Autism Spectrum Disorder Technical Assistance Paper

Oregon Department of Education Special Education - Regional Programs

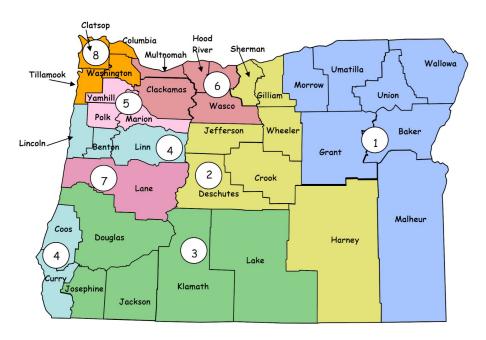
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Updates and Additions

The ASD TAP will receive periodic updates and additions to ensure it is current and to increase its usefulness for early childhood and school-based professionals statewide. This section will log the updates as they are made.

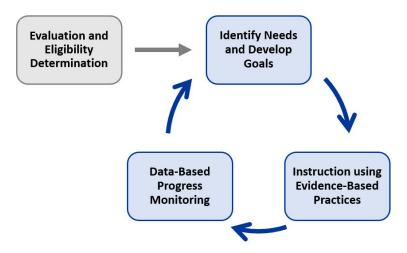
Date	Update Description

Introduction

This document is intended for all educational professionals responsible for autism spectrum disorder (ASD) evaluation and/or service delivery including autism specialists, speech and language pathologists, school psychologists, special education teachers, and other related service providers.

This technical assistance paper (TAP) provides non-regulatory guidance (except when citing state and federal rules and statutes) to assist early childhood and school-based professionals with the process of ASD evaluation and eligibility determination. Significant revisions of the TAP were necessitated by changes in Oregon Administrative Rule (OAR) <u>581-015-2130</u>. This OAR specifies the required evaluation components and criteria for determining eligibility for special education under the category of ASD. The OAR revisions were approved by the State Board of Education on June <u>21</u>, 2018 and went into effect on January 1, 2019.

The TAP includes subsequent chapters to support teams with the ongoing process of effective instruction that includes goal development, implementation of evidence-based practices, data collection, and progress monitoring to inform adjustments in service delivery. This information is intended to assist with Individual Family Service Plan (IFSP) and Individual Education Program (IEP) development.



Consistent with IDEA mandates, this TAP promotes the use of evidence-based approaches in assessment, instruction, and support for individuals with ASD. Evidence-based assessment (EBA) emphasizes the use of research to inform the focus of assessment as well as the selection of evaluation tools, methods, and processes (Hunsley & Mash, 2007; Ozonoff, Goodlin-Jones, & Solomon, 2005). The use of evidence-based practices (EBPs) involves the selection of instructional methods based upon scientific evidence of efficacy, and ensuring fidelity of implementation (Stahmer et al., 2015; Wong et al., 2015). This TAP is intended to strengthen the quality and consistency of services for children and students with ASD throughout the state.

This document may also assist medical or clinical professionals with an interest in the requirements that educational professionals must adhere to with regard to ASD evaluation, eligibility determination (i.e., identification) and service delivery. Medical and clinical professionals may also use this TAP to increase their understanding of the ways in which educational eligibility under ASD differs from medical diagnosis.

What is an Autism Spectrum Disorder?

Within an educational context per OAR 581-015-2000, "'Autism Spectrum Disorder' means a developmental disability that includes persistent deficits in social communication and social interaction across multiple contexts; restricted, repetitive patterns of behavior, interests, or activities. Characteristics are generally evident before age three but may not become fully evident until social demands exceed limited capacities, or may be masked by learned strategies. Characteristics cause educationally and developmentally significant impairment in social, occupational, or other important areas of current functioning. The term does not apply if a child's educational performance is adversely affected primarily because the child has an emotional disturbance. However, a child who qualifies for special education under the category of autism spectrum disorder may also have an emotional disturbance as a secondary disability if the child meets the criteria under emotional disturbance."(4)(b)(A)

ASD Educational Eligibility Criteria

In Oregon, to be eligible for special education services as a child with ASD (OAR 581-015-2130), the child must meet all of the following minimum criteria:

- 1. Child demonstrates **persistent deficits in social communication and social interaction across multiple contexts**, as evidenced by <u>all three</u> of the following, currently or by history (examples are illustrative, not exhaustive):
 - Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions;
 - Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication; and
 - Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.
- 2. Child demonstrates **restricted**, **repetitive patterns of behavior**, **interests**, **or activities**, as evidenced by <u>at least two of the four</u>, currently or by history (examples are illustrative, not exhaustive):
 - Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypes, lining up toys or flipping objects, echolalia, idiosyncratic phrases);
 - Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take the same route or eat the same food every day);

- Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests); or
- Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the
 environment (e.g., apparent indifference to pain/temperature, adverse response to
 specific sounds or textures, excessive smelling or touching of objects, visual fascination
 with lights or movement).
- 3. Characteristics are generally evident before age three, but may not have become fully evident until social demands exceed limited capacities, or may be masked by learned strategies.
- 4. The characteristics of autism spectrum disorder are not better described by another established or suspected eligibility for special education services.
- 5. A child may not be eligible for special education services on the basis of an autism spectrum disorder if the child's primary disability is an emotional disturbance under OAR 581-015-2145. However, a child with autism spectrum disorder as a primary disability may also have an emotional disturbance as a secondary disability.
- 6. To be eligible for special education services as a child with an autism spectrum disorder, the eligibility team must also determine that:
 - For a child age 3 to 5, the child's disability has an adverse impact on the child's developmental progress; or
 - For a child age 5 to 21, the student's disability has an adverse impact on the student's educational performance.

Note that there is no adverse impact requirement for children in the birth to 3 age range.

7. The child needs special education services as a result of the disability.

Refer to Chapter I "Evaluation & Eligibility Determination" for a more detailed explanation of the ASD eligibility criteria with specific behavioral examples.

Educational Eligibility versus Medical Diagnosis

While there is a significant overlap in the <u>DSM-5 criteria</u> used for medical diagnosis and Oregon's educational criteria for ASD, they are separate and distinct. Since this is often a point of confusion, it is important for education-based professionals to help parents and caregivers understand the difference. A medical diagnosis of ASD does not necessarily mean a child will meet the educational criteria, though the evaluation team must carefully consider this and any other relevant medical factors in determining eligibility.

It can be especially confusing when a child meets either medical or educational criteria, but not both. We can help parents and caregivers by explaining that each has its own criteria. In education, we must demonstrate not only that a child exhibits of a pattern of deficits characteristic of ASD but also that the disability results in an adverse impact (ages 3-21) and that the child needs specially designed instruction SDI) or special education.

Chapter I.

Evaluation and Eligibility Determination

REQUIRED ASD EVALUATION COMPONENTS SUMMARY

The components of an ASD evaluation are listed below alongside the requirements of the professional(s) who may complete the assessment. For additional technical guidance on each component, go to the section titled "Required Components of an ASD Evaluation."

ASD Evaluation Component	Professional(s) who May Complete
Developmental History	Licensed Professional Knowledgeable Regarding ASD (see next subsection for detailed information)
Parent/Caregiver Interview: historical and current characteristics that are associated with ASD	Licensed Professional Knowledgeable Regarding ASD
Three Observations completed across multiple environments, on at least two different days	Licensed Professional Knowledgeable Regarding ASD
 Must include a direct interaction between the professional knowledgeable regarding ASD and the child (i.e., structured observation) 	
 Must include observation of the child with one or more peers in an unstructured setting if possible, or with a familiar adult 	
Social Communication Assessment	Speech-language pathologist (Licensed via TSPC and/or Oregon Board of Examiners)
Standardized Autism Identification Tool	Licensed Professional Knowledgeable Regarding ASD
 Medical Examination or Health Assessment Required for initial eligibilities, birth-to-5 As determined by the team, 5-to-21 	Physician, Nurse Practitioner, Physicians Assistant, or Naturopathic Doctor

◆ Review existing screening, conduct if unavailable	Both Vision and Hearing: same personnel qualified for completing Health Assessment, parent/caregiver interview (EI/ECSE) Vision: School nurse (can also train staff) ODE ASD VISION SCREENING GUIDELINES Hearing: SLP, Audiologist ODE ASD HEARING SCREENING GUIDELINES
Additional Assessments to Determine Impact of Suspected Disability	Licensed Professional Knowledgeable Regarding ASD
Additional Assessments to Determine Educational Needs	Licensed Professional Knowledgeable Regarding ASD

LICENSED PROFESSIONALS KNOWLEDGEABLE REGARDING ASD

To determine eligibility for ASD, an evaluation team that includes the parent(s) must document whether the student exhibits a pattern of behavioral characteristic associated with ASD as described by the eligibility criteria established in Oregon Administrative Rule (OAR 581-015-2130). Parents/Caregivers are a part of the team making decisions about evaluation, eligibility, educational placement, and the provision of free appropriate public education (FAPE) for their child.

Composition of the Evaluation Team. The evaluation team is required to conduct the evaluation to determine educational eligibility, and at a minimum includes one or more licensed professionals knowledgeable about the behavioral characteristics of ASD, and a speech and language pathologist licensed by the State Board of Examiners for Speech-Language Pathology and Audiology or the Teacher Standards and Practices Commission, and the parent/caregiver. Examples of licensed professionals include special education teachers, speech-language pathologists, occupational therapists, school psychologists, and autism specialists/consultants.

Verification of Competencies. It is incumbent upon each school district or agency to verify that the group of persons who evaluate students are appropriately trained and experienced. In Oregon, a set of Seven Knowledge Areas has been established to identify core skills needed to meet the criteria as the person(s) identified as knowledgeable about the behavioral characteristics of ASD. The Knowledge Areas are applicable for ASD Specialists/Consultants, District ASD Specialists/Consultants, School Psychologists, and Speech-Language Pathologists. The expertise of an autism specialist/consultant can be highly valuable to assist in conducting the evaluation, to guide the team, or to build capacity via training and coaching - particularly among teams or evaluators with limited knowledge and experience conducting ASD evaluations.

OCASD Recommended Team Competencies. In 2011, the <u>Oregon Commission on Autism Spectrum</u>
<u>Disorder</u> (OCASD) published a document titled <u>Oregon Education Guidelines for ASD</u>. It includes a list of recommended ASD evaluation team competencies (knowledge areas). These team competencies are not required, though teams may find them useful as a reference.

REFERRAL, EVALUATION PLANNING, AND TIMELINES

Pre-referral and referral processes vary by district, program, and school. Follow your district or agency process and procedural guidelines. Given the time and resources involved in completing an ASD evaluation, multiple behavioral indicators associated with ASD should be generally evident to support proceeding.

Involvement of an autism specialist is extremely helpful. In general terms, they can explain the ASD eligibility criteria and help others understand when a referral for an ASD evaluation is appropriate. However, informed written consent by the parent must be obtained before a specialist can conduct an observation or any other informal or formal assessment that focuses on a specific child (e.g., interview, rating scale). This is specifically highlighted here because ASD specialists have been asked to conduct a single observation of a child or student to then recommend whether or not to refer. These requests often come from well-intentioned educators who value the expertise of an autism specialist but may not be fully aware of special education procedures.

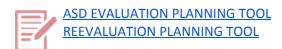
ASD evaluations involve collaboration, an interactive process in which professionals work together and share knowledge and expertise to plan and complete the assessments. The evaluation team must be knowledgeable about and carefully follow special education evaluation and reevaluation requirements and procedures. Follow the links below for detailed procedural requirements:

OAR 581-015-2105: Evaluation and Reevaluation Requirements

OAR 581-015-2110: General Evaluation and Reevaluation Procedures

Evaluation Planning. ASD evaluations are complex with multiple components, so it is important to identify an evaluation team leader who agrees to coordinate the process by noting who is responsible for which components and to track timelines for completion. The ASD evaluation planning tool linked below was created to assist teams in organizing and completing the process.

Consent to Evaluate. Include the list of required assessment components, ensuring that any standardized or formal measure is specifically listed. Vision and/or hearing screening will need to be listed if documentation of screening results either do not exist or could not be located. The medical examination/health assessment must be listed when conducting an initial evaluation for a child up to age 5 or if the team determines it is needed for a school-aged child. The actual list of assessments/procedures will vary by each child/student.



Timelines

- **Birth-to-Age 3 (Early Intervention)**. Initial evaluation. An evaluation must be completed within 45 calendar days from the date of referral. <u>581-015-2775(6)(d)</u>
- **Birth-to-Age 3**. Subsequent evaluations for children already eligible under another category. An evaluation must be completed within *60 school days* from the date of written parent consent.
- Early Intervention (EI) to Early Childhood Special Education (ECSE). Children in EI who have an ASD eligibility must be reevaluated before they turn 3 because the ASD eligibility criteria for

- children in ECSE has the added requirement that the team must determine that the disability has an adverse impact upon developmental progress.
- Age 3-to-21 Initial. An initial evaluation must be completed within 60 school days from the date of written parent consent to the date of the meeting to consider eligibility. Reevaluation: A reevaluation must be completed within 60 school days from written parent consent (or from the date the evaluation is initiated under OAR 581-015-2095(3)) to the date of the meeting to consider eligibility, continuing eligibility or the student's educational needs.

KEY PRINCIPLES IN ASD ELIGIBILITY

- Use a variety of assessments. In accordance with IDEA §300.503, districts and ESDs must "not use any single measure or assessment as the sole criterion for determining whether a child is a child with a disability." No individual test or assessment indicates whether or not a child meets the eligibility criteria for ASD. The team must carefully consider the results of each component of the evaluation in determining eligibility. Each component of the evaluation carries co-equal weight in determining eligibility (e.g., results from a standardized instrument are no more or less valid in determining eligibility than the informal observations, interviews, etc.)
- The pattern of characteristics is key. The presence or absence of a single behavior, skill or
 characteristic may not be used to rule ASD in or out. Many features often associated with ASD,
 taken individually, are also observed among several other conditions. The criteria may only be
 met by establishing that a pattern of characteristics are present, as defined by the ASD eligibility
 criteria.
- ASD evaluations must be developmental. If a child demonstrates a skill that is known to be impaired among those with ASD, does this indicate the child does not have ASD? The mere presence of the skill is insufficient; we must look more closely at the frequency and quality of the skill relative to developmental expectations (i.e., typical child development).

A Developmental Lens

We know that children with ASD struggle with social initiation. When observing a child who is initiating interactions with peers, we may be tempted to conclude that we have observed a skill that contraindicates ASD. Such a conclusion may be erroneous.

While it is true that some children with ASD demonstrate a complete failure to initiate social interactions, many children with ASD do initiate. They simply do so less frequently and with less sophistication compared to their same-aged, typically developing peers (Orsmond, Krauss, & Seltzer, 2004).

Evaluations must extend beyond whether or not a child demonstrates a skill to describe the frequency and quality of the skill in comparison with developmental expectations.

TECHNICAL GUIDANCE REGARDING THE ASD ELIGIBILITY CRITERIA

This subsection is organized by providing language from the eligibility criteria followed by technical information. The **seven domains** or areas (three social communication and four restricted, repetitive patterns of behavior, interests, or activities) are each accompanied by a list of examples.

Child demonstrates persistent deficits in social communication and social interaction across multiple contexts, as evidenced by all of the following, currently or by history (examples are illustrative, not exhaustive)

"Persistent deficits... across multiple contexts" Observed deficits must be persistent which, by definition, indicates that the team has documented characteristics that continued to occur or endure over a prolonged period. A behavior that was documented once or twice, or only very fleetingly, may not be described as persistent.

Deficits must also be demonstrated **across multiple contexts**. "Multiple" indicates two or more. "Contexts" encompasses different settings within the same or different environments. For example, there are "multiple contexts" at school including the classroom, assemblies, cafeteria, and playground.

"Currently, or by history." For older students, it is possible to meet criteria in one or more of the seven domains by documenting that deficits in the domain were clearly present in childhood - but not as an adolescent or young adult. Some restricted, repetitive or sensory-related behaviors may be camouflaged by older students who either suppress the behaviors or have learned when and where to demonstrate them. Researchers confirmed that many individuals with ASD, especially those without intellectual disabilities, exhibited restricted, repetitive behaviors (RRBs) as young children but not as adolescents or adults (Esbensen et al. 2009, Shattuck et al. 2007). To some extent, reduction of social communication deficits also occurs among some with ASD as they age (Anderson et al. 2014, Shattuck et al. 2007). However social communication difficulties are core to ASD and generally tend to pervade well into adulthood (Magiati & Howlin, 2014).

The "or by history" language, adopted from the DSM-5 diagnostic criteria, reflects efforts to craft a criteria that would encompass individuals with ASD across the lifespan (Lord & Bishop, 2015). Concerns were expressed regarding the DSM-4 that the diagnostic criteria were suitable for identifying children, but were excluding some adults with ASD who had characteristics that decreased over time.

Even though some characteristics may diminish over time, Lord and Bishop (2015) point out that, "Importantly, to receive a diagnosis of ASD, the individual must still show impairment in current functioning (even if the specific criteria are met by history)" (p. 58). In the context of educational eligibility, teams are encouraged to draw specific attention to a child's or student's *current profile* of observed characteristics associated with ASD. If the team determines that a youth or young adult meets criteria in one or more of the seven domains based upon the historic presentation of characteristics, ASD eligibility requires that the team also establish that (a) there is currently an adverse impact upon educational performance (for school-aged students); and that (b) the student needs special education.

