

**BERRIEN REGIONAL EDUCATION
SERVICE AGENCY**

PROCEDURE HANDBOOK

**AUTISM SPECTRUM
DISORDER**

**GUIDELINES FOR IDENTIFICATION OF
ELIGIBLE INDIVIDUALS**

12/12/2008

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ENDORSEMENT PAGES

The undersigned certify:

That representative(s) from my school district have been involved in and/or apprised of the **Autism Spectrum Disorder Guidelines**, which were developed and/or modified to assist in the evaluation of students with autism spectrum disorder within the Berrien Regional Education Service Agency. My signature certifies that my district will use and implement the **Autism Spectrum Disorder Guidelines**.

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INTRODUCTION TO AUTISM SPECTRUM DISORDER (ASD)

The purpose of this procedure handbook is to provide users with information relative to the identification of individuals with autism spectrum disorder. While it will not address every situation in the determination of educational eligibility it should provide helpful guidance in most situations. Unique cases will require consultation with additional resources.

What is Autism Spectrum Disorder (ASD)?

ASD is a brain development disorder characterized by impairments in social interaction, communication, and restricted and repetitive behavior, typically appearing during the first three years of life. Heritability appears to contribute a large fraction of the risk of a child developing this disorder, although the genetics of ASD are complex, and it is generally unclear which genes are responsible for the disorder (Freitag, 2007). The number of people known to have ASD has increased dramatically since the 1980's, at least partially due to changes in diagnostic practice; the question of whether prevalence has increased is unresolved (Newschaffer, Croen, & Daniels, 2007).

Common Characteristics of ASD

Although each person with ASD has a unique personality and combination of characteristics, ASD is often fundamentally described in terms of a triad of characteristics:

- Qualitative impairments in reciprocal social interaction.
- Qualitative impairments in communication
- Stereotypic behavior/markedly restricted range of interests

These symptoms and characteristics can range, however, from mild to severe.

Cause(s) of ASD

Although many genetic and environmental causes of autism have been proposed, its theory of causation is still incomplete. Genetic factors appear to be the most significant cause for ASD, but the genetics of ASD are complex (Freitag, 2007). Genetic linkage analysis has been inconclusive and no single genetic feature has been identified at this point. Many ASD individuals have unaffected family members with similar genetic patterns (Sebat, Lakshmi, & Malhotra, 2007). Likewise, a number of pre- or post-natal environmental factors have been claimed to contribute to ASD or exacerbate its symptoms with little evidentiary support. These have included certain foods, infectious disease, heavy metals, solvents, diesel exhaust, PCBs, phthalates and phenols used in plastic products, pesticides, brominated flame retardants, alcohol, smoking, illicit drugs, and vaccines (Newschaffer, Croen, & Daniels, 2007).

Diagnosing ASD

There are no medical tests for determining eligibility for ASD. An accurate recommendation of eligibility must be based on observation of the individual's communication, behavior, and social interaction. Parental input and a developmental history are essential components of an evaluation.

Michigan's Definition of Autism Spectrum Disorder

R 340.1715 Autism spectrum disorder defined; determination. Rule 15: (1) Autism spectrum disorder is considered a lifelong developmental disability that adversely affects a student's educational performance in 1 or more of the following performance areas:

- (a) Academic.
- (b) Behavioral.
- (c) Social.

Autism spectrum disorder is typically manifested before 36 months of age. A child who first manifests the characteristics after age 3 may also meet criteria. Autism spectrum disorder is characterized by qualitative impairments in reciprocal social interactions, qualitative impairments in communication, and restricted range of interests/repetitive behavior.

(2) Determination for eligibility shall include all of the following:

- (a) Qualitative impairments in reciprocal social interactions including at least 2 of the following areas:
 - (i) Marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction.
 - (ii) Failure to develop peer relationships appropriate to developmental level.
 - (iii) Marked impairment in spontaneous seeking to share enjoyment, interests, or achievements with other people, for example, by a lack of showing, bringing, or pointing out objects of interest.
 - (iv) Marked impairment in the areas of social or emotional reciprocity.
- (b) Qualitative impairments in communication including at least 1 of the following:
 - (i) Delay in or total lack of, the development of spoken language not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime.
 - (ii) Marked impairment in pragmatics or in the ability to initiate, sustain, or engage in reciprocal conversation with others.
 - (iii) Stereotyped and repetitive use of language or idiosyncratic language.
 - (iv) Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level.
- (c) Restricted, repetitive, and stereotyped behaviors including at least 1 of the following:
 - (i) Encompassing preoccupation with 1 or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus.
 - (ii) Apparently inflexible adherence to specific, nonfunctional routines or rituals.
 - (iii) Stereotyped and repetitive motor mannerisms, for example, hand or finger flapping or twisting, or complex whole-body movements.
 - (iv) Persistent preoccupation with parts of objects.

