Sequential clusters may or may not be selected based on expressive language skills
Cognitive Assessment

Some score trends:

• VIQ < PIQ
• Subtest scatter; inconsistent performance
• WISC-IV: Info>Compr, PRI > WMI and PSI

• KABC-II:
  – Scores often higher than WISC/WPPSI
  – Learning subtests relative strengths
  – Strengths in Gestalt Closure
  – Lower Face Recognition score
  – Lower Rover score due to executive functioning & working memory demands
  – Verbal Knowledge> Story Completion
• Weaknesses in Processing Speed:
  – Slower in completing pencil paper tasks
  – Slower auditory processing
  – Extra time needed to retrieve information and respond
Weaknesses in Executive Functioning

- Cognitive flexibility and problem solving
- Planning
- Organization
- Shifting attention; overfocusing to the exclusion of other things
- Working memory
Executive Functioning Assessment

• Standardized tests

• Direct observation of planning, organization, shifting, attention, cognitive flexibility, problem solving, monitoring, regulating of emotions

• Behavior Rating Scales
  – BASC2 Rating Scales
  – BRIEF Teacher and Parent Rating Scales
Executive Functioning Tests

• NEPSY-II EF subtests:
  – Inhibition
  – Clocks
  – Animal Sorting

• Attention subtests:
  – Auditory Attention & Response Set
  – Design Fluency
  – Statue

➢ Child might also score poorly on these tests for other reasons
THEORY OF MIND DEFICITS

ToM is the ability to recognize & understand others’ emotions, beliefs, experiences

More simple, the ability to take others’ perspectives

My experience is that formal ToM tests are often not valid and/or don’t tap into ToM
## DEVELOPMENT OF TOM

**Carol Westby Ph.D.**

- Dr. Westby views ToM as a developing over time and along two strands; for example:

<table>
<thead>
<tr>
<th>AGE</th>
<th>COGNITIVE THEORY OF MIND</th>
<th>AFFECTIVE THEORY OF MIND</th>
</tr>
</thead>
</table>
| 18-months-2 years | Sense of self  
Engage in pretend  
Recognize that different people may like different things | Recognizing emotions | Using and manipulating |
|              | Predict that receipt of broken toy will make child unhappy | | Emergent altruistic behavior  
Emergence of sense of self  
Use words *happy, sad, mad, scared*  
Change doll’s affect by bringing suitable object |
THEORY OF MIND TASK BATTERY

• 2014; download from www.theoryofmindinventory.com

• Ages 2-17 years (scores reliable beginning age 4)

• Assesses the ToM understanding of younger and older children who vary widely in their cognitive and linguistic profiles. Appropriate for nonverbal individuals with ASD - respondents can indicate responses either verbally or through pointing
• 16 test questions within 9 tasks. Tasks presented in short vignettes arranged in ascending difficulty. Items are variable with regard to content and complexity, from the ability to identify facial expressions to the ability to infer second-order false beliefs.

• Tasks presented in a story-book format. Each page has color illustrations and accompanying text. Memory control questions are included which must be passed in order for credit to be given on the test questions. Characters in the vignettes represent a range of races and ethnicities.

• Identifies **three levels** of ToM development: early, basic, advanced. Suggests interventions for each level

• **CAUTION:** Child with high functioning ASD could pass test but FAIL SOCALLY IN REAL LIFE!
THEORY OF MIND INVENTORY

• 2014; FREE; download test and score online: www.theoryofmindinventory.com

• 47 item parent-report measure. Items designed to tap all ToM dimensions.

• Website may be used to generate reports (subscales, composite scores, percentiles)

• Identifies three levels of ToM development:
  – Early: e.g., identifying emotions
  – Basic: e.g., false belief, seeing leads to knowing
  – Advanced: e.g., second order reasoning
Adaptive

• Individuals with ASD have adaptive skill deficits, i.e., social, functional, coping skills

• Adaptive skill deficits exist for individuals with higher cognitive skills
Adaptive

• Trends in Vineland
  – Low(er) Socialization skills
  – Weaknesses in Communication

• Additional tools to consider include:
  – ABAS-II
  – DP-III
  – PEP-3 Adaptive & Personal Self Care
Adaptive

Tips to obtain valid adaptive scores information:

• Collect information from more than one source, i.e. teacher and parent
• Parent interview preferable to rating scale
• Go back and interview for inconsistent responses or omitted info
• Verify that raters report skills that child performs on a regular basis
• Tie in and validate with cognitive, and other testing results and observations
The following characteristics put individuals with ASD at risk for mental health issues:

- Poor emotional regulation
- Limited coping strategies
- Limited self awareness and insight
- Limited ability to attend to others’ reactions / preferences
- Limited flexibility
Social-Emotional Assessment