Demonstrating ASD Characteristics by History

The team may consider answering "yes" to a domain based on history versus current profile when there is clearly documented evidence (e.g., evaluation reports, medical records) that confirm the student previously demonstrated ASD deficits/characteristics in the domain in childhood but not currently as an adolescent or young adult. This is more likely to occur with restricted repetitive behaviors than it is with social communication deficits. In addition, the school-aged student should demonstrate other presently observed characteristics of ASD that result in an adverse impact upon educational performance.

"Examples are illustrative, not exhaustive." The ASD eligibility statement provides examples of specific difficulties to add clarity and specificity regarding behavioral features of ASD across a range of severities. For example, under "social-emotional reciprocity", deficits are listed that are common among individuals with ASD who have complex language ("abnormal social approach", "failure of normal back-and-forth conversation") followed by deficits that are common among individuals with ASD who have limited or no speech ("failure to initiate or respond to social interactions"). There are many more ways in which individuals demonstrate difficulty with social-emotional reciprocity than the examples listed in the criteria. For this reason, do not rely solely on the examples to determine if a child exhibits deficits in social-emotional reciprocity or any of the other seven domains.

Evaluation of Students who are Culturally and Linguistically Diverse. Social communication norms vary across cultures. When evaluating children and students who are culturally and linguistically diverse (CLD), it is important to be aware of cultural norms specific to that child's family and cultural background. For example, what may appear to be a deficit in the use of eye contact may in fact reflect learned behavior by the child to demonstrate deference and respect for adults and authority figures by limiting direct eye contact. For more information on this topic, see the subsection titled "ASD Evaluation of Students who are Culturally and Linguistically Diverse".

DEFICITS IN SOCIAL COMMUNICATION AND SOCIAL INTERACTION

DOMAIN #1

Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions

Social-emotional reciprocity refers to the ability to form mutual connections with one another that satisfy innate needs to associate with, be around, and enjoy one another. This includes a person's motivation and ability to seek out opportunities to connect and to respond positively to attempts from others to do so.

Sometime between six and 12 months of life, typically developing infants develop a **social smile** in response to the smiling face of a parent or caregiver. This intentional demonstration of warmth is an early form of social-emotional reciprocity. Affective displays of pleasure at the presence of others, or simply responding to and showing an interest in others are forms of social-emotional reciprocity. This is why evaluators often ask parents/caregivers if their baby showed an interest in social games such as

peek-a-boo, if they were receptive to being held and kissed, and if they held up their arms to be picked up when a parent/caregiver extended their arms to do so.

Joint attention, using gesture or eye gaze to share attention toward an interesting event or object, is a critical skill associated with social-emotional reciprocity. In fact, the failure to establish joint attention at around 18 months is considered an important "red flag" for ASD. Examples of joint attention include a child looking at something that their parent/caregiver has pointed toward, and the child directing attention by pointing at something while looking at their parent/caregiver.

Though the following is not intended as a checklist, examples of social-emotional reciprocity that may be absent, limited, or atypical among children with ASD include:

- Showing an interest in other children
- Observing and imitating others
- Responding to their name or when spoken to
- Initiating interactions or conversations; also knows how to maintain and end a conversation
- During conversation, makes on-topic comments regarding the topic(s)
- Responsive to others who initiate interactions
- Balanced conversations; each person takes turns and gets to discuss topics of interest to them
- Talking about someone else's interests
- Sharing items
- Bringing, showing, pointing out events or items of interest to others
- Responding positively to attempts by others to show or point out
- Coordinating/matching affect when others show excitement or joy
- Responding with evident pleasure to verbal praise
- Showing pleasure in being with and interacting with others
- Responding with concern when others are clearly upset or hurt
- Offering comfort to others in pain or distress
- Welcomes or responds positively to affection from family
- Communicates for the purpose of connection and social closeness, not only to obtain something or refuse/protest (e.g., giving compliments, commenting, asking questions about others)
- Engages in simple games
- Takes turns and cooperates with others
- Times initiations appropriately (e.g., knowing how and when to enter a group conversation, raising a hand to speak in class)

Remember that a child with ASD may lack a skill altogether but more commonly they may demonstrate a skill associated with social-emotional reciprocity *less frequently* or with *less sophistication* compared to their typically developing peers. When evaluating a six year old child, for example, it is essential to understand both what normal development of social-emotional reciprocity looks like at age six in addition to the ways in which social-emotional reciprocity may appear impaired among those with ASD in the same age-range.

Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication

ASD has been described as a disorder of global communication, meaning that both verbal and nonverbal modes are adversely impacted. While a percentage of children with ASD are preverbal or face significant delays in spoken language, this is not part of the criteria because the speech delays are not particularly suggestive of ASD (i.e., speech delays are present in many other disorders). However, impairments in the use and understanding of nonverbal communication has been identified as a core feature of ASD.

Some children with ASD may demonstrate no ability to interpret nonverbal communication and read even the most basic emotions; happy, sad, etc. While those less severely impacted by ASD may readily interpret obvious messages and emotions, they may fail to detect subtle and highly nuanced connotations that differ dramatically from the literal meaning of the words.

The Importance of Paralinguistic Communication

A middle school student standing with a group of peers discussing an upcoming assembly says, "That sounds great!" with an eye-roll and exaggerated tone connoting sarcasm. A nearby student with ASD does not derive meaning from these nonverbal communicative behaviors and interprets the words literally. As a result, they misunderstand the true meaning of the statement.

Though the following is not intended as a checklist, examples of nonverbal communicative behaviors used for social interaction that may be absent, limited, or atypical among children with ASD include:

- Establishing and maintaining eye contact, socially acceptable in terms of frequency and duration
- Orienting body toward communication partners
- Adheres to social norms regarding proximity and personal space
- Use and understanding of gestures; pointing, waving, beckoning, shrugging, etc.
- Use and understanding of facial expression to convey emotions
- Interpreting connotations of language provided via tone, facial expression, and gesture
- Typical-sounding variations in prosody, volume, and rate to convey meaning and emotion
- Appropriate range of affect/facial expressions appropriate to the situation (e.g., smiling in response to warm greeting from others, worried/concerned look when a troubling situation is being discussed) and to convey emotions
- Warm, friendly expressions directed toward others
- Recognizing and interpreting the mental state or emotions of others based on nonverbal cues including facial expression, and tone
- The ability to naturally coordinate verbal and nonverbal communication to explain, show, or tell
 a story

 Coordinating verbal and nonverbal communication to convey a range of mental states and emotions (e.g. shaking head, frowning, and giving "thumbs down" to decline an offer, or nodding head and smiling to indicate approval)

DOMAIN #3

Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers

The development and maintenance of relationships depends upon a child's ability to engage in behaviors that are generally considered by others (especially peers) as socially appropriate. The demonstration of prosocial behavior is regulated by social cognitive processes (e.g., Theory of Mind) that provide an intuitive ability to infer what other people are thinking and feeling, and how they are likely to respond to our behavior. This ability to perceive minds separate from our own and realize other people can have different or false beliefs emerges in typically developing children around age 4 or 5 (to learn more, research the "Sally Anne Test" and "False Belief Task").

Theory of Mind skills are typically impaired to some degree among individuals with ASD, ranging from a total lack of awareness of minds apart from their own (i.e., mindblindness) to an ability to take perspective but not at the same level of automaticity and sophistication as same-aged peers. Difficulty with Theory of Mind helps us understand, in part, why children/students with ASD struggle to adhere to social norms and why, in turn, relationship development is adversely impacted.

Though the following is not intended as a checklist, examples of skills associated with developing, maintaining, and understanding relationships that may be absent, limited, or atypical among children with ASD include:

- Engaging in developmentally appropriate play with other children (e.g., at around age 4+, engages in cooperative and dramatic play, demonstrating an interest in other children as well as the activity)
- Intuitively and automatically considering the thoughts, beliefs, and experiences of other people and predicting how they are likely to respond
- Demonstrates Theory of Mind skills with a depth and sophistication commensurate with same-aged peers
- Gauging another person's level of interest in a topic or activity
- Interpreting cues from another person that indicates how they are feeling or what they want (e.g., a person trying to end a conversation by looking at their watch, motioning toward the door, commenting how busy they are. In response, the other person reads these context cues and wraps up the interaction)
- Understands and uses mental state vocabulary (e.g., anxious, proud, concerned) and other abstract social concepts (e.g., patriotism, altruism, loyalty, equality)
- Showing an awareness of and adherence to social norms specific to a variety of contexts (i.e. "unwritten rules", "hidden curriculum")
- Demonstrating tact and care in discussing sensitive topics

- Asks questions to find out about others, remembers and references details about others' interests and experiences (i.e. maintains a mental "social file" for friends and family)
- Can both conceptually explain socially appropriate behavior in a variety of situations as well as perform those skills in the contexts where they are needed
- Ability to "code shift", adjusting style of communication based on the communication partner and situation (e.g., talking to a police officer in a different manner that a familiar peer)
- Recognizing socially awkward situations or when an error has been made, and making attempts to adjust or repair
- Increases social competence via "trial and error"
- Inferring the emotional states of others in response to events or situations (i.e., knowing when and why someone might be excited, happy, worried, angry, surprised, etc.)
- Awareness of peers teasing or being unkind (e.g., bullying, ridicule)
- Making attempts to establish and develop friendships with peers
- Has established friendships with one or more preferred peers
- Drawn to groups of other children during unstructured opportunities (e.g., recess, transition times between activities or classes)
- Playing with children in the same age-range or of a similar developmental level
- Engages in a balanced give-and-take in friendships; neither overly passive or overly directive/rigid/controlling
- Responsive to the social overtures of peers
- Demonstrates an interest in peers and is socially engaged
- Aware of peers and what is happening around them socially
- Seeks out interactions with peers, makes attempts to gain attention
- During team or group activities, remains physically and mentally part of the group

RESTRICTED, REPETITIVE PATTERNS OF BEHAVIOR, INTERESTS, OR ACTIVITIES

Restricted, repetitive patterns of behavior, interests, or activities, as evidenced by at least two of the following, currently or by history (examples are illustrative, not exhaustive)

In combination with core deficits in social communication, restricted, repetitive patterns of behavior, interests, or activities are key features of ASD. Behaviors in this category are extremely variable across individuals with ASD and differ based upon age, developmental level, and severity. They are less frequent and less severe among older individuals with ASD (Esbensen, Seltzer, Lam & Bodfish, 2018).

Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypes, lining up toys or flipping objects, echolalia, idiosyncratic phrases)

Stereotypical behaviors can be verbal or nonverbal, can involve gross or fine motor movement, and can be simple or complete. They can also occur with or without objects. A hallmark of stereotypies in ASD is that they occur outside of developmental and social norms.

Stereotypies are produced by developmentally typical infants and toddlers. These behaviors often resemble the stereotypies observed among individuals with ASD across the lifespan. However, stereotypies produced by individuals with ASD tend to appear more unusual or peculiar compared to those produced by typically developing young children.

The following list of examples is not intended as a checklist and represent only a sampling of the myriad stereotyped or repetitive motor movements, use of objects, or speech that are often highly specific to each individual with ASD:

Stereotyped or repetitive motor movements

- Hand flapping
- Finger flicking
- Clapping
- Twisting/spinning
- Rocking from foot to foot
- Twirling hair
- Facial grimacing
- Intense body tensing
- Walking on toes
- Side looking

• Stereotyped or repetitive use of objects

- Lining up toys or objects
- Spinning items such as wheels or coins
- Opening and closing doors repeatedly
- o Turning lights on and off
- Non-functional play with objects (e.g., twirling sections of string, waving sticks or straws)
- Running an object past one's visual field or peripheral vision
- Dropping items/watching items fall

• Stereotyped or repetitive speech

- Echolalia (i.e. immediate or delayed parroting of language they've heard)
- Pronoun confusion (e.g. saying "you" to reference self, or "I" to refer to another person)
- Refers to self using their name instead of "I"
- Idiosyncratic words and phrases that have a unique meaning specific to the child/student
- Scripting; rote repetition of dialogue from shows or movies
- Unconventional vocalizations including guttural sounds, squeals, humming, and noises (e.g., alternation of vowel sounds "oo-ee-oo-ee" with rising/falling prosodic variations)
- Pedantic, unusually formal, adult-sounding speech

Note that repetitive behaviors among individuals with ASD should be distinguished from those observed in association with Obsessive Compulsive Disorder (OCD), and stereotypies in ASD are not the same as tics. Evaluators are advised to research these differences in situations when it becomes important to make these distinctions.

Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take the same route, or eat the same food every day)

Though this list is not intended as a checklist, some examples of insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior include:

- Insistence on rigidly following a specific routine that goes beyond what typically developing children often enjoy such as a bedtime routine (e.g., need to take the same driving route to/from a location)
- Following unusual child-specific routines (e.g., always laying out letters in the same order and shape)
- Becoming anxious, upset, or tantruming when a routine is disrupted or when a change occurs (e.g., being forced to take a different route to school, change or cancelation of an activity that normally occurs daily, running out of a preferred food item)
- Insisting that something be done or arranged in the same, prescribed way as before or feeling compelled to "fix" how things are arranged (e.g. arrangement of the classroom calendar, insisting on always being third in line)
- Rituals that the child feels compelled to do (e.g., touching every door handle as they walk down the hall, inserting a specific word or phrase into every utterance, turning in a circle before entering a room)
- Use of an unusual greeting ritual (e.g., always asking/commenting about the other person's eye color when you meet them; asking what type of power tools they own)
- Compulsion to finish what was started; difficulty stopping an activity
- Inflexibility of thought (i.e. cognitive rigidity); an inability to see more than one way to approach or solve a problem, to see different perspectives, to consider different options, and to take a different approach when the first approach did not work
- Difficulty switching sets (i.e. going from one way of doing something to another)
- Inflexible, literal, concrete interpretation of language; struggles to understand figurative language, idioms, figures-of-speech, multiple-meaning words, and inferences
- Inability to understand humor, irony, and sarcasm (also related to difficulties interpreting non-verbal communication)
- Tendency to view rules and expectations in "black and white" terms with little room for nuance or "shades of gray".

Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests)

Though not intended as a checklist, examples of highly restricted, fixated interests that are abnormal in intensity or focus include:

- More interested in preferred objects/activities than other people
- Demonstrates an attachment to a specific, unusual object (e.g. a toddler who attached to a cooking pan)
- Excessive focus on irrelevant or nonfunctional parts of objects
- Insists on carrying around or holding an unusual object (going beyond typically developing children who insist on carrying a blanket or stuffed animal with them everywhere)
- Intense preoccupation with a particular topic or interest area and associated details (e.g. knowing the technical detail of every commercial airplane; number windows, seats, type of engines, etc.)
- Pedantic recall and sharing of details and minutiae associated with preoccupations
- Range of interests is very narrow
- Maintains focus on the same individual or few topics, activities, or items
- Preoccupation with numbers, letters, and symbols
- Demonstrates perfectionism
- Focus of interests that are atypical or perceived as peculiar (e.g. obsessive interest in vacuum cleaners, washing machines, weathervanes, flags of the world, etc.)
- Perseverates on preferred topic, will try to turn conversational topics back to area of intense interest

DOMAIN #7

Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement)

Studies of preschool and school-aged children with ASD indicate a prevalence of sensory features ranging from 40% to 90% (Baranek, Little, Parham, Ausderau & Sabatos-DeVito, 2014). In other words, many but not all children with ASD demonstrate observable signs of atypical sensory processing (e.g., hypo- and hypersensitivities, seeking or avoiding, overload) across all modalities; visual, auditory, olfactory, gustatory, vestibular, and somatosensory (proprioceptive).

Assessment may be completed via interviews, observation, and use of informal and/or formal assessments designed to detect behaviors associated with atypical processing of sensory input.

Though not intended as a checklist, examples of hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment include:

- Hypersensitivity (behaviors to avoid or limit stimuli)
 - Covering ears to block noise (auditory)

- Closing, covering, or squinting eyes to block light or other input (visual)
- Recoiling, pulling away, or acting out to escape/avoid touch; tactile defensiveness (tactile)
- Refusing certain foods due to color and/or texture (visual/tactile)
- Getting upset when hands get dirty or sticky (glue, dirt, markers) (tactile)
- Only wearing certain clothes to avoid specific fabric textures, tags (tactile)
- Comments on a smell that others do not detect (olfactory)
- Elopes from a space to avoid the smell of food, perfume, or some other scent (olfactory)
- Resists having hair or nails cut (tactile)
- Avoidance and anxiety associated with certain environments due to sensory overload (e.g. too loud, bright, too many people) or to avoid specific stimuli (e.g. fire alarm) (all sensory modalities)

• Hyposensitivity (behaviors to seek out or increase stimuli)

- Mouthing items, placing objects/items in mouth (tactile)
- Seeking deep pressure, hugs (tactile/proprioceptive)
- Staring at bright lights, spinning objects (visual)
- Shows a strong preference for certain colors (visual)
- Excessive exploration of certain substances (e.g. water) (tactile)
- Extreme fascination with watching movement (e.g. spinning wheels of toys or other revolving objects) (visual)
- Holding items close to eyes or at unusual angles (visual)
- Seeking out the sound of vacuum cleaner, lawn mower (auditory)
- Banging objects (auditory)
- Throwing body against walls or on the floor to gain input within muscles and joints (proprioceptive)
- Smelling items that are socially unexpected (e.g., others' hair, erasers, toys) (olfactory)
- High tolerance for pain; may be associated with self-injurious behaviors
- Licking or sniffing objects (taste, olfactory)
- Rocks back and forth (vestibular)
- Excessive and rigorous swinging (vestibular)
- Lack of awareness of body in space poor coordination (vestibular/proprioceptive)
- Seeks out vibration (tactile/proprioceptive)
- Engages in rough play (proprioceptive/vestibular)
- Makes loud noises, sings or hums (auditory)
- Seeks out activities that provide touch, pressure, movement such as swinging or hugs (tactile/proprioceptive/vestibular)

Characteristics (of ASD) are generally evident before age three but may not have become fully evident until social demands exceed limited capacities or may be masked by learned strategies.