(3) Determination may include unusual or inconsistent response to sensory stimuli, in combination with subdivisions (a), (b), and (c) of subrule 2 of this rule.

(4) While autism spectrum disorder may exist concurrently with other diagnoses or areas of disability, to be eligible under this rule, there shall not be a primary diagnosis of schizophrenia or emotional impairment.

(5) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team including, at a minimum, a psychologist or psychiatrist, an authorized provider of speech and language under R 340.1745(d), and a school social worker. (Rule effective as of 9/15/2004.)

Discussion of Michigan Department of Education (MDE) Definition of Autism Spectrum Disorder

The Michigan ASD rule has undergone numerous changes in recent years, most recently in September of 2004 with the change from “Autism” to “Autism Spectrum Disorder.” The following commentary provides a fuller explanation of the new Michigan definition of ASD. Appendix A shows a side-by-side comparison.

R 340.1715 (1) Autism spectrum disorder is considered a lifelong developmental disability...Autism spectrum disorder is typically manifested before 36 months of age. A child who first manifests the characteristics after age 3 may also meet criteria...

ASD is a neurological disorder that can occur in any combination of symptoms, and with varying degrees of severity. Indicators of developmental problems may or may not be apparent by early infancy, but usually become obvious during early childhood. This does not mean that the child is diagnosed by 36 months; but in looking back at those first 36 months, indicators should be identified even if not noted at the time or thought to point to something else. In some cases, however, characteristic behaviors manifest themselves after age 3.

R 340.1715 (1) ...that adversely affects a student’s educational performance in 1 or more of the following performance areas: (a) Academic (b) Behavioral (c) Social...

Academic -The student’s ability to progress in the general education curriculum must be considered. One aspect of adverse affect may be reflected in a student’s grades, but that is not the only factor which must be considered. Determination of adverse affect can be based on such evidence as progress in the general education curriculum, academic grades, achievement tests, and social/adaptive functioning.

Behavioral - Children with ASD also demonstrate some degree of delayed and/or atypical behaviors. The degree of the behavioral difficulties will vary widely, depending on the individual, in both the number and the severity of the behaviors displayed. The behaviors must be looked at in the overall context of autism spectrum disorder and difficulties only in the behavioral realm would indicate other eligibility criteria should be explored.

Social - Children with ASD also demonstrate some degree of delayed development in social, behavioral, and emotional response. They often lack empathy not understanding how someone else might feel, or what they think or know. They have difficulty engaging in shared enjoyment or reciprocity with others. They may resist touch or attempts to engage them in social activities. Many show a flat, almost mechanical affect, often inconsistent with the setting. They might be aggressive or seemingly rude. Eye contact and facial gazing is typically minimal. Deficits in this area make participation in groups and acceptance of others difficult.

R 340.1715 (1) ...Autism spectrum disorder is characterized by qualitative impairments in reciprocal social interactions, qualitative impairments in communication, and restricted range of interests/repetitive behavior.

A triad of pervasive impairments exists in the areas of communication, socialization, and behavior. The degree of qualitative differences will vary widely, depending on the individual, in both the number and the severity of the behaviors displayed. It is important not to confuse

qualitative with quantitative behavior when identifying children with suspected ASD. A qualitative impairment does not mean an absence of skills, but rather a difference in the way skill is demonstrated. For example, children who echo verbal behaviors have language but lack communicative intent. Children who tantrum may have communicative intent but fail to understand nonverbal pragmatics.

R 340.1715 (2) (a) Qualitative impairments in reciprocal social situations, including at least 2 of the following areas:

(i) Marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction.

Social deficits are a major difficulty for students with ASD. They may often avoid eye contact, and their faces may lack any expression or appropriate affect based on the situation. For example, they may laugh at a very sad situation. They may not derive meaning from their own or others' nonverbal behaviors. The concept of "marked impairment" indicates having a distinctive or emphasized characteristic which would be measurable and observable across multiple settings.

(ii) Failure to develop peer relationships appropriate to developmental level.

These children may occasionally try to develop peer relationships, but they are rarely able to develop "give and take" (reciprocity) in their interactions. They rarely move from the level of parallel play without intervention from an adult. Satisfying their own needs is often their primary consideration. The development of peer relationships must be considered in reference to the child's overall developmental level.

(iii) Marked impairment in spontaneous seeking to share enjoyment, interests, or achievements with other people, for example, by a lack of showing, bringing, or pointing out objects of interest.