• Observations
• Direct interaction and interviews
• Drawings
• Projectives
• Rating scales
  – Student Visual Rating Scales
Behavior Rating Scales

• BASC2:
  • Broad band of behaviors and social-emotional functioning (specific profiles to analyze will be discussed soon)

• Behavior Rating Inventory of Executive Functioning (BRIEF)
  – Includes both Metacognitive and Behavior Regulation areas
• Social Skills Improvement System (SSIS), former version called SSRS

• Ages 3-18

• Includes three main scales:
  • Social Skills (*communication, cooperation, assertion, responsibility, *empathy, *engagement, self-control)
  • Competing Problem Behaviors (Externalizing, Bullying, Hyper/Inattentive, Internalizing, *Autism Spectrum)
  • Academic Competence

* especially helpful to collect info on ASD characteristics
Examples of self rating scales:

- Beck Youth Inventories, 2nd Edition, ages 7-18; 5 subscales with 20 likert items

- Feelings, Attitudes, and Behavior Scale for Children (FABS-C): ages 6-13, 10 minutes

- Multidimensional Anxiety Scale for Children (MASC), ages 8-19, 15mins, 5 areas of anxiety and inconsistent scale, likert scale

- BASC2 Self Report of Personality (SRP)
  - New SRP-Interview for ages 6-7; examiner reads questions, student answers with yes/no, 20 minutes
Self rating scales

- **Tips and Caveats:**
  - Likert scales responses can be stressful for students, consider discontinuing if needed
  - Consider administering scale designed for younger children
  - Take into consideration student’s self awareness
Analyze and Integrate with other findings and clinical judgement
Analyze and Integrate
BASC-2

Taps into communication deficits:

<table>
<thead>
<tr>
<th>Scales</th>
<th>Associated Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional Communication</td>
<td>Explaining, sharing experiences, describing feelings, presenting ideas, conversational skills</td>
</tr>
<tr>
<td>Atypicality</td>
<td>Echolalia, saying things that make no sense</td>
</tr>
</tbody>
</table>
Analyze and Integrate
BASC-2

Taps into social interaction

<table>
<thead>
<tr>
<th>Scales</th>
<th>Associated Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal</td>
<td>Making friends, playing, joining in, avoidance and rejection by others</td>
</tr>
<tr>
<td>Social skills</td>
<td>Basic social skills, interpreting others’ emotions or actions (involves both interest and awareness), tactfulness, empathy</td>
</tr>
<tr>
<td>Leadership</td>
<td>Social problem solving, working with others, creativity</td>
</tr>
<tr>
<td>Aggression</td>
<td>Can reflect challenges with problem solving, frustration, and social insight</td>
</tr>
</tbody>
</table>
Analyze and Integrate BASC-2

Taps into restrictive, repetitive, stereotypic behaviors, activities and interests:

<table>
<thead>
<tr>
<th>Scales</th>
<th>Associated Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptability</td>
<td>Adapting to changes, flexibility, repetitive behaviors, emotional regulation</td>
</tr>
<tr>
<td>Atypicality</td>
<td>Repetitive behaviors, awareness of others</td>
</tr>
<tr>
<td>Hyperactivity</td>
<td>Sensory related, impulsivity</td>
</tr>
<tr>
<td>Attention</td>
<td>Distractability, inattention, difficulty following directions</td>
</tr>
<tr>
<td>Study Skills</td>
<td>Planning and organization</td>
</tr>
</tbody>
</table>
Analyze and Integrate BASC-2

Taps into emotional regulation, social-emotional difficulties

<table>
<thead>
<tr>
<th>Scales</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Perfectionism, flexibility/rigidity</td>
</tr>
<tr>
<td>Depression</td>
<td>Reaction to social rejection, rigidity, lability</td>
</tr>
<tr>
<td>Aggression</td>
<td>Hitting, threatening, calling names</td>
</tr>
</tbody>
</table>
Analyze and Integrate BASC-2

Investigate the following to differentiate from ASD:

<table>
<thead>
<tr>
<th>Scales</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression, Conduct Problems</td>
<td>Deceptiveness and sneakiness skills</td>
</tr>
<tr>
<td>Social skills</td>
<td>Might have learned basic social skills but still has challenges with awareness and interpreting others’ emotions and desires</td>
</tr>
<tr>
<td>Atypicality</td>
<td>High score can reflect attention difficulties, psychosis or other mental illness(although less common at young age), medication side effects</td>
</tr>
</tbody>
</table>
THANKS FOR VIEWING THIS POWERPOINT

I LOOK FORWARD TO SEEING YOU SOON AT THE FULL TRAINING!

Mirit