Generally evident before age three. This requirement of the eligibility criteria reflects a recognition that some children with ASD may demonstrate mild or fleeting indicators in early childhood when the gap in development between the child and their peers is not particularly wide. As toddlers, these children may have appeared "quirky" or somewhat out-of-sync with their peers. As they age and enter kindergarten, first grade, and second grade the gap in development becomes much more apparent as "social demands exceed limited capacities".

If historic information regarding the child's development is available via parent/caregiver interview and/or other records, the team will have to document that characteristics of ASD were "generally evident before age three", even if those characteristics at the time were mild and did not raise concerns regarding the presence of ASD or some other disability. Meeting this requirement may pose a challenge to the team if limited or no information is available, or if the parent/caregiver is unable to recall information regarding development of key skills and milestones.

May be masked by learned strategies. For other students, the characteristics of ASD may have been "generally evident" in early childhood but years later some of those characteristics have become "masked by learned strategies". This concept generally applies to older students with ASD who have developed the ability to suppress certain repetitive or sensory-related characteristics of ASD. It can also apply to students with ASD who have received effective instruction and can therefore employ compensatory strategies that allow them to mirror their neurotypical peers.

Girls and ASD. The concept that characteristics of ASD may not become fully evident until social demands exceed limited capacities is especially applicable to girls with ASD. Research tells us that many girls with ASD have sufficient skills to pass socially in early childhood and elementary school (Dean, Harwood, & Kasari, 2017). Yet as these girls approach adolescence and enter middle school, the social demands increase dramatically. It is around this time than many girls with ASD (who often go unidentified) begin to truly struggle socially. Unfortunately, many also develop significant secondary issues related to poor self-esteem and diminished confidence including anxiety, eating disorders, and depression (Hull et al., 2017). For more information on this topic, see the subsection titled "ASD Evaluation and Girls".

The characteristics of ASD are not better described by another established or suspected eligibility for special education services.

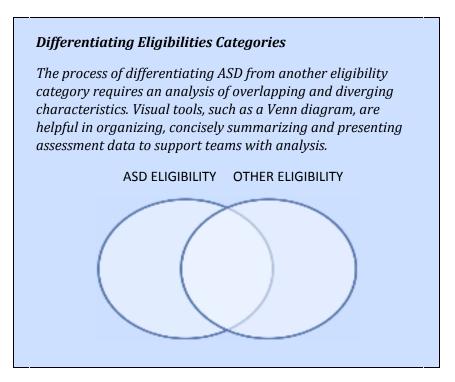
Several disabilities mimic ASD and/or co-occur with ASD. Teams must attempt to determine if observed characteristics of ASD may be more appropriately attributed to a different or additional disability category such as:

- Intellectual Disability (to establish eligibility under both ASD and ID, social communication must be below that expected for the child's general developmental level)
- Emotional Disturbance
- Communication Disorder (associated with expressive language impairment or articulation disorder)
- Other Health Impaired (associated with various medically diagnosed neurodevelopmental, genetic, and psychological conditions)
- Hearing Impairment

- Vision Impairment (Optic Nerve Hypoplasia and Cortical Visual Impairment can present similarly to ASD)
- Traumatic Brain Injury

Given the complexity and requirements of a medical differential diagnosis in addition to issues of professional scope of practice, it is important to note that educational professionals must limit themselves to the differentiation of educational eligibility categories.

The developmental history and medical examination/health assessment (when gathered) provide especially important information for differentiating eligibilities. Documentation or evidence of one or more medically diagnosed conditions does not rule ASD in or out. However, the team should carefully consider the information in the decision-making process. New information may necessitate consideration of additional or different eligibilities. For example, if a medical statement is returned stating that a child sustained a serious head injury when younger, the team may decide to consider Traumatic Brain Injury (TBI) in addition to ASD. During the evaluation planning process, carefully consider which additional disabilities should be considered if the team should be taking a wider look beyond ASD.



Sharing concerns with parents/caregivers. During the evaluation process, team members may uncover "red flags" for undiagnosed medical conditions. As educational professionals, document and describe what was observed that raised concerns. Then share this information with parents or caregivers so that they can follow up with their child's health care provider. Take care to avoid speculation regarding medical diagnoses, treatments, or medications.

It is highly valuable to have at least one member of the evaluation team who is familiar with indicators and features of conditions that mimic and co-occur with ASD to (a) assist in the the process of differentiating eligibilities; and (b) to provide parents and caregivers with information that they can share with their child's health care provider if concerns arise. All professionals involved in ASD evaluation are encouraged to strengthen their knowledge in this area.

For more information on this topic, visit the section titled "<u>Differentiating ASD from Other Eligibility</u> <u>Categories</u>".

The child does not have a primary disability of Emotional Disturbance. A child may not be eligible for special education services on the basis of an autism spectrum disorder if the child's primary disability is an emotional disturbance. However, a child with autism spectrum disorder as primary disability may also have an emotional disturbance as a secondary disability.

IDEA's definition of autism states, "The term autism does not apply if the child's educational performance is adversely affected primarily because the child has an emotional disturbance..." (34 CFR 300.8(c)(1)(ii)).

In line with the definition provided by IDEA, a child/student in Oregon cannot be identified as eligible for special education services due to an ASD if they are primarily eligible due to an Emotional Disturbance under OAR 581-015-2145. When an Emotional Disturbance is the primary cause of an adverse impact on a child's developmental progress or educational performance, that child cannot be determined eligible for special education due to ASD. Conversely, it is possible for a student with ASD to also meet eligibility criteria for Emotional Disturbance but, in those cases, ASD must be the primary cause of an adverse impact on the child's developmental progress or educational performance.

The child's disability has an adverse impact on the on the child's developmental progress for a child age 3 to 5, or on the student's educational performance for a student age 5 to 21; and the child needs special education services as a result of the disability.

Adverse impact upon educational performance does not narrowly refer to academic performance, letter grades, or scores on summative state tests of academic achievement. Many students with ASD perform at or above grade level academically, yet their educational performance is adversely impacted in other critically important domains such as social communication, adaptive skills, and organization. Not only are these essential skills to succeed at school and in the workplace, they also link directly to academic performance. For example, social skills are interwoven with academic access and performance.

Adverse impact upon educational performance will often be more evident to those school-based professionals with extensive backgrounds in ASD. These professionals are well-positioned to assist others in widening their conception of adverse impact beyond grades and test scores.

REQUIRED COMPONENTS OF AN ASD EVALUATION

- 1. <u>Developmental History.</u> As defined in OAR 581-015-2000(8) to include information regarding the child's: prenatal and birth history (including prenatal exposure to alcohol, prescription and nonprescription drugs, and other drugs); meeting of developmental milestones; socialization and behavioral patterns; health and physical/medical history; family and environmental factors; home and educational performance; trauma or significant stress experienced by the child; and the display of characteristics of any additional learning or behavioral problems.
- 2. <u>Parent/Caregiver Interview.</u> Information regarding the child's historical and current characteristics associated with ASD encompassing (1) social communication and social interaction and (2) restricted, repetitive patterns of behavior, interests, or activities.
- 3. Three Observations. At least one of which involves direct interaction with the child, and one that involves direct observation or video of the child's interactions with one or more peers in an unstructured environment when possible, or with a familiar adult. The observations must occur in multiple environments, on at least two different days, and be completed by one or more licensed professional(s) knowledgeable about ASD.
- 4. Social Communication Assessment. Assessments conducted by a speech and language pathologist licensed by the State Board of Examiners for Speech-Language Pathology and Audiology or the Teacher Standards and Practices Commission, in reference to developmental expectations and that address the characteristics of ASD to develop a profile of:
 - a. Functional receptive and expressive communication, encompassing both verbal (level of spoken language) and nonverbal skills;
 - b. Pragmatics across natural contexts; and
 - c. Social understanding and behavior, including social-emotional reciprocity
- 5. <u>Standardized Autism Identification Tool.</u> One or more valid and reliable standardized rating scales, observation schedules, or other assessments that identify core characteristics of autism spectrum disorder.
- 6. Medical Examination or Health Assessment. A medical examination or health assessment shall be completed for children age birth to five for initial eligibility determinations, and may be completed for children above age five, as determined necessary by the team. The purpose of a medical examination or health assessment is to ensure consideration of other health and/or physical factors that may impact the child's developmental performance for a child age 3-5 or the child's educational performance for a child age 5-21. A medical diagnosis of ASD is not required to determine eligibility nor can it be used in isolation to establish eligibility.
- 7. <u>Vision and Hearing Screening.</u> For both, review existing screening or if none has been completed, conduct a new screening.
- 8. Any additional assessments to determine the impact of the suspected disability. May include, measures of cognitive, adaptive, academic, behavioral-emotional, executive function/self-regulation, or sensory processing
- Any additional assessments determined necessary by the team to identify educational needs
 of the child/student. Assessments for identification are limited in their utility for program

planning. Several assessments are designed specifically to identify instructional needs and track progress.

DEVELOPMENTAL HISTORY

A developmental history as defined in OAR 581-015-2000(8) (information listed below)

The developmental history encompasses information regarding:

- Prenatal and birth history, including prenatal exposure to alcohol, prescription and non-prescription medications, or other drugs
- Meeting of developmental milestones
- Socialization and behavioral patterns
- Health and physical/medical history
- Family and environmental factors
- Home and educational performance
- Trauma or significant stress experienced by the child
- The display of characteristics of any additional learning or behavioral problems

Gathering this information will assist the team in determining if any of the aforementioned factors lead the team to consideration of a different or additional disability category. Information from the developmental history could also assist the team in determining the need for a medical statement if it reveals confirmed or suspected medical conditions. While a medical statement is required for consideration of initial eligibility for a child from birth to age five, its necessity is left to the team's discretion for school-aged students.

The primary source of information for the developmental history will be the child's parents/caregivers, though additional sources may include school or program staff who have known the child for some time and a review of video and/or photographs of the child at earlier stages of development.

If in the course of evaluating a child for ASD, "red flags" for a medically undiagnosed (and therefore untreated) condition emerges, it is important for the team to share observational concerns with the parents or caregivers without speculating about medical diagnoses or treatments. That way, the parents or caregivers may choose to seek appropriate medical evaluation and treatments.



SAMPLE DEVELOPMENTAL HISTORY AND PARENT/CAREGIVER INTERVIEW FORM

PARENT/CAREGIVER INTERVIEW

Information from parent/caregivers and other knowledgeable individuals regarding the child's historical and current characteristics that are associated with ASD, including (a) deficits in social communication and social interaction across multiple contexts; and (b) restricted, repetitive patterns of behavior, interests, or activities

The parent/caregiver interview is intended to elicit information regarding their child's development so that the evaluator may assess for the current and/or historic presentation of behavioral characteristics associated with ASD. It is best to structure the interview with a questionnaire that will probe development across the seven domains or areas listed in the ASD eligibility criteria (three social communication and four restricted, repetitive patterns of behavior, interests or activities).

To interpret item responses and know which follow up questions to ask, the interviewer must possess a

thorough understanding of <u>typical child development</u> (in the domains of interest) and the ways in which development is discrepant among children with ASD across a range of severities.

Standardized instruments to assist with parent/caregiver interviews. Use of the Autism Diagnostic Interview - Revised (ADI-R) is supported in the literature for its diagnostic validity (Falkmer, Anderson, Falkmer & Horlin, 2013). Though it is time-consuming to administer (about two hours) and requires extensive prior training, the ADI-R is valuable tool that may be used to complete the parent/caregiver interview. The Social Communication Questionnaire (SCQ) is an ASD rating scale that takes much less time to administer. The SCQ was developed based upon the ADI-R items that were most predictive of a positive identification of ASD. The "Lifetime" form is particularly useful. There are other standardized tools that may be used or adapted for parent/caregiver interviews, probing for current and historic characteristics associated with ASD. However the use of standardized instruments is not required for this component of the evaluation.

Supporting parents and caregivers. It is important to recognize the powerful emotions that parents and caregivers experience during the ASD evaluation process, especially for an initial ASD evaluation of a young child. In addition, some of the topics raised by the developmental history are quite sensitive. For these reasons, it is important to approach parents and caregivers with care and respect. It is equally important to ensure there is adequate time provided to explain ASD and the evaluation process, to answer questions, and to allay any concerns. If parents or caregivers are apprehensive or hesitant, reassure them. Explain that the purpose of the interview is to gather information that will lead the evaluation team to the right decision regarding eligibility and ensure that their child receives the supports they need to be successful. While the evaluator is obligated to inquire regarding all listed areas of the developmental history, parents/caregivers may choose to not answer questions that make them uncomfortable.



SAMPLE DEVELOPMENTAL HISTORY AND PARENT/CAREGIVER INTERVIEW FORM

Due diligence when developmental information is limited or unavailable

In some cases, a full history may not be available. For example, consider a five year old child adopted by American parents from an orphanage in China when the child was three. The adoptive parents have lots of information regarding the last two years, but have little-to-no information regarding development birth-to-three.

Attempts to reach the orphanage are unsuccessful. Due diligence involves collecting as much information as possible and making multiple, documented attempts to gather required information. If a parent, caregiver or other informant cannot be reached, try to contact someone else who knows the child well (gather informed consent to share information as appropriate).

Document the multiple attempts and then move forward with the other evaluation components. When reporting the results of both the developmental history and parent/caregiver interview, demonstrate care in reporting sensitive information.

OBSERVATIONS

Three observations of the child's behavior: at least one of which involves direct interactions with the child, and at least one of which involves direct observation or video of the child's interactions with one or more peers in an unstructured environment when possible, or with a

familiar adult. The observations must occur in multiple environments, on at least two different days, and be completed by one or more licensed professionals knowledgeable about the behavioral characters of autism spectrum disorder

Observation requires the evaluator to examine the environment, identify what is happening in the setting, determine what is expected to happen, and note how the child being observed performs in relation to expectations. Observations are required to occur over at least two days and across multiple environments so that the team gains a sense of how the child performs in different conditions and among different people. It is important to note that observations must be completed by licensed professionals knowledgeable about the behavioral characteristics of ASD. Some individuals may be good sources of information regarding the child, but they are not licensed professionals with training and expertise in ASD.

The ASD eligibility criteria requires that the child demonstrate a *pattern of deficits* specific to ASD that are *persistent across multiple contexts*. Multiple observations are thus required to make the determinations regarding a pattern of deficits and if they are persistent (i.e., exist over a prolonged period) across multiple contexts (e.g., classroom, whole class, small group, independent work, cafeteria, playground). When a child is observed in different settings and on different days, the likelihood is increased of gaining an accurate picture of how the child communicates, interacts, and responds to a variety of demands, people, and environments.

Data recording methods. Two common methods for recording observational data are *narrative recording* and *systematic recording*. Both have advantages and disadvantages. Narrative recording involves taking detailed, running notes of relevant child behaviors and the social and environmental context in which they occur. As with other aspects of ASD evaluation, this type of data collection requires a thorough understanding of the behavioral characteristics of ASD relative to typical development. A limitation of this recording method is that it is more subjective and less reliable than other forms (i.e., two experienced evaluators might differ significantly on what they decide is most relevant to record). Yet this type of recording provides an expansive picture of a child's social communication and behavior in naturalistic contexts.

With systematic recording, the evaluator determines in advance what specific skills or well-defined behaviors they will observe for and record, as well as the type of data to be collected (e.g., frequency/rate, severity/intensity, duration). For example, the evaluator may wish to record the frequency of social initiations and/or responses to social bids from peers within a given time period. While this type of data recording is more objective, reliable, and usable for establishing baselines, it is also much more limited in scope than data collected through narrative recording. Care should be taken to record strengths and indicators of typical development (in areas impacted by ASD) as well as deficits and behaviors characteristic of ASD. This will assist in developing a complete picture of the child or student.

Observing peers. Regardless of recording method, it is often highly useful to identify one or more typically developing peers to observe in relation to the child being evaluated. A classroom teacher may be asked to point out one or two peers who demonstrate typical social-communication and behavioral development; children "somewhere in the middle" of the group with regard to social competence.

Since children with ASD are at high risk for social rejection and social isolation, it can be helpful to observe for the behavior, responses, and attitudes of peers toward the child being evaluated. Observations paired with staff interviews may reveal social errors and idiosyncratic behaviors associated with ASD that are resulting in adverse peer responses.