Although these children may try to relate to adults and/or peers, their interactions are often rote or one-sided. They may only converse on their own select topics, or seek information from others only to satisfy their own needs, rather than engaging in a sharing of information with others. The concept of "marked impairment" indicates having a distinctive or emphasized characteristic which would be measurable and observable across multiple settings.

(iv) Marked impairment in the area of social or emotional reciprocity.

Children with ASD have difficulty recognizing and responding to the feelings of others. They lack an understanding of the back and forth flow of interactions between people. The concept of "marked impairment" indicates having a distinctive or emphasized characteristic which would be measurable and observable across multiple settings.

R 340.1715 (2) (b) Qualitative impairments in communication including at least 1 of the following:

(i) Delay in, or total lack of, the development of spoken language not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime.

Some children have no spoken language at a time when speech should be developing, and they also fail to compensate with facial expressions or through the use of gestures. The child with ASD may use people mechanically as “a means to an end.” For example, the child may take an adult’s hand and lead him/her to the refrigerator for some juice without a word or a glance – using the adult as a tool to get what s/he wants. In a few instances, children with ASD begin developing spoken language but then lose the language they have acquired.

(ii) Marked impairment in pragmatics or in the ability to initiate, sustain, or engage in reciprocal conversation with others.

Pragmatics is the term used to explain how children use verbal and nonverbal language in social situations. Children with ASD have significant difficulty with the social aspects of language. Some of these problem areas may include the following: establishing and maintaining eye contact, understanding and reacting to the listener’s body language, and being either too close or too far away from the listener while talking.

Some children with ASD who have developed verbal speech have a difficult time initiating and sustaining conversation with other people. They can talk for long periods of time about a subject of their liking regardless of the listener’s interest. They often have difficulty understanding the interests and desires of others because they do not see things from another person’s perspective. The child with ASD may talk “at” another person in a monologue rather than “with” him/her in conversation.

(iii) Stereotyped and repetitive use of language or idiosyncratic language.

Echolalia is a major characteristic of ASD, particularly delayed echolalia. Immediate echolalia refers to a “parrot-like” repetition of what has just been said. For example, if a person asks a child with ASD, “Do you want juice?” he or she might respond by saying, “Do you want juice?”, then may or may not answer the question. The immediate echoing of words and phrases is an important part of normal language development in children under the age of two. It becomes abnormal when it is the sole means of communication after the age of two. Delayed echolalia is the repetition of TV commercials, movies, videos, or single words heard minutes, days, weeks, or even months previously. It is common for older children with ASD to incorporate delayed echolalia into their conversational speech. This rehearsed speech may sound more fluent with appropriate intonation and rhythm than the rest of their speech. Some children with ASD may speak with a monotone voice quality and not control their pitch or volume. For example, a student with ASD may speak very loudly in the school media center unaware that one should talk very quietly there.

Children with ASD typically do not fully develop their language skills. They lack the subtleties of

speech such as correct use of pronouns and sentence structure.

Children with ASD tend to be very literal, and have difficulty with abstract concepts such as idioms, words with multiple meanings, and complex ideas.

(iv) Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level.

Children with ASD often may not engage in pretend play with toys or elaborate on learned routines. They may line up their cars or trains, or focus on a part of the toy rather than the enjoyment of actually playing with it. Children with ASD do not generally engage in imitative interactions such as a finger play (like the “Itsy Bitsy Spider”) without specific teaching and prompts. Verbal children may recite parts of movies or books verbatim and not be able to change the story when asked.

R 340.1715 (2) (c) Restricted, repetitive, and stereotyped behaviors including at least 1 of the following:

(i) Encompassing preoccupation with one or more stereotyped and restrictive patterns of interest that is abnormal either in intensity or focus.

Individuals with ASD can display patterns of thought and behavior that are abnormal in focus and intensity. They may be preoccupied with certain topic areas, people, or objects. This behavior can manifest itself in repetitive language patterns (talking about the same topic over and over) or preoccupation with the actual object, person, or process. The behavior can be exhibited in persons of all ages with ASD, and a child may carry his/her preoccupation into adult life. These preoccupations can also change over time.

(ii) Apparently inflexible adherence to specific, nonfunctional routines or rituals.

Variation from a routine may cause significant behavioral distress. Many children with ASD display a need for unwavering adherence to schedules, routines, dress, diets, social interactions, and/or structure of home and school environments. Children with ASD who display this component of behavior can display the same type of obsession for a period of time and then transfer that behavior to another routine, schedule, or preoccupation. Each individual is different, but the underlying common characteristic is displayed with insistence on sameness and the inflexibility to change within and across environments.

(iii) Stereotyped and repetitive motor mannerisms, for example, hand or finger flapping or twisting, or complex whole-body movements.