Observation tips. Consider the following suggestions when conducting observations:

• Remember that one of the three observations must include a **direct interaction** (see next section) and another must involve observation of the child **interacting with one or more peers**.

- If circumstances make observation among peers impossible (e.g. hospitalized, medically fragile child), it is permissible to observe the child with a familiar adult and/or use video.
- Assess the child/student across a variety of settings (e.g., at home alone, at home with siblings
 or other similar age peers, visiting other family members, preschool snack or play time, recess,
 music, social studies, lunch). A series of brief assessments that represent child/students'
 environments is preferred to one lengthy observation in one environment.
- Observe the child/student in the presence of different individuals (e.g., day care provider, teachers, peers, and parents/caregivers). Examine the child/student behavior under varied task demands (e.g., play time, small group, sharing, independent activities, written work, large group work, unstructured activities).
- Observe the child/student at different times of the day (e.g., morning, afternoon, before or after lunch).
- Seek information from multiple respondents (e.g., teachers, parents/caregivers, day care providers, preschool teachers, paraprofessionals, ancillary staff, and peers).
- If possible, assess the child/student in a variety of potentially stress-invoking scenarios (e.g., lining up for new activity, changing from playing with favorite toy or activity, an unexpected change in routine, family or school outing, instruction with a high level of verbal content, academic demands above instructional level, presence of a substitute teacher, situations that may require additional problem solving).
- Plan observations during other assessments. Observing the student during intelligence or achievement testing can provide valuable insights and assist in selecting the appropriate sensory assessment.
- When observing students with subtle characteristics of ASD, take note of the nuances of their social interactions and social communication. Some will attempt to hide stereotypic motor behaviors and usually do not display these behaviors in public settings. Other students may attempt to socialize but are lacking the required conversational skills and abilities or have the skills but are extremely naive or rote in their use. Some high functioning students show imaginative play during observation but familiar adults note that the same actions or play routines are repeated each time that the child/student uses that specific material.
- While a one-to-one testing situation can elicit the behaviors associated with ASD, some high
 functioning students are very comfortable in these situations and perform very well. For this
 reason, observe high functioning children in unstructured, highly stimulating situations, when
 they are bored and in new situations when expectations are not clearly defined. Also review the
 history as ASD characteristics should be generally evident in some form before age three.
- Look for patterns as well as differences of performance across multiple variables. These can
 provide valuable information concerning the characteristics of the child as well as insights for
 developing interventions. Consider the environmental or assessment setting as a critical
 component for understanding the student's behavior (e.g., proximity of child/student to
 teacher, room arrangement, desk arrangement, lighting, noise levels).



SEVEN DOMAINS SORTING TOOL (FOR POST-OBSERVATION ANALYSIS)

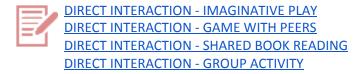
DIRECT INTERACTION

One of the three observations must involve direct interaction with the child/student. Direct interactions,

often described as structured observations, provide a number of advantages to naturalistic observations during which the evaluator is a passive observer. Naturalistic observations, while valuable, can be time consuming and sometimes yield very little useful information. For example, observation notes while a socially withdrawn child quietly reads during classroom instruction provides little relevant information to a team determining eligibility.

In contrast, direct interactions provide opportunities to stage developmentally appropriate activities designed to elicit or press for skills typically impaired to some degree by ASD. This can involve the evaluator in a play-based interaction with the child using a variety of cause-and-effect toys, a facilitated game-playing activity with one or two socially capable peers, or simply a 1:1 conversation/interview with an older student who has advanced language. Again, the evaluators knowledge of ASD and an understanding of typical development is critical during these direct interactions. This knowledge allows the evaluator to take advantage of opportunities to elicit behavioral responses that help determine the presence or absence of ASD characteristics as the interaction unfolds. For example, while engaging in play schemes with a young child the evaluator spots a colorful hot air balloon through the window. In an exaggerated manner, she turns toward the window with an excited expression and says, "Wow! Look at that!" The evaluator then carefully observes for a response, to see if the child engages in joint attention following the eye gaze of the examiner.

Standardized tools that may assist with the direct interaction. Tools such as the Structured Interaction Assessment subtest of the Autism Screening Instrument for Educational Planning-3 (ASIEP-3), the Psychoeducational Profile Revised (PEP-R), the Autism Diagnostic Observation Schedule - 2 (ADOS-2), or the TEACCH Transition Assessment Profile, Second Edition (TTAP) may be used to structure a direct interaction. There are non-standardized tools and protocols that are also extremely useful in structuring a direct interaction, such as the Social Communication Emotional Regulation Transactional Support (SCERTS) forms, or the "Double Interview Task" (Winner).



SOCIAL COMMUNICATION ASSESSMENT (SCA)

A social communication assessment conducted by a speech and language pathologist licensed by the State Board of Examiners for Speech-Language Pathology and Audiology or TSPC, in reference to developmental expectations and that address the characteristics of autism spectrum disorder to develop a profile of: functional receptive and expressive communication encompassing both verbal (level of spoken language) and nonverbal skills; pragmatics across natural contexts; and social understanding and behavior including social-emotional reciprocity

Wetherby, Prizant & Hutchinson (1998) state that the centrality of communication and language characteristics in ASD "underscores the significant role that speech-language pathologists should play in understanding, assessing, and treating children with autism. The field of speech-language pathology offers a unique expertise in communication and language acquisition and disorders that is rooted in developmental theory and knowledge" (p. 78).

Speech and language pathologists (SLPs) new to the field or to working in schools often want to know what instrument or procedures to use that will indicate whether or not a child meets criteria for ASD. In reality, the quality and accuracy of the social communication assessment (SCA) relies upon the SLPs understanding of typical social communication development and the ways in which social communication development is discrepant among children with ASD across a range of ages and

severities (see table below). This knowledge informs how SLPs conduct their assessments and how they interpret the data collected. The table below contrasts early communication between typically developing children and those with ASD (Fahim & Paul, 2014).

	Typical Development	ASD
Frequency of communication	By 12 months: 2 communicative acts per minute, gesturing, vocalizing, using words By 24 months: 7 communicative acts per minute	Rate of communicative acts is depressed
Forms of communication	By 6 to 10 months: infants begin using conventional gestures; pointing, showing, and waving - babbling and consistent-sound patterns with assigned meanings have emerged	Use of more unconventional gestures, such as hand-leading vs pointing - Preverbal vocalizations are atypical; growling, tongue clicking, and unusual intonation
Function of communication	By 18 months: communicating to regulate behavior of others (request, protest) as well as to connect socially By 18 to 24 months: more functions emerge such as asking "Whazat?" with rising inflection, acknowledging by imitating, mimicking, head nodding, answering, and commenting	Exhibits a restricted range of functions, often limited to regulating behavior of others (requesting and protesting) rather than to connect socially (commenting, questioning)
Social responsiveness	By 5 to 7 months: volitional orienting to social stimuli (e.g., turns to look at people talking) By 12 months: respond to their name by turning to the speaker	Spends less time looking at people for briefer periods. Responds less frequently to social stimuli - fails to respond to their name or responds much less frequently
Joint attention	By 8 months: follows another's eye-gaze By 10 to 12 months: follows a parent's point then looks back at the parent By 12 to 14 months: directs another person's attention by pointing By 15 to 16 months: uses the three-point-gaze - looks at parent then at the object of interest then back at the parent	Demonstrates limited or no joint attention - note that deficits in joint attention between 12 and 18 months are central indicators of ASD (Charman, 2003).

While the SCA is an important component of the ASD evaluation, other evaluation team members will also be assessing the core social communication features of ASD. The shared expertise of the team is required to determine if a child demonstrates persistent deficits in social communication across contexts. This extended section on the SCA is divided into four subsections:

- A. Guiding Concepts in Completing the SCA
- **B.** Social Communication Characteristics of ASD
- C. Review of SCA Requirements
- D. SCA Tools and Procedures

A. GUIDING CONCEPTS IN COMPLETING THE SCA

SCA versus Traditional Speech and Language Evaluations. SLPs are very familiar with evaluation to identify disorders of speech (articulation) and language. The SLPs role in ASD evaluations differ in some key ways:

- SLPs will rely less on standardized tests that generally attempt to decontextualize language skills so that constructs (e.g. sentence comprehension, semantic relationships) may be measured. However, ASD is a disorder of communication in context. Therefore SLPs should utilize methods and tools to measure functional communication in naturalistic settings (i.e., data gathered as the student being evaluated attempts to navigate the social world among peers).
- Assessment of functional communication requires SLPs to extend beyond evaluation of forms of communication (topography) to evaluate a child's repertoire functional receptive/expressive abilities (e.g., asking for preferred items, labeling/commenting, responding to questions, following directions) when and where they are needed (Esch, LaLonde & Esch, 2010). This includes functional analysis of maladaptive behaviors.
- Assessment of receptive/expressive language must extend beyond formal aspects (e.g., syntax, morphology, semantics) to the domain of language most adversely impacted by ASD, pragmatics (i.e., the social use of language).
- The impact of ASD upon communication is global, impacting both verbal and non-verbal capabilities. Therefore, SLPs must assess **use and understanding of language, non-verbal communication**, and the coordinated use of verbal and non-verbal communication to regulate social interactions.

Strengths and Limitations of Standardized Language Tests in Completing an SCA. For students with ASD who possess complex language, comprehensive language tests such as the Clinical Evaluation of Language Fundamentals - Fifth Edition (CELF-5), the Test of Language Development-Primary: Fourth Edition (TOLD-P:4), and the Comprehensive Assessment of Spoken Language, Second Edition (CASL-2) may not yield much useful information. This is because these broad language measures are not particularly sensitive to characteristics of ASD and because they measure language in a decontextualized manner. SLPs may find these tests helpful in establishing levels of language development for children who have phrase level speech and moderate and evident delays (in language development).

With these cautions regarding global language measures in mind, there are tests and subtests available to SLPs that are sensitive to social communication/language difficulties associated with ASD. While standardized tests of pragmatics may *appear* helpful, it is important to consider the skills these tests are actually measuring. Tests of pragmatics often involve providing students with various social scenarios then asking them to describe a socially appropriate response. Children who perform in the average to above-average range on this type of measure demonstrate an ability to *describe* socially appropriate behavior. These tests do not measure the ability to actually *demonstrate* socially appropriate responses.

A hallmark of many intelligent, verbally fluent children with ASD is the discrepancy between the ability to describe socially appropriate behavior (i.e., declarative knowledge) versus the ability to actually demonstrate or apply that social knowledge in real-world contexts (i.e, procedural knowledge). Dodd, Franke, Grzesik & Stoskopf (2014) stated that verbally fluent students with ASD "may not show deficits on standardized tests due their static nature and many items can be answered correctly based on information the student can recall about a particular social situation. Correct responses do not necessarily indicate application of this knowledge" (p. 76).

Standardized Language Tests and Students who are Culturally and Linguistically Diverse

With regard to children and students who are culturally and linguistically diverse (CLD), it is important to recognize that all standardized language tests are culture-bound and biased to some degree. Therefore use of these tools with CLD students is not likely to yield an accurate profile of social and communicative competence - and their use compromises the SLPs ability to seperate difference versus disorder (De Lamo White & Jin, 2011).

The American Speech-Language Hearing Association (ASHA) advises that "standardized tests should be culturally and linguistically appropriate, and standard scores should not be determined if the norming sample is not representative of the individual assessed" (Autism Spectrum Disorder: Overview, n.d.). For more information on this topic, resources are available via ODE and the American Speech-Language Hearing Association (ASHA):

- ODE English Learner Students with Disabilities (ELSWD)
- Assessing Diverse Students With Autism Spectrum Disorders
- IDEA Part B Issue Brief: Culturally and Linguistically Diverse Students
- Working with Culturally and Linguistically Diverse (CLD) Students in Schools

If a child performs well on a test of pragmatics, it is indicative of strength in *declarative knowledge* but does not necessarily indicate commensurate *procedural knowledge*. Therefore, SLPs must also assess procedural knowledge in natural settings among peers (Bellini, 2016). In summary, tests of pragmatics have some utility in completing the SCA. However, interpret scores in the average range with caution as the score may reflect an ability to describe, but not actually demonstrate, socially appropriate responses to common scenarios. Notwithstanding the cautions listed above and below, there are standardized tests and subtests that provide some utility in documenting social communication deficits associated with ASD:

- Clinical Evaluation of Language Fundamentals Fifth Edition (CELF-5): Includes two pragmatic assessments, the *Pragmatics Profile* (mean=10, SD=3) is a checklist completed with input from parents, teachers, and other informants; and the *Pragmatics Activity Checklist* is a criterion-referenced measure with suggested activities and scoring checklist.
- **CELF-5 Metalinguistics:** This stand-alone instrument was designed for older students between 9 to 21, the test assesses higher-level language skills that are academically important and often impacted by ASD; making inferences, conversation skills, multiple meanings, and figurative language.
- Comprehensive Assessment of Spoken Language Second Edition (CASL-2): The Inferences and Pragmatic Judgement subtests were found to be sensitive to pragmatic deficits associated with ASD (Reichow, Salamack, Paul, Volkmar & Klin, 2008)
- Test of Problem Solving 3 Elementary: Normative Update (TOPS-3E:NU) and Test of Problem Solving 2 Adolescent (TOPS-2 Adol): Demopoulos, Hopkins & Davis (2013) found that the TOPS-3E detected social cognitive deficits in students with ASD (scoring about -1.5 SD). Social scenario pictures are presented followed by questions that assess the ability to make inferences, predict, and so forth.
- Test of Pragmatic Language, Second Edition (TOPL-2): Young, Diehl, Morris, Hyman & Bennetto, (2005) found that children with ASD performed 1.5 SD lower than controls without ASD. However, some subjects with ASD performed as well as controls. Volden & Phillips (2010)

confirmed that the TOPL failed to identify pragmatic impairments in children with ASD who have age-appropriate structural language skills. The TOPL-2 involves showing the child pictures of common social situations and then asking them to generate a response from the perspective of depicted characters.

- Pragmatic Language Skills Inventory (PLSI): The PLSI is a norm referenced rating scale that is completed by an informant who knows the child. It takes only 5 to 10 minutes to administer.
 Based upon naturalistic observations, it provides ratings for Personal Interaction Skills, Social Interaction Skills, and Classroom Interaction Skills.
- Children's Communication Checklist—2 (CCC–2): This questionnaire may be completed by parents and teachers and is highly sensitive to pragmatic impairment specific to ASD (Volden & Phillips, 2010; Geurts et al., 2004).
- Social Language Development Test (SLDT) Elementary and Adolescent versions: Uses photos
 to assess perspective-taking, interpretation of emotions, making inferences, and resolving
 problems with peers.

Observation of test-taking behaviors. One advantage of standardized language tests is that administration provides SLPs with an opportunity to informally observe a host of test-taking skills before, during, and after the testing session. In fact, these informal observations may provide more useful information for the SCA than the test scores. Tests that an SLP has given many times can be especially helpful in this regard because the the SLP often has a sense of how students typically respond to the process, prompts, and language. During testing, observe for the following:

- Social responsiveness, initiation, and connection during efforts to establish rapport with the child, social interaction opportunities before, during, and after testing
- Various pragmatic skills including eye contact/orientation of body toward communication partner, conversational turn-taking
- Ability to understand the language used by the examiner to explain the test task and respond within the expected parameters of the test (e.g., "I will say three words. Tell me the two that go together best.")
- Atypical interpretation of language or of the test prompts, mental inflexibility (e.g., overly literal/concrete, difficulty understanding abstract concepts, idiomatic or figurative language)
- Various "student skills" (e.g., staying in seat, following directions)
- Attention, persistence, and motivation to complete a non-preferred task; emotional regulation
- The need for any accommodations to complete the testing (e.g., providing a mini-schedule of first, then, and next to increase compliance and decrease anxiety, breaks, chunking the testing, and/or providing periodic reinforcement)

Authentic Assessment of Social Communication

When evaluating children with complex/advanced language, SLPs often assess social communication via 1:1 conversation. By training and disposition, SLPs tend to scaffold and support communication with the children they are evaluating often without an awareness that they are doing so (Prelock, 2000). For example, when a seven-year old child with complex language offers to tell you about his collection of windmills (i.e., area of intense interest), the SLP will often smile warmly and respond with an enthusiastic "Sure!"

As the discussion becomes a monologue about the child's area of intense interest, the SLP listens attentively, nodding and asking follow-up questions. At these moments, a child with ASD may appear not only charming but also socially capable, thus contraindicating ASD. The child may demonstrate enthusiasm for the interaction, engage in elaborated conversation, and co-construct a fairly balanced conversation (social-emotional reciprocity). This type of scenario will lead some SLPs to the erroneous conclusion that the child is more socially competent than they actually are. A more authentic assessment of social competence would be conducted in natural social contexts when the child is among one or more peers.

Consider the responses this child is likely to receive from his peers when attempting to discuss his preferred topic of windmills. Unless specifically trained to do so, peers will probably not prop up the interaction by feigning interest. In fact, peers may distance themselves or avoid the child with ASD altogether (Rowley et al., 2012; Bauminger, Shulman & Agam, 2003). It is no surprise that many children with ASD prefer interaction with adults.

While a 1:1 conversation or interview with a child is a useful method of informal assessment, it is critically important to also assess social functioning in unstructured settings among peers. Navigating social interactions amidst a group of peers is especially demanding for our students with ASD.

Dynamic assessment of social communication. Westby (2015) stated, "Speakers with ASD tend to do better on decontextualized, examiner-administered measures than assessment of natural conversation would predict, raising issues about the validity of the use of direct standardized assessments for measuring pragmatics in this population. . . . One solution to this problem is to make use of dynamic assessment procedures" (p. 1). Dynamic assessment (DA) is a non-standardized approach that provides SLPs with flexibility to play an active and intervening role when interacting with the child being evaluated (Haywood & Tzuriel, 2002).

During semi-structured, developmentally appropriate activities, the SLP presents tasks and opportunities designed to elicit social communicative responses from the child that are appraised within the context of the evaluators knowledge of ASD and typical development. Prompts may be provided to note the type and amount of support needed. Activities should be planned out to some degree with forethought into what skills are to be assessed. This is a dynamic versus static process so the SLP may be opportunistic in attempting to elicit various skills of interest. During these interactions, it can be very helpful to disrupt or sabotage the activity in some way to assess how the child or student responds, relative to developmental expectations. For example, during a game-playing activity, attempt to skip the child's turn to see if and how the child responds to the evaluators social error. When a student begins to talk at length regarding a preferred topic, the SLP may feign subtle signs of boredom. Then, if the student is unresponsive, the nonverbal expressions of boredom may become increasingly obvious and overt. The skill being elicited is the ability to attend to and interpret nonverbal signs of disinterest by a communication partner, and adjust accordingly (e.g., change topic, ask a question).

The Yale in vivo Pragmatic Protocol is a 30-minute conversational interaction with 19 probes that incorporates DA methods. For example, one probe includes the examiner engaging in small talk about themselves to note if the child/student demonstrates an interest. During another probe, the examiner muffles their speech to see if the child/student requests clarification. Simmons, Paul & Volkmar (2014) found that this protocol was effective in uncovering problems that children/students with high

functioning ASD have with discourse management as well as their need for multiple cues to request information and to maintain conversational topics.

The literature on DA reflects definitions and applications that differ in important ways (Hasson & Joffe, 2007). Researchers state that DA is increasingly employed in the evaluation of culturally and linguistically diverse (CLD) students "to reduce the inherent cultural and linguistic bias attached to static standardized tests" (Hasson, Camilleri, Jones, Smith & Dodd, 2013 .p. 59). In the evaluation of CLD students, "DA commonly follows a test—teach—retest format and in doing so, provides information about current levels of performance, the effect of intervention upon performance and highlights the best strategies for supporting further learning" (De Lamo White and Jin, 2011, p. 620).

B. SOCIAL COMMUNICATION CHARACTERISTICS OF ASD

The focus of the social communication assessment will vary based on age and level of expressive language development. Paul and Fahim (2014) outlined assessment considerations by language level in the chapter "Assessing Communication in Autism Spectrum Disorders" from *The Handbook of Autism and Pervasive Developmental Disorder* that were adapted for this subsection. Children or students being evaluated will fall within one of the following four categories:

← Greatest Severity

Least Severity →

Preverbal Young Children Approximately birth-to-4 range

Minimally Verbal/Nonverbal Older Children

Approximately age five and above

Emergent/Word Combinations

Using speech as a primary form of communication although language delays or deficits are evident

Complex/Advanced Language

Formal aspects of language (syntax, morphology) are in the average range. Marked pragmatic challenges. May struggle with higher order skills (e.g., inferences, nonliteral language)

Assessing Preverbal Young Children (approximate birth-to-4 range)

Compared to typically developing children, young preverbal children with ASD demonstrate:

- Reduced pointing to communicate needs and express interests
- Delayed development in the use of and response to pointing gestures
- Use of nonconventional means of communication (e.g., pulling person by hand, using them as a tool rather than pointing or looking)
- Depressed rate of preverbal communicative acts
- Reduced responsiveness to speech
- Restricted range of communicative functions, primarily to getting people to do or not do things
- Limited communication for social interaction or to establish joint attention
- Atypical preverbal vocalizations
- Atypical and limited language and nonverbal communication
- When speech is present, these is more echolalia and stereotyped phrases compared
- Deficits in pretend and imaginative play
- Limited ability to initiate
- Limited use of gesture, particularly nodding and shaking of the head
- Less tendency to initiate or respond to verbal communication
- Reduced response to name

These behaviors reflect an important focus of social communication assessment when evaluating toddlers for ASD (many of these characteristics are also red flags for a hearing loss, highlighting the importance of the hearing screening requirement). Focus communication assessment upon areas most impacted by ASD: rate of communication (verbal and nonverbal), use of eye gaze and gestures, responsiveness to speech and gestures, range of communicative functions (i.e. restricted to getting or rejecting or inclusive of communication for social interaction), and use of play schemes (e.g., feed the doll, put it to bed).

Communicative temptations (Wetherby & Prizant, 1989) involve attempts to elicit communication when assessing or working with a child. SLPs can use cause and effect toys and high interest materials. For example, an SLP could open a bottle of bubbles, blow bubbles to entice interest, close the bottle tightly and hand it to the child, and wait to observe the child's reactions. An SLP may also disrupt or gently sabotage an activity to elicit communication. For example, they could individually hand the child three of the required pieces to complete a four-piece puzzle or hand them an incorrect object for the fourth piece, and observe the child's resulting reactions.

Assessing Minimally Verbal/Nonverbal Older Children (approximately age five and above)

Tager-Flusberg & Kasari (2013) stated that while most preschool children with ASD will acquire enough speech to meet their daily communication needs, 25% to 30% will enter kindergarten nonverbal or minimally verbal with a very restricted ability to communicate. Researchers had previously concluded that children with ASD who had not acquired speech by age 5 were highly unlikely to do so (Mirenda and Iacono, 2009). However, Wodka, Mathy and Kalb (2013) found that nonverbal preschoolers with ASD were likely to develop speech if their nonverbal intelligence was in the average range and if they demonstrated social interest and engagement. Conversely, nonverbal preschoolers with ASD with an intellectual disability who showed little-to-no social interest were much less likely to acquire phrase-level or fluent speech later in development. In other words, we can never say for sure if a nonverbal child age five and above will develop speech.

Fortunately, aided augmentative and alternative communication (AAC) interventions are an evidence-based intervention for children with ASD (Odom, 2013), regardless of developmental trajectory. AAC offer dual benefits for minimally verbal and nonverbal children with ASD. First, AAC provides children and students with a functional means of communicating (Mirenda & Iacono, 2009). Second, AAC promotes speech development (DiStefano & Kasari, 2016). This second fact may be important to point out to parents and others as a common myth that the introduction of AAC will limit or impede speech development. Two of the most studied AAC interventions for children with ASD are the Picture Exchange Communication System (PECS) and use of speech-generating devices (SGDs); both are effective in providing individuals with ASD means of functional communication (Ganz et al., 2014; Ganz, 2015).

Why is AAC being emphasized in the context of evaluation? Because it is <u>critically important</u> to provide children with ASD who have minimal or no speech a functional means of communication (Brady et al., 2016). SLPs may set the stage for AAC by assessing the child's repertoire of communicative *forms* (e.g., speech, vocalization, eye gaze, conventional gestures such as pointing, unconventional gestures such as hand-leading) and *functions* (e.g., request, protest, comment). Children with ASD who lack functional speech may engage in maladaptive behaviors to request/obtain items or activities, to protest/avoid, to gain attention, and/or to seek sensory input. In other words, their behavior is communicative. It is important to identify the underlying function of maladaptive behaviors so that we can teach and reinforce adaptive replacement skills that the child is capable of performing (e.g., picture exchange) and

that achieves the same function. This evidence-based practice is otherwise known as functional communication training (FCT) (Franzone, 2009). Concurrently, maladaptive behaviors are often strategically ignored to prevent them from being reinforced; this is a process known as extinction, another evidence-based practice.

Additional factors to consider when evaluating older nonverbal children and considering AAC options include cognitive requirements of the AAC modality, level of representation (i.e., from what does the child derive symbolic meaning; objects, photos, line drawing, words) including the level of iconicity/complexity a child can handle, motor skills, and imitation skills (for those who lack imitation skills, hand-over-hand physical prompts may be needed at first). A reinforcement assessment will also be important to identify items and activities that can be used to elicit and reinforce the child's communication. While assessment plays an important role in determining how to get started, there are no prerequisite skills that a child must possess prior to the implementation of AAC. Every child deserves a reliable means to communicate basic wants and needs, building toward a broader repertoire of functions and message complexity.

Assessing Children at the Emergent/Word Combinations Stage

For children with functional speech who demonstrate evident language delays, standardized language tests are often helpful in establishing levels of receptive and expressive language. Note that test procedures may need to be modified to complete testing (e.g., providing more time, breaking into chunks, providing breaks/reinforcement between non-preferred test tasks). Additional assessment of children in this category should focus on communicative behaviors that are often associated with ASD, including:

- Reduced responsiveness to their name being called or to the conversational obligation to respond when spoken to
- Echolalia, the immediate or delayed imitation of what was heard and/or repetition of chunks of memorized language (note that echolalia often appears non-functional, but generally serves some purpose from the child's point of view)
- Pronoun confusion, saying "you" or their name to refer to themselves or "I to refer to another person (some researchers attribute pronoun errors to underlying problems in conceptualizing the self versus another person)
- Idiosyncratic word use, mapping a highly specific or unusual meaning to work or phrase (may be associated with a specific event or memory)
- Pragmatic use of language

A communication sample may be collected, transcribing both verbal and nonverbal communication. Since children in this group may not produce much communication spontaneously, elicitation techniques such as communicative temptations will be useful (e.g., enticing interest in a toy, then sealing it in a clear container so that the child would have to communicate the need for assistance). Structured observation (direct interaction) may be staged (see sample activities in the SCA resources section), providing an opportunity to assess:

- Responsiveness to speech, noting (for example) the percentage of times the child responded to their name, or proportion of adult social bids the child responded to
- Mean length of utterance
- Word use, assessing for variety, idiosyncratic word use, use and understanding of mental state vocabulary during, for example, looking at pictures or reading a book together

- Echolalia, examining for function in particular so that adaptive replacement skills can be targeted
- Pronoun use
- Pragmatics see "Strengths and Limitations of Standardized Tests" for a list of norm-referenced tools that assess pragmatics, in addition to the wide number of informal pragmatic checklists available to SLPs

Assessing Students with Complex Language

Often described as "high functioning", this group of students with ASD demonstrate relative strengths with formal aspects of language and may sound advanced for their age and pedantic. For this verbally fluent group, precocious expressive language development may mask significant receptive language and processing deficits. Hudry et al., (2010) found that one third of preschoolers with ASD in their study presented with an atypical language profile; receptive skills lagged behind expressive skills.

The use of comprehensive standardized language tests (e.g., TOLD-P:4, CELF:5) with these individuals often confirms what the SLP already had surmised; formal language skills are in the average-to-above average range. The American Speech-Language Hearing Association advised that "Formal testing may be useful for assessing the structure and form of language, but may not provide an accurate assessment of an individual's use of language (i.e., pragmatics)" (Autism Spectrum Disorder: Overview, n.d.). However, there are some standardized tests and subtests that are sensitive to language difficulties associated with ASD (see "Strengths and Limitations of Standardized Tests" earlier in this section).

For this group of students, social communication difficulties are characterized by deficits in pragmatics (the social use of language), social cognition (e.g., Theory of Mind), and the adhering to nuanced, unwritten social expectations in myriad real world contexts. Children with ASD in this group may talk endlessly (monologue) about their preferred topic(s) of interest with little or no attention paid to the nonverbal cues of their communication partner. They may also lack an awareness of the other person's interests or background. As a result conversations can be one-sided, without a balanced "give and take". Conversational responses may be non-contingent, meaning the child with ASD responds with a comment that has nothing to do with what the other person said. When the topic is not focused on an area of interest for the child or student, their contributions tend to be sparse and unelaborated. Students in this group show little ability to adjust their communication based on the communication partner (e.g., adult versus child).

Students within this group may also appear rude or lacking in tact, making blunt comments that offend others (resulting from a lack of skills and understanding, not any ill intent). Their social initiations are awkwardly timed. For example, teachers often find that these child struggle with calling out in class even though they are expected to raise their hand prior to speaking. While other children seem to learn social rules naturally, children in this group typically do not. These rules are routinely violated due to both a lack of social understanding and a limited awareness of the perspectives of others (i.e., how their peers view and respond to social errors).

These students may demonstrate unusual prosody, rate, rhythm, or nasality in speech. One child may be unusually flat, while another may speak with a singsong intonation, and another will sound highly nasal. The combination of social communication problems often adversely impact how peers perceive the student with ASD, leading to social rejection and isolation. While interviewing teachers and staff, it can be helpful to ask how the child being assessed is viewed by peers. If peers are rejecting or isolating the

child, find out what behavior or skill deficits are impeding social acceptance. This information will be invaluable for developing goals and planning appropriate interventions.

C. REVIEW OF SCA REQUIREMENTS

To complete the SCA, the SLP must assess the following three overlapping and interrelated areas:

- 1. Functional receptive and expressive communication encompassing both verbal (level of spoken language) and nonverbal skills;
- 2. Pragmatics across natural contexts; and
- 3. Social understanding and behavior including social-emotional reciprocity.

The resulting written profile should describe the child/student's development relative to expectations for typically developing peers. The tools and procedures used to complete the SCA should be sensitive to social communication impairments that are associated specifically with, but not necessarily exclusive to, ASD.

1. Functional receptive and expressive communication encompassing both verbal (level of spoken language) and nonverbal skills.

- Assess the child/student's understanding and use of language and nonverbal forms to function in naturally occurring situations.
- Extend language sampling to communication sampling that captures expression of both verbal and nonverbal messages - assess to the coordinated use of verbal and nonverbal communication.
- Consider using standardized benchmarks to report level of language development. A group of distinguished scholars in ASD research proposed five benchmarks to provide common terminology in describing levels of language development among children with ASD (Tager-Flusberg et al., 2009). These benchmarks are intended to assist when evaluating the efficacy of interventions that target spoken language. SLPs may find the benchmarks helpful for rating levels of spoken language in their report, following assessment. The five levels are summarized below; the article goes into much greater detail.
 - Preverbal Communication: Using preverbal intentional communication through vocal (babble) and gestural means
 - First Words: Using non-imitated spontaneous single words referentially and symbolically to communicate about objects and events; at least some speech is intelligible
 - Word Combinations: Using two- and three-word combinations for several different communicative functions; language used creatively to refer to objects and events
 - Sentences: Combining words into clauses and sentences, using plurals, prepositions, and some verb endings. Vocabulary is large enough to serve needs in everyday situations, communicating a wide range of functions across different settings and people
 - Complex Language: Using a rich vocabulary to communicate a wide range of topics including abstract ideas using complex grammar in conversation and narratives
- If the child or student is verbal then assess for aspects of language use and understanding often associated with ASD. Examples include:

- o Echolalia
- Scripting (i.e., rote recall of dialogue or other written/spoken information)
- Profile of superficially stronger expressive vocabulary belying weaker receptive skills
- Pedantic; language may sound advanced for his/her age
- Concrete, inflexible understanding of language
- Difficulty with figurative language (idioms, metaphor, irony)
- Difficulty understanding inferences and indirect requests
- Solid decoding and reading fluency with poor comprehension
- Struggling to perceive the "main idea" while focusing on details
- Difficulty processing/following multi-step verbal directions
- Atypical prosody, rate, stress, and/or nasality
- Difficulty using and understanding words or concepts related to emotions/mental states

The Verbal Behavior Milestones Assessment and Placement Program (VB-MAPP) and Assessment of Basic Language and Learning Skills-Revised (ABLLS-R) are tools frequently used by board certified behavior analysts (BCBAs) to establish baselines, identify intervention goals and track progress among children with ASD who have significant deficits/delays in language development. The Promoting the Emergence of Advanced Knowledge - Direct Training (PEAK-DT) assessment is another tool designed to identify specific language deficits in order to guide intervention (Dixon, Stanley, Belisle & Rowsey, 2016).

These tools are also appropriate for use by SLPs. Esch, LaLonde & Esch (2010) argue that SLPs should increase their use of these function-based assessments because they "offer immediate clinical benefit over non-functional speech-language tests because they allow clinicians to identify speaker-listener deficits according to developmental norms in a curricular sequence" (p. 184). SLPs who wish to use these assessments should possess at least a basic understanding of applied behavior analysis (ABA) and corresponding Skinnerian terms and concepts, verbal behavior in particular.

For students with complex/advanced language, SLPs may elect to use (or develop) criterion-referenced probes that assess understanding and use of, for example: idioms, emotions/mental state vocabulary, literal/inferential/evaluative questions, jokes, sarcasm, irony, slang, indirect requests, and so forth (Dodd, 2010). These assessments will help provide a more complete picture of the child/student to determine how ASD may be adversely impacting educational performance.

2. Pragmatics across natural contexts

Pragmatics refers to the use of language to function in social contexts across a wide range of circumstances and people. Children with pragmatic language difficulties struggle to use language in ways that are appropriate for their age or for the setting. Pragmatics is sometimes oversimplified, reduced to a small number of frequently cited skills (e.g., greetings, turn-taking). However, pragmatics is far more complex and refers to a highly varied set of skills.

Pragmatic skills fall along a developmental continuum from the early emerging (e.g., establishing joint attention, pointing, initiating, responding) to skills that emerge later (e.g., balanced conversation) to the highly sophisticated (e.g., nuanced matching of social behavior to the specific context). This PRAGMATIC SKILLS HIERARCHY BY AGE table is a helpful reference, with examples from birth to 18.

Assess and report on pragmatics in the natural contexts where that child must function among peers and/or other people (e.g., home, preschool, classroom, community). Pragmatics may be assessed via observation, direct interaction, interviews, and use of both formal (e.g., Children's Communication

Checklist - 2nd Edition) and informal, criterion-referenced measures. Whether or not standardized tools are used, it is essential to assess pragmatics in natural "real world" contexts.

Scores from standardized tests or subtests of pragmatics may overestimate true pragmatic abilities among students with ASD who have complex/advanced language. Many tests of pragmatics measure a student's ability to *describe* socially appropriate responses rather than measuring the actual ability to *perform* socially appropriate behaviors in real-world contexts (i.e., declarative knowledge versus procedural knowledge). Many verbally fluent students with ASD may perform at or above the average range on these decontextualized pragmatic tests/subtests even though they struggle with pragmatics in naturalistic settings among peers.

When evaluating CLD students, it is important to view pragmatic assessment through an equity lens and employ culturally responsive practices. Rivers, Hyter and DeJarnette (2012) stated that "Pragmatic language skills are the outward expression of the underlying social and cultural practices resulting from a group's collective and historical experiences" (p. 15). Therefore, SLPs must be aware of and account for the norms of a child's culture throughout the assessment process to prevent mistaking difference for disorder.

3. Social understanding and behavior including social-emotional reciprocity

Social understanding refers to the processing of information about oneself and other people that underlies socially competent behavior. It includes joint attention, emotional recognition, and theory of mind (Dodd, Franke, Grzesik & Stoskopf, 2014):

- Joint attention is an early developing form of social cognition (Tomasello, 1995) that involves two minds knowing they have a shared focus. For example, when a child turns to look at a dog that a peer is pointing at, this is an observable behavior that tells us the child has established joint attention with their peer upon the dog.
- Emotional recognition is the ability to recognize what someone else is feeling based upon facial expression and/or other verbal and paralinguistic cues.
- Theory of Mind (ToM) refers to the ability to infer the mental state of another person, guiding both automatic and volitional social behavior (i.e., impairments in ToM result in diminished social competence) (Adolphs, 2001).

It is important to assess and report upon social understanding because it undergirds social behavior. Poor or limited social understanding may lead to poor or limited social competence.

Assessment of social understanding may be competed via observation, direct interaction, interviews, and the use of analog tasks that require social understanding. Winner (2002) developed a dynamic assessment protocol that includes tasks such as interpreting social scene photos and the double interview (the examiner interviews the student and then the student is prompted to interview the examiner). Care must be taken to match assessments to the appropriate developmental level of the child/student. Failure to do so can lead to faulty conclusions.

Some standardized test provide useful information regarding development of social cognition/social understanding such as the Test of Problem Solving (elementary and adolescent versions available). In addition to social understanding, the SCA must assess affective prosocial behavior including social-emotional reciprocity such as:

- Affective displays of pleasure and enjoyment in being around and interacting with others
- Initiating social interactions with peers, and responding to the social attempts made by others
- Showing, bringing, and pointing things out to others

- Helping, sharing, comforting, showing concern for others injured, fearful, or in distress
- Relationship development and level of peer integration/acceptance

D. SOCIAL COMMUNICATION ASSESSMENT: PROCEDURES

There is no specific, prescribed set of assessment procedures that SLPs are directed to follow to complete an SCA. Children with ASD represent a remarkably heterogeneous group. Therefore, SLPs must select assessment tools and procedures based on the age of the child/student, developmental level, and estimated ASD severity. In general, the following procedures are recommended to complete and SCA:

SCA Procedure	Suggestions and Tips
Background, Records Review, Reason for Referral	As the evaluation is initiated, search for available information regarding development of social communication, language, and peer relationships; document the social communication concerns that led to the evaluation
Naturalistic Observation	Complete during both structured times (teacher-led lesson) and unstructured times (transitions, passing times between scheduled activities/classes, lunch, playground)
	Observe for functional use and understanding of language
	Observe for pragmatic skills, quality and duration of interaction, note how others respond to and interact with child
	Helpful to collect comparative data from one or more peers (e.g., rate and quality of social initiations and responses)
	Recording method may be narrative (i.e., the observer keeps a continuous log of relevant, anecdotal social behavior) or systematic (i.e., the observer begins with a predetermined set of skills or behaviors to observe for based on frequency, severity, or duration along with context/where the behavior occurred; e.g., rate of social initiation during a period of time). An informal checklist or tool may be used to structure the observation (e.g., communication "forms and functions" tool
	Note regarding ADOS-2: It is appropriate for SLPs to conduct an observation while an evaluation team member administers the ADOS-2. This is a rich context to record behaviors of interest relevant to completion of the SCA
	Limitation: Naturalistic observations can be time-consuming while yielding data of limited value (e.g., a socially withdrawn child may not interact with other children during the observation, providing little opportunity to assess social skills or functioning
Structured	See "Dynamic assessment of social communication" earlier in this section.
Observation/Direct Interaction	For a highly impacted, nonverbal pre-school child, engage in a series of "communicative temptations" (Wetherby & Prizant, 1989) with cause and effect toys to elicit communication, assess if the child has a functional means of requesting, gaining assistance; use of conventional versus non-conventional gestures. Elicit responses to assess for joint attention, responsiveness to his/her

name and other social stimuli

For a child in early elementary grades with phrase-length expressive language, stage a game playing activity (Don't Break the Ice. Don't Spill the Beans) with one-to-two socially capable peers, providing stand-by prompts to keep the play moving forward. Assess for functional use and understanding of language in the context of the activity, pragmatics, social responsiveness with peers

For an upper elementary student with advanced language, provide the student and one or two socially typical peers with a group task or art project to complete that requires sharing of materials, focus on a single, shared goal. Observe for adherence to various social rules, reading nonverbal communication, engaging in "give and take" conversation

Limitation: While this type of observation can yield much richer information in a shorter period of time, the situations may be inauthentic or overly contrived

Interviews and Informal Checklists

Use with parents, caregivers, classroom teachers, and other adults who have had many hours to observe the child in naturalistic settings with peers (paraeducator on daily recess duty). Teachers who have had students in their classroom for several months are an especially rich source of information

It is best to structure the interview with some type of tool or checklist matched to the age and developmental level of the child. While these checklists can be completed by informants on their own, it is very helpful to be able to ask follow-up questions and explain items as needed. Examples of tools include:

- Pragmatic skills checklist (there are many available)
- Autism Social Skills Profile 2 (ASSP-2) (Bellini)
- Social Skills Checklist from "Do, Watch, Listen, Say" (Quill)
- Underlying Characteristics Checklist (UCC) versions for preschool, classic, and high functioning ASD (Aspy & Grossman)

Standardized Instruments

Standardized Tests. Not required, but may be useful (see "Strengths and Limitations of Standardized Language Tests"). For children at the emergent/word combinations stage with an evident language delay, comprehensive language measures will often assist in establishing baseline levels of receptive and expressive language development

Other language tests previously mentioned in this chapter demonstrate sensitivity to language features associated with ASD and are therefore directly helpful in completing the SCA

Standardized Rating Scales. Children's Communication Checklist - 2nd (CCC-2) will help identify pragmatic impairments in ASD. The CCC-2 has a .89 sensitivity and .97 specificity in detecting ASD (ASHA recommended that standardized tools for identifying ASD should have .80 or higher values for sensitivity and specificity)

Social Responsiveness Scale - 2nd (SRS-2) emphasizes assessment of social reciprocity and has separate norms for boys and girls; a uniquely helpful feature for evaluating females suspected of being eligible under ASD

Sample Tools Useful in Completing the SCA

As stated previously, there is no prescribed list of assessments for completing the SCA. Evaluation of a preverbal toddler is going to require different tools and methods than a 4th grader with complex/advanced language. The list below provides a small sample of assessments that may be helpful to include as part of the SCA to illustrate that tools vary in their suitability based upon the language level of the child.

	Estimated Suitability by Language Level Refer to manuals whenever available for specific guidelines			
Name of Assessment	Preverbal Young Children Ages 0-4	Minimally Verbal/ Nonverbal Older Children Ages 5 and up	Emergent/ Word Combinations	Complex/ Advanced Language
The Rossetti Infant-Toddler Language Scale	х			
REEL-3 Receptive-Expressive Emergent Language Test Third Edition	х			
The Communication Matrix (Rowland)	х	х		
Communicative Temptations (Prizant)	х	х		
Assessment of Communicative Acts/Functions (Wetherby & Prizant)	х	х		
Communication and Symbolic Behavior Scales (CSBS:DP)	х	х		
SCERTS-SAP Observation Form: Social Partner	х	х		
Assessment of Basic Language and Learning Skills-Revised (ABLLS-R)	х	х	х	
Verbal Behavior Milestones Assessment and Placement Program (VB-MAPP)	Х	Х	Х	
Promoting the Emergence of Advanced Knowledge - Direct Training (PEAK-DT)	х	х	х	
Social Skills Checklist (Quill, 2000)		х	х	
Social Responsiveness Scale-2		х	х	х
Children's Communication Checklist - 3rd (CCC-3)		х	х	х

SCERTS-SAP Observation Form: Language Partner		х	
Autism Social Skills Profile (ASSP) Bellini		х	х
Friendship Skills: Indices of Friendship Observation Schedule (Attwood, 2004)		Х	Х
Social Skills Rating System (SSRS)		х	х
SCERTS-SAP Observation Form: Conversation Partner			х
Double Interview (Winner)			х
Test of Problem Solving (TOPS-3) Elem / TOPS-2 Adolescent			х
Social Skills Improvement System (SSiS)			х

REPORTING SOCIAL COMMUNICATION ASSESSMENT RESULTS

In reporting results of the SCA, keep in mind the following:

- The SCA report should "paint a picture" of the child/student in natural settings among peers
- Synthesize the assessments to form a profile of social communication development across the domains impacted by ASD, described in relation to developmental expectations. If ASD is present, a pattern of characteristics should begin to emerge.
- Include strengths, likes, and interests of the child. Not only is this important for parents and caregivers emotionally, it is useful for program planning.
- The SCA completed by the SLP is one source of data that informs the team's determination as to whether the child meets eligibility criteria for special education under the category of ASD. However, it is not the sole source of data and must be considered collectively with all other evaluation components and information about the child/student.
- In addition to providing information that assists with the team's determination regarding the child's/student's eligibility, the SCA should also point directly toward intervention priorities and, in the event that the child/student is eligible for special education, assist with development of the IEP/IFSP (e.g., Present Levels of Academic and Functional Performance, Measurable Annual Goals, and Accommodations/Modifications)



SAMPLE SCA REPORT (IN DEVELOPMENT)

STANDARDIZED AUTISM IDENTIFICATION TOOL

Standardized autism identification tool. One or more valid and reliable standardized rating scales, observation schedules, or other assessments that identify core characteristics of

autism spectrum disorder

Since we use standardized autism identification tools to determine eligibility (along with the other evaluation components), the key psychometric property we should scrutinize is **diagnostic validity** as measured by an instrument's **sensitivity** and **specificity**. Test sensitivity refers to the rate at which the instrument correctly identifies children who have been confirmed with ASD (true positive rate). Test specificity refers to the rate at which the instrument correctly rules out ASD among children who have been confirmed to not have ASD (true negative rate).

As a general rule, a standardized instrument being used to assist in ASD identification should have minimum sensitivity and specificity levels of .80 (80%) or better (Meisels, 1989). Sensitivity refers to the percentage of children an ASD instrument accurately detects (true positives). Specificity refers to the percentage of children an ASD instrument accurately rules out (true negatives). The Autism Diagnostic Observation Schedule – 2nd (ADOS-2), widely considered a "gold standard" instrument for identifying ASD, has sensitivity in the upper 90% range (.91 to .95) and specificity in the upper 80% to lower 90% range (.84 to .94) (Lord et al., 2008).

There are a host of other variables to consider when selecting an instrument (e.g., the age range it was designed for, the amount of time and complexity involved for administration, the training involved to use the instrument, and the usefulness of the results). Some instruments have notable features that make them especially well-suited for certain situations. For example, the highly regarded Social Responsiveness Scale – 2nd Edition (SRS-2) has separate normative tables for girls. These separate normative tables may result in the SRS-2 providing increased sensitivity to ASD among girls. Given the number of variables that go into determining an appropriate evaluative instrument, the specific instrument to be used for an evaluation is a matter most appropriately left to the professional judgment of the qualified evaluator in consultation with the evaluation planning team.

When using the instruments, it is essential to follow the guidelines spelled out in the manual. Straying from standardization jeopardizes the validity of the score and any conclusions or decision made based upon that score.

Table of Standardized Autism Identification Tools

The table below includes several reliable and valid instruments, though the list is neither exhaustive nor prescriptive. No single instrument determines eligibility, and results from a standardized instrument carry neither more nor less weight than any other components of the evaluation. Some may be tempted to rely more heavily upon results from standardized instruments yet teams are cautioned against doing so. Eligibility determination requires that the team carefully consider all of the information gathered from the completed assessments. Many of the tools listed below are available in other languages (or in development); please check with the publisher for more information.

Name of	Instrument	Age	Administration and	Support in the
Instrument	Description	Range	Scoring	Literature
ADI-R 1994	Provides extensive information regarding history and development	Children and adults with a "mental age above 2 years"	The ADI-R has a steep learning curve, and is lengthy to administer.	Along with the ADOS-2, widely considered a gold standard in autism identification

Autism Diagnostic Interview- Revised Available in Spanish and other languages	This is a structured Parent/Caregiver interview with 93 items that are administered in a prescribed manner		Requires 1.5 to 2.5 hours to administer	(Falkmer, Anderson, Falkmer & Horlin, 2013) Sensitivity: .9 to 1.0 Specificity: .97 (distinguishing ASD from non-ASD)
ADOS-2 2012 Autism Diagnostic Observation Schedule – Second Edition Available in Spanish and many other languages	Semi-structured direct interaction designed to assess communication, social interaction, imagination & play Tasks elicit behavior to determine the presence or absence of behaviors associated with ASD	Toddler module for 12 to 30 months Modules 1, 2, 3 and 4 for ages 31 months to adulthood	The ADOS-2 has a steep learning curve. Training from a skilled professional is required; 2-day training along with practice to ensure fidelity, establish minimum level of inter-rater reliability About 30-45 minutes to administer	Widely considered a gold standard assessment in ASD identification (along with the ADI-R) Sensitivity: .9195 Specificity: .8494
ASIEP-3 2008 Autism Screening Instrument for Educational Planning - Third Edition	Five Subtests -Autism Behavior Checklist -Sample of Vocal Behavior -Interaction Assessment -Education Assessment -Prognosis of Learning Rate	2:0 to 13:11	Moderately complex to learn, administer, and score. Requires two evaluators. Practice with an examiner experienced with the tool is recommended 12-30 minutes per subtest	None of the subtests on their own are suitable for use as the required standardized autism rating tool
ASRS 2010 Autism Spectrum Rating Scale Available in Spanish	Two full-length forms include 70 items each for students ages 2-5 and 6-18. Includes a short form screener Teacher and Parent versions Norm-referenced	2:0 to 18:0	Relatively easy to learn, administer, and score 10 to 20 minutes to administer	Strong psychometric properties but paucity of independent research Sensitivity: .94 Specificity: .92
CARS-2 ST (Standard) 2010 Childhood Autism Rating Scale-Second Edition	15-item rating scale completed by the evaluator knowledgeable regarding ASD Also included the CARS 2-QPC; an unscored questionnaire designed to obtain pertinent	For use with children younger than 6 years of age and those with communication difficulties or below-average	The examiner completing the protocol must possess a thorough understanding of ASD Not a checklist - carefully review administration directions in the manual	Original CARS was well supported and highly regarded. CARS-2 offers high diagnostic agreement with DSM-5 criteria (Dawkins, Meyer &

Available in Spanish	developmental information from parents or caregivers	cognitive ability		Van Bourgondien, 2016) ST: Sensitivity: .94 Specificity: .85
CARS-2 HF (high functioning) 2010 Childhood Autism Rating Scale-2nd Ed. Available in Spanish	15-item rating scale; completed by an evaluator based upon multiple sources of information such as direct observation, parent/teacher interviews, etc.	For use with children 6:0 and up, with an IQ of 80 or higher	The examiner completing the protocol must possess a thorough understanding of ASD NOT a checklist to be handed out; carefully review administration directions in the manual	See information from CARS-2 Standard Sensitivity .81 Specificity .87
CCC-2 2006 Children's Communication Checklist – Second Edition Available in Spanish and other languages	This rating scale is especially sensitive to pragmatic language impairments observed in ASD, while providing ratings for other communication domains: speech, syntax, semantics, coherence	For use with children 6:0 and up, with an IQ of 80 or higher	Relatively easy to learn, administer, and score. The examiner completing the protocol must possess a thorough understanding of ASD Can be used to determine need for further ASD evaluation or as part of the communication assessment	Generally Supported/Well Regarded Sensitivity: .89 Specificity: .97
SCQ 2003 Social Communication Questionnaire Available in Spanish and other languages	40 yes/no items; adapted from ADI-R using items most associated with positive autism diagnosis. Designed to screen for ASD	4:0 to adult, "with a mental age over 2 years"	Relatively easy to learn, administer, and score. Completed by parent/caregiver Two forms: Lifetime and Current Uses a simple cutoff score of 14 10 minutes to complete	Generally Supported/Well Regarded Sensitivity: .85 Specificity: .75 Lower cutoff score of 11 increases sensitivity to 1.0 for children 3 to 5; specificity: .62
SRS-2 2012 Social Responsiveness Scale 2nd Ed. Available in Spanish	4 forms (based on age), 65 items each Based on naturalistic observations. For Parent/Caregivers, teachers, and adult self-report	2.5 to adult	Easy to use and score; requires about 10-20 minutes Yields a T-score associated with categories Uses norms separated by rater; males and females, parent and teachers Includes DSM-5 subscales	Generally Supported/Well Regarded Compares well with ADOS-2, ADI-R and SCQ Sensitivity: .92 Specificity: .92

MEDICAL EXAMINATION/HEALTH ASSESSMENT

as determined necessary by the team. The purpose of a medical examination or health assessment is to ensure consideration of other health and/or physical factors that may impact the child's educational performance for a child age 5-21. A medical diagnosis of autism spectrum disorder is not required to determine eligibility

A medical examination or health assessment is required when conducting initial evaluations for children ages birth to five to ensure consideration of possible health and/or physical factors. For students age 5 and above, the team has discretion to decide whether or not to gather formalized medical examination or health assessment information. Health assessments can provide the team with information that will contribute to deciding whether or not to rule out or confirm other eligibility categories. If there are significant concerns regarding possible health and/or physical factors impacting the student, best practice calls for collecting this information. Information gathered in the developmental history may help the team determine if a medical examination or health assessment is warranted. For reevaluation, the team should also consider any behavioral changes in the previous three years that could prompt the need for new health information.

The medical statement can be completed by a State Board Licensed Physician, Physicians Assistant, Nurse Practitioner or Naturopathic Doctor. Teams do not have to use the ODE medical statement form; they may use other documentation from medical providers as long as it communicates the same information required on the state sample form (i.e., any health and/or physical factors).



SAMPLE COVER LETTER FOR THE MEDICAL STATEMENT/HEALTH ASSESSMENT STATEMENT

HEARING AND VISION SCREENING

Vision and Hearing Screening. Review existing screening, or if none conduct a new screening

Vision and hearing are vital functions, and impairments may adversely affect development, learning, communication, health, safety, and quality of life. ASD evaluations must document that screenings have been completed and the team must consider the findings in determining eligibility under ASD.

The first step in this process is to attempt to locate documentation confirming that hearing and vision screenings have been completed. This information is often contained in the child's cumulative file or may be available via outside sources. If documentation of both screenings is obtained, then this step in the ASD evaluation process is complete.

If the documented results of one or both screenings cannot be obtained or if screenings have not been conducted, then they must be completed. The following documents provide detailed information regarding guidelines for hearing and vision screening:

ODE ASD HEARING SCREENING GUIDELINES

ODE ASD VISION SCREENING GUIDELINES

Q: What do we do if the child/student cannot be screened via commonly used behavioral methods?

A. Most children will be successfully screened via pure-tone hearing screening and distance central visual acuity testing using the Snellen chart (or Lazy E chart for younger children, alphabet chart, etc.). However, alternative methods of screening may be necessary for some.

Hearing screening alternative: If the child/student cannot be screened via pure-tone testing, a permissible alternative is completion of the <u>ASD HEARING SCREENING CHECKLIST INTERVIEW</u> with the parent/caregiver **AND** otoacoustic emissions (OAE) screening.

Vision screening alternative: If the child/student cannot be screened via distance testing using a Snellen or other type of chart, a permissible alternative is completion of the <u>ASD VISION</u> SCREENING CHECKLIST INTERVIEW.

Once hearing and vision have been screened, the procedural requirement for the ASD evaluation process has been met. However, if a child fails a screening or concerns arise then the established processes regarding next steps must be followed to ensure any vision and/or hearing problems are formally evaluated, identified and treated. Review the hearing screening guidelines and vision screening guidelines linked above for specifics.

Q: If a child fails a hearing and/or vision screening, does this mean the team cannot proceed with an ASD eligibility determination until the hearing and/or vision follow-up process has been completed?

A. In most situations, the evaluation team will want a definitive resolution regarding what is happening with a child's hearing and/or vision before determining eligibility under ASD. Assessment of the sensory features associated with ASD is especially complicated by unresolved hearing or vision issues. In their chapter on the clinical assessment of sensory features of ASD, Baranek, Little, Parham, Ausderau & Sabatos-DeVito (2014) wrote, "Although most individuals with ASD do not have a primary sensory deficit such as hearing or vision loss, the appropriate professionals should assess these functions, resolving any concerns before further evaluating sensory processing functions" (p. 393). Every child and situation is unique and proceeding with ASD eligibility determination while hearing or vision follow-up is occurring is not specifically prohibited. The decision rests with the evaluation team.

ADDITIONAL ASSESSMENTS TO DETERMINE IMPACT OF THE DISABILITY

Any additional assessments that may include: measures of cognitive, adaptive, academic, behavioral-emotional, executive function/self-regulation, or sensory processing necessary to determine the impact of the suspected disability

Additional assessments may be formal or informal, utilized at the discretion of the team. Since even the brightest, verbally fluent individuals with ASD are known to struggle with adaptive skills, adaptive measures (e.g., ABAS-3, Vineland-3) may provide the team with valuable information regarding the degree to which an individual is developing the self-sufficiency skills needed in function successfully and safely in real-life situations (Kanne et al., 2011).

Behavior rating scales, such as the BASC-3 or CBRS, that that are not narrowly focused on ASD characteristics may provide a more broad-based picture of behavioral, emotional, and social strengths and weaknesses as well as assisting in the process of differentiation (Wilkinson, 2016). Instruments with a narrower focus such as the Multidimensional Anxiety Scale for Children 2nd Edition (MASC-2) may be

helpful if there are elevated concerns in a particular area such as anxiety or social loneliness (White & Roberson-Nay, 2009).

Academic testing is helpful because capability in this area is often an unrecognized strength among learners with ASD (Ozonoff, Goodlin-Jones & Solomon, 2005). It can reveal undiscovered strengths as well as weaknesses that are important for instructional planning (e.g., strong decoding, weak comprehension).

Huerta and Lord (2012) stated that cognitive testing can provide useful information to assist teams in the process of differentiating ASD, as well as further describing strengths and weaknesses. However, cognitive testing for individuals with ASD has come under scrutiny in recent years due, in part, to concerns that the use of some tests result in underestimations of children who are non-verbal or minimally verbal (Courchesne, Meilleur, Poulin-Lord, Dawson & Soulières, 2015). Ozonoff, Goodlin-Jones & Solomon (2005) stated, "There are special concerns about the validity of testing younger, lower functioning, and nonverbal children, and care must be taken in choosing appropriate tests" (p. 529). The expertise of a school or clinical psychologist on the evaluation team is essential in the selection, administration and interpretation of cognitive tests when included in ASD evaluations.

The following are examples of instruments evaluation teams have found useful in providing a more complete picture of the child/student (list is illustrative, not exhaustive):

Assessment	Area Assessed	Age Range
Behavior Rating Index of Executive Functioning (BRIEF-2 or BRIEF-P)	Executive Function	BRIEF-P: Ages 2-5.11 years BRIEF-2: Ages 5-18 years
Behavior Assessment System for Children (BASC-3) (Spanish available)	Behavior and adaptive	Ages 3-adult
Conners Comprehensive Behavior Rating Scales (Conners CBRS)	Behaviors, emotions, academic, social problems	Ages 6-18
Sensory Profile-2 (SP-2) (Spanish available)	Sensory functioning	Ages birth-14.11
Wechsler Intelligence Scale for Children-Fifth Edition (WISC-V)	Cognitive	Ages 6:0–16:11
Comprehensive Test of Nonverbal Intelligence, Second Edition (CTONI-2)	Cognitive (Non-Verbal)	Ages 6.0-21
Battelle Developmental Inventory -2 (BDI-2)	Developmental	Ages birth-7.11
Kaufman Test of Educational Achievement, Third Edition (KTEA™-3)	Academic	Ages 4.0-21

Woodcock Johnson-IV Test of Achievement	Academic	Ages 2-Adult
Adaptive Behavior Assessment System Third Edition (ABAS-3)	Adaptive	Ages birth-adult
Vineland-3 Vineland Adaptive Behavior Scales, 3rd Ed.	Adaptive	Ages birth-adult

ADDITIONAL ASSESSMENTS TO DETERMINE EDUCATIONAL NEEDS

Any additional evaluations or assessments necessary to identify the child's educational needs

Many of the assessments used to determine impact may also provide some indication regarding educational needs. However, many tools designed for ASD identification offer limited utility for determining and prioritizing intervention targets (Gould, Dixon, Najdowski, Smith & Tarbox, 2011). Some assessments provide in-depth measurement of skill domains impacted by ASD and are therefore especially helpful for both program planning and tracking progress. Many manualized curricula and intervention programs include their own assessments, some which are useable on their own.

Assessments to determine needs may be formal or informal, norm-referenced or criterion-referenced, static or dynamic, formative or summative. Depending upon the child/student, assessment to determine needs should encompass all areas adversely impacted by ASD including academic/pre-academic skills, functional communication/language, social skills, organization/executive function, emotional self-regulation, sensory, and adaptive/life skills.

The following list includes examples of published assessments that may be helpful in determining instructional needs/priorities (list is illustrative, not exhaustive):

Assessment	Details	Age Range
Assessment of Basic Language and Learning Skills- Revised (ABLLS-R)	Assesses language, social interaction, self-help, academic, and motor skills that typically developing children acquire by age 3 to 4 and need prior to entering kindergarten	Birth to 12 with delayed basic communication or life skills
Verbal Behavior Milestones Assessment and Placement Program (VB-MAPP)	Assesses functional communication and pre-academics for goal development progress monitoring; Barnes, Mellor & Rehfeldt (2014) advised that users should be "familiar with Skinner's analysis of verbal behavior and basic behavior analysis" (p. 57)	Assesses developmental milestones up to 48 months
Promoting the Emergence of Advanced Knowledge (PEAK)	There all four PEAK modules, each includes an extensive assessment of language, social, and pre-academic/academic skills	18 months through teen years

STAR Program Student Learning Profile Assessment	Level 1, Level 2, and Level 3 protocols available assessing various language, social, learning, and pre-academic/academic skills	Preschool and elementary
Underlying Characteristics Checklist (UCC)	The UCC is a team-based assessment for comprehensive planning via the Ziggurat Model (Aspy & Grossman, 2011). EI=Early intervention, CL=classic, HF=high functioning (HF)	All ages - select suitable UCC; EI, CL, or HF
Rubrics for Transition III: Autism Spectrum	Identify priorities from a list of 63 transition-related skills, each broken into sub-skills for teaching, tracking progress	Transition-aged students

ELIGIBILITY DETERMINATION

Once all required assessments have been completed, the team should consider if they have sufficient information to proceed with eligibility determination. Specifically, has the team collected enough information to make a data-based determination when answering "yes" or "no" to each of the seven behavioral domains (below) after all assessments have been shared at the eligibility meeting?

Deficits in social communication (must exhibit all three)

- 1. Social-emotional reciprocity
- 2. Nonverbal communicative behaviors used for social interaction
- 3. Developing, maintaining, and understanding relationships

Restricted, repetitive patterns of behavior, interests, or activities (must exhibit at least two of four)

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

If the team has sufficient data to proceed, then an eligibility determination meeting that includes the parent must be scheduled.

In discussions prior to the eligibility meeting, it is important to avoid actions that essentially "pre-determine" eligibility (i.e., indicate whether or not the child/student meets the ASD eligibility criteria). The actual determination of eligibility must be deferred to the eligibility meeting itself with the parent or caregiver present. The eligibility determination meeting provides a venue for each team member, including the parent/caregiver, to present information to and hear from one another. The complete picture formed by this process is necessary to determine if the child/student meets the ASD eligibility criteria.

Tips for sharing results:

• In reports and during the meeting, **emphasize student strengths, interests, and abilities**. The benefits of doing so are two-fold. First, ASD is characterized by a scattering of skills or pattern of "peaks and valleys". It is important for parents/caregivers to know that others see the strengths

- and capabilities in their child. Second, IFSPs and IEPs are stronger when they build from student strengths and leverage reinforcers and areas of interest.
- Avoid belaboring the same findings regarding specific child/student deficits. There is value for
 multiple team members to share corroborating findings. Yet it can be painful for parents to hear
 the same detailed account of how their child, for example, struggles socially with peers. Look for
 ways to balance the need to be thorough while also minimizing redundancy.
- During the process, ensure that **the parent has an opportunity to discuss questions/concerns** about the evaluation information presented.

The ASD Evaluation Report. Assessment data from all assessment procedures must to be synthesized via separate report or, as some teams elect to do, via a unified report. ASD evaluation reports tend to be more qualitative and descriptive given the nature. Indeed, the report(s) should "paint a picture" of the child/student by describing the results of the reason for referral, background, records, observations, interactions, interviews, and formal/informal assessments.



SAMPLE ASD EVALUATION REPORT
SOCIAL RESPONSIVENESS SCALE - 2ND ED (SRS-2) TEMPLATE FOR REPORTS

Additional templates for commonly used instruments in development

THREE-YEAR REEVALUATION

A reevaluation must be conducted at least every three years unless the parent and district agree that an evaluation is unnecessary. The evaluation may not occur more than once a year unless a parent and public agency agree otherwise. A reevaluation begins with a team review of the existing information in order to determine whether any additional information is needed and, if so, what specific evaluation will be conducted. If additional evaluation data is obtained, an evaluation report must be written reporting the results of the evaluation.

For a three-year reevaluation, there are multiple pathways the team may pursue to re-establish an eligibility. If the team determines that there have been significant changes to the student's level of functioning or autistic characteristics displayed, for example, they may choose to complete some of the required evaluation components in order to gather more data. If a team is questioning the continued need for an ASD eligibility, they may choose to perform all of the required components in order to demonstrate due diligence in light of the potential exit from special education services. Conversely, some educational teams may determine that there have not been significant changes that require a deeper look at the child's development, displayed characteristics, or academic performance and may choose to pull forward most or all previously completed evaluation components to re-establish eligibility.

Whether or not an evaluation (or any component of the evaluation) is conducted, a new eligibility statement must be completed identifying the documentation used to determine eligibility. The documentation may include information from the previous evaluation, existing information, and new evaluation data.

Reevaluations occuring after January 1, 2019 must adhere to the updated ASD criteria. Therefore, evaluation teams must note the new and significantly revised required evaluation components (e.g., hearing/vision screening, developmental history, social communication assessment). Previously

completed components *may* be usable if they align with the updated eligibility definitions, components and criteria.

Based on the amount and type of information gathered, a written reevaluation summary for a 3-year reevaluation may look very much like an initial ASD evaluation report that includes information on all updated information gathered to support the reevaluation. Alternatively, a written summary may be more concise; in which the evaluator(s) include a brief overview of the student's present levels of performance and a description of how the student continues to display deficits in in the area of Social Communication and characteristics relating to patterns of behavior, interests, or activities associated with ASD.

Review: Key Considerations for Reevaluation

When teams are considering whether or not to conduct a full reevaluation versus using some, or all, of the previously completed assessments to re-establish eligibility, they are encouraged to take into account the following three considerations:

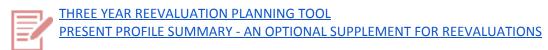
- **1.** Does the team question if ASD continues to accurately describe the student? If yes, the student should be fully reassessed, particularly if the team suspects that the student will no longer meet the ASD eligibility criteria.
- **2.** Does the team have enough information to serve the student? If not, additional assessments should be thoughtfully selected to provide the team with the information needed to plan, prioritize and implement instruction and supports.
- **3. How old is the student?** A great deal of developmental change occurs in early childhood. As a general rule, the younger the child, the less justifiable it is to re-establish eligibility based upon assessments completed as part of a previous evaluation.

Best Practice Recommendations for Teams Using Previous Assessments to Re-Establish Eligibility

When considering whether or not to update some or all of the ASD evaluation components teams should consider: (1) the age of the child, (2) if ASD continues to best describe the student's learning profile, (3) if the team has sufficient information to effectively continue to serve the student and develop appropriate educational programming, and (4) significant transitions coming up for the child that may require the team to examine potential needs based on increased rigor or new expectations or requirements that may occur in the student's educational career/lifespan (e.g., elementary to middle, aging out of services).

- Team should consider if there have been significant medical or medication changes since the last eligibility determination (i.e. TBI, new diagnoses, suspected cognitive impact from seizures, etc.)
- When team members have determined that they would like to carry forward some or all of the required components from the previous evaluation to re-establish eligibility, be sure to discuss the matter with the full team including the parent before proceeding. Ensure that the team is in agreement that no additional evaluation or testing is needed based upon existing information.
- When the team determines that all previous evaluation components can be used to re-establish eligibility, it is best practice to draft an informal summary. It should be completed by a team member who knows the student well. This summary should include pertinent information on

the student's current performance based on recent observations, how ASD impacts the student, and what they need to be successful. Consider what happens if the student transitions to a different school, district, or state. What current information would you want the receiving team to have to successfully get started working with and supporting the student? This summary should be included in the student's educational record, accompanying the eligibility statement (see sample Present Profile Summary tool below).



ASD EVALUATION OF STUDENTS FROM CULTURALLY AND LINGUISTICALLY DIVERSE BACKGROUNDS

Conducting ASD evaluations for students from culturally and linguistically diverse backgrounds is complicated by language barriers, differences in how ASD and disability are conceptualized across cultures, and variability in social norms. Culturally responsive practices in ASD evaluation and eligibility are essential because:

- Nationally, students from CLD backgrounds with ASD are under-identified and identified later than others (Travers & Krezmien, 2018)
- Intervention for students from CLD backgrounds may be delayed by years even though research has linked optimal outcomes for ASD with early identification and treatment (i.e., the earlier, the better) (Zwaigenbaum et al., 2015)
- IDEA mandates that evaluation teams must take into account a child's English language proficiency, experiences, and cultural background

Recommendations for conducting culturally responsive ASD evaluations:

- Form a partnership with parents/caregivers and incorporate their preferences, honor cultural differences, and respect any challenges they may be facing associated with limited resources. ASD evaluations for students from CLD backgrounds require additional time, in part, because of the extra time needed to establish rapport and trust.
- Include parents as partners in the process of assessment. Active parent involvement will help evaluators resolve questions about the child and/or cultural context.
- Recognize that parents of students from CLD backgrounds often have different values and attitudes toward disability, special education, and ASD. Gain an understanding of the parent/caregiver perspective so you can educate and reassure them.
- Work with interpreters and cultural liaisons to establish an understanding of what is typical for a
 family's culture as well as linguistic expectations of children in their community. If possible,
 develop a collaborative relationship with interpreters and include them in the planning process
 and debrief. This work should form a context for the evaluation and is specifically necessary
 when completing the:
 - Developmental history: Must be viewed through the lens of culture, especially in light
 of the sensitive questions and topics raised while completing this component.

- Parent/Caregiver interview: When asking about current and historic development in areas impacted by ASD, consider cultural and linguistic factors that may influence appropriateness and/or relevance of benchmarks or developmental norms.
- Observations: Developmental comparisons must be made with genuine peers; those from the same cultural and linguistic background as the child/student being evaluated.
- Direct interactions: Best practice is to complete in both languages and in natural contexts.
- Standardized Autism Identification Tool (and other standardized testing): Assess the
 cultural relevance of ASD assessments. It is common for publishers to translate tools
 without addressing cultural bias or other inherent issues that make their use with CLD
 students problematic (Harris, Barton & Albert, 2012).
- **Social Communication Assessment:** Best practice is to collect language/communication samples in both languages.
- Select culturally appropriate assessment methods and tools. Consider the cultural relevance of
 the tests, rating scales, and other assessments used as part of the ASD evaluation. This checklist
 provides a framework examining the cultural relevance of ASD assessments. Many of our tools
 and procedures are culturally biased in ways that can contribute to misidentification. Evaluators
 must either be aware of the cultural bias in an assessment so that results can be interpreted and
 reported upon within that context, or they must select or adjust assessments to reduce or
 eliminate the cultural bias.
- Use an ecological approach that accounts for the child's background and experiences. When
 conducting the assessment, gather information from multiple people who are familiar with the
 child across settings.
- Present evaluation results in a culturally-sensitive manner. Self-monitor for jargon acronyms,
 using language that is accessible and readily interpretable. Use steady pacing, providing enough
 time both for the interpreter and for the parent to process the information. Periodically check in
 to ensure you are being clear and to ask if there are any questions. Be mindful of the different
 ways in which some cultures view disability and any fears or misconceptions that may
 accompany those views.
- Take time to learn more about culturally responsive evaluation practices and develop cultural
 competence as a professional. This resource touches only briefly on this complex and important
 issue.

Resources

English Learner Students with Disabilities (ELSWD) (ODE)

Special Education Assessment Process for Culturally and Linguistically Diverse Students (2015) (ODE)

Assessing Diverse Students With Autism Spectrum Disorders

IDEA Part B Issue Brief: Culturally and Linguistically Diverse Students

Working with Culturally and Linguistically Diverse (CLD) Students in Schools



CHECKLIST FOR ASSESSING THE CULTURAL RELEVANCE OF ASD ASSESSMENTS

ASD EVALUATION AND GIRLS

Girls with ASD are identified less often and later compared to boys with ASD (Hiller, Young & Weber, 2016). Studies of male to female ASD prevalence ratios range between 4:1 (Christensen, 2018) to 3:1 (Loomes, Hull & Mandy, 2017). Boys outnumber girls with ASD at a 10:1 ratio when the analysis is limited to individuals with ASD that have cognitive skills in the average range (Dworzynski, Ronald, Bolton & Happé, 2012). Girls with ASD are at far greater risk than boys of being misdiagnosed or missed altogether (Lai & Baron-Cohen, 2015). The suspected reasons for under and misidentification of girls include:

- The diagnostic criteria is based largely upon how ASD manifests in boys (i.e., male stereotype of ASD) (Bargiela, Steward & Mandy, 2016)
- The tools developed to detect ASD were designed and validated on groups of boys (Kopp & Gillberg, 2011)
- Diagnostic overshadowing occurs when ASD-like features in girls are attributed to previously diagnosed conditions such as anxiety or eating disorders (Lai, Lombardo, Auyeung, Chakrabarti & Baron-Cohen, 2015)
- Many girls learn to camouflage their ASD so that social difficulties are masked until social demands exceed their capacities, usually in middle school/high school (Kenyon, 2014).

Girls with ASD face significant adverse effects as a result of underidentification and misidentification such as specialized support and instruction that is delayed or denied altogether - and long term social and psychological difficulties associated with camouflaging (Hull et al., 2017). Prior to diagnosis, women with ASD recall experiencing "a lack of support and compassion from others, psychological confusion and distress due to their unexplained differences, and exclusion and victimization by peers…" (Egerton & Carpenter, 2016, p. 7). Recognizing the ways in which ASD presents differently in girls is an important in ensuring timely and accurate identification.

In the category of social communication and social interaction, girls with ASD tend to:

- Demonstrate ASD characteristics that are often less obvious in preschool and elementary school as young girls with ASD are often able to mimic simple social behaviors. This has been referred to as social echolalia or social camouflaging (Beteta, 2009).
- Demonstrate stronger early joint attention skills (e.g., pointing, gaze following, and eye contact).
 Superficially, they may appear to be socially connecting with their peers even though genuine social reciprocity is diminished or absent. When observing a girl among peers as part of an ASD evaluation, it may be helpful to determine if genuine social-emotional reciprocity with one or more peers is being demonstrated.
- Show more outward signs of social difficulty as they approach adolescence and demands begin to exceed limited capacity. During teen years, girls with ASD often develop an understanding of social expectations while struggling to adhere to them.
- Not demonstrate certain social communication skills. Wilkinson (2016) observed that, "It is often the absence of expected behavior (communication and social interaction) rather than atypical behavior that may characterize ASD" (p. 97).
- Demonstrate social immaturity with a preference to play with significantly older or younger children (Egerton & Carpenter, 2016).

- Express the desire to socialize and have friends, but often they have a single friend. Due to the intensity of the relationship, "friendship burnout" occurs resulting in frequent changing of friends (Sedgewick, Hill, Yates, Pickering & Pellicano, 2016)
- Often viewed as "odd", quiet, or shy. They can be passive and lack interest in classroom activities (Wilkinson, 2008).

In the category of restricted, repetitive patterns of behavior, interests, or activities, girls with ASD tend to:

- Engage in repetitive questioning more often (Kopp & Gillberg, 1992)
- Exhibit "clingy" behaviors rather than exhibiting what Leo Kanner described as "extreme autistic aloneness" (Rivet & Matson, 2011)
- Have perseverative special interests that are similar to those of neurotypical girls and appear developmentally appropriate; often related to animals, music, art, fantasy. It is not the topics themselves but the *intensity and quality* of these interests that stands out. It is not uncommon for these special interests to change with relative frequency (Gould & Ashton-Smith, 2011).
- Demonstrate an active imagination which can include pretend play. They gravitate toward
 organizing, arranging and setting up objects and play scenes rather than taking the next step to
 interact and play with toys or items. They will often insist on playing the same role or game each
 time, demonstrating a lack of social reciprocity and the tendency to control play (Szalavitz,
 2016).
- Have striking similarities in cognitive profiles to females with anorexia nervosa (Oldershaw,
 Treasure, Hambrook, Tchanturia & Schmidt, 2011). Both girls with ASD and girls with anorexia
 tend to be rigid, detail-oriented and distressed by change. Though the majority of women with
 anorexia nervosa do not have ASD, women with anorexia exhibit higher rates of ASD.

SRS-2: An ASD Rating Scale with Norms for Girls

<u>The Social Responsiveness Scale (SRS-2)</u> is a well-regarded rating scale used to identify social impairment associated with ASD. It is useful when evaluating girls suspected of having ASD because it has norms separated by gender, as well as by parent and teacher.

The SRS-2 offers two DSM-5 compatible subscales: Social Communication and Interaction, and Restricted Interests and Repetitive Behavior. It is therefore well aligned with Oregon's educational criteria.

DIFFERENTIATING ASD FROM OTHER ELIGIBILITY CATEGORIES

This section is in development.

FREQUENTLY ASKED QUESTIONS

Q. Do we have to use the official medical examination/health assessment form, or can we use other documentation to meet this requirement?

A. Meeting this requirement is about the information, not the form. In other words, if the team receives documentation completed by an authorized medical provider that allows the team to answer whether or not there are medical/physical factors impacting the child's developmental performance (for a child age 3-5) or educational performance (for a child age 5-21), then this is sufficient to meet the requirement.

Q. Does the medical statement need to say the child has a medical diagnosis of ASD to find them educationally eligible?

- A. No, there is no requirement for any medical diagnosis in order to qualify as a student eligible for special education due to an ASD. Educational eligibility is determined by the criteria set forth in OAR 581-015-2130. However, the team must carefully consider any medical diagnoses when determining eligibility.
- Q. The medical statement indicates a medical diagnosis of ASD. Does this mean the child will automatically be eligible for special education services under ASD?
 - A. No. An educational eligibility is different from a medical diagnosis and has a different criteria.

Q. We have documentation of a medical/clinical evaluation for ASD. May we use components from this evaluation to meet certain procedural requirements?

A. Yes. For example, if the team obtains a clinical report completed by a developmental pediatrician that includes results from an ADOS-2, the team may choose to use the results to meet the requirement for a Standardized Autism Identification Tool. However, the team is not required to do so. Take care to ensure the evaluation was completed recently enough to reflect the child's current performance. Also note that the team is required to consider the results of any information supplied by the parent whether or not it is used as part of the initial evaluation process.

Q. If a parent or caregiver approaches a school and says that their child has a medical diagnosis of ASD, does the district have to evaluate for an ASD Eligibility?

A. Treat this situation as a request for an evaluation for special education from a parent and proceed accordingly. Following such a request, the LEA will need to determine whether an evaluation is warranted based on the information known about the student. If the LEA agrees that an evaluation is warranted, it should seek the parent's written informed consent to begin the evaluation process. If the LEA does not agree that an evaluation is warranted, they must provide the parent with Prior Written Notice documenting the district's consideration of the request and the refusal of the evaluation supported by data. It is recommended school districts follow their general education pre-referral (e.g., Student Support Team) processes in such instances.

Q. What does the team do when one of the required components has not yet been completed by the time the team meets to complete eligibility determination?

- A. All required components of the evaluation must be completed prior to the eligibility determination. Either the missing components must be completed or the meeting must be rescheduled, adhering to required timelines for EI/ECSE and school-aged.
- Q. We have made repeated attempts to obtain the medical examination/health assessment statement or suitable alternative documentation regarding medical/physical factors that may be impacting the child. Can we proceed with eligibility?
 - A. To proceed with eligibility without this component, document your due diligence and multiple attempts to obtain the required documentation. This includes the LEA offering to schedule and pay for the medical appointment for the purpose of gathering the required information for eligibility. Carefully document this and the other attempts to gather the medical/health information. If the LEA decides to proceed with eligibility, be sure to include documentation of the attempts to gather the medical examination/health assessment statement or documentation to accompany the eligibility determination statement.
- Q. What is the speech-language pathologists role on the evaluation team?
 - A. The SLP is responsible for completing the social communication assessment (SCA) alongside team members who are responsible for completing the other components. It is important to note that other evaluation team members play an important role as evaluating core social communication deficits associated with ASD. Each team member contributes their expertise in determining eligibility across all seven domains.
- Q When a child comes up for reevaluation and was made eligible under the previous criteria, can we reestablish eligibility using previously completed assessments (i.e. "rollover" components from the previous eligibility to the new)?
 - A. There is not a "yes" or "no" answer because of student-specific variables. Due to additions to the required components, the team will have to convene an evaluation planning meeting and obtain consent for the components needed to meet the new criteria in effect as of January 1, 2019. The team <u>may</u> choose to carry forward some previously completed evaluation components <u>if</u> they align with the new criteria.
- Q. When a child has an ASD eligibility in EI, do we need to conduct a reevaluation to determine eligibility before the child turns age three and enters ECSE?
 - A. Yes. An evaluation planning meeting should be held to determine which assessment components will be needed to re-establish eligibility. Many or all assessment components from the previous evaluation may be usable if recently completed (i.e. within the past few months). The new ECSE ASD eligibility form needs to be completed.
- Q. I heard that the new educational criteria more closely align with the medical DSM-5 diagnostic criteria. Does this mean that having a medical diagnosis is the same as having as an educational eligibility?
 - A. No. An educational eligibility remains distinct from a medical diagnosis, though the educational criteria are now closer conceptually to what medical providers use to diagnose ASD. While the core characteristics we look for in both education and medical contexts are the same, in education we must also establish need for special education and related services.
- Q. During the ASD evaluation we identify concerns that necessitate collection of additional medical information to complete the process, and/or we decide to look at another or different eligibility category yet doing so will push us past our required timeline to complete the evaluation. What do we do?

A. Our obligation to the child necessitates a sufficiently thorough evaluation even though doing so may result in exceeded timelines. Teams shall not determine eligibility while important information has yet to be gathered, and then restart the process with a new consent to evaluate. This issue underscores the importance of considering timelines well in advance and beginning the process with sufficient time to be thorough.

Q. How old can the vision and/or hearing screening be?

A. There are no guidelines that specify an age at which a hearing and/or vision screening has become "too old" to use. When using previous screenings, it is best practice to query the parent about any current vision concerns, and if the child has a history of ear infections. The team may choose to conduct new screenings.

Q. During an evaluation to determine eligibility under ASD, the team discovers information that leads them to suspect eligibility in a different or additional category. What should we do?

A. Contact the parent to obtain consent to amend the original consent form to add any assessments necessary to determine eligibility under the category in addition to ASD. Hold to the original timeline. It is not appropriate to complete the ASD eligibility process and then obtain a new consent to evaluate for the second eligibility gaining a second timeline for completion.



Index of Chapter 1 Resources

The following **Chapter I. Evaluation and Eligibility** resources are linked throughout this chapter and are consolidated here in a single list.

EVALUATION PLANNING

ASD EVALUATION PLANNING TOOL

THREE YEAR REEVALUATION PLANNING TOOL

PRESENT PROFILE SUMMARY - SUPPLEMENT FOR REEVALUATIONS

COMPLETING THE EVALUATION

SAMPLE DEVELOPMENTAL HISTORY AND PARENT/CAREGIVER INTERVIEW FORM

SAMPLE COVER LETTER FOR THE MEDICAL STATEMENT/HEALTH ASSESSMENT STATEMENT

DIRECT INTERACTION - IMAGINATIVE PLAY

DIRECT INTERACTION - GAME WITH PEERS

DIRECT INTERACTION - SHARED BOOK READING

DIRECT INTERACTION - GROUP ACTIVITY

SEVEN DOMAINS SORTING TOOL (FOR POST-OBSERVATION ANALYSIS)

ASD HEARING SCREENING CHECKLIST INTERVIEW

ASD VISION SCREENING CHECKLIST INTERVIEW.

REPORTING RESULTS

SAMPLE ASD EVALUATION REPORT

SOCIAL RESPONSIVENESS SCALE - 2ND ED (SRS-2) TEMPLATE FOR REPORTS

SAMPLE SOCIAL COMMUNICATION ASSESSMENT REPORT (IN DEVELOPMENT)

ADOS-2 RESULTS TEMPLATE FOR REPORTS (IN DEVELOPMENT)

REFERENCES

SOCIAL/PRAGMATIC SKILLS HIERARCHY BY AGE

ODE ASD HEARING SCREENING GUIDELINES

ODE ASD VISION SCREENING GUIDELINES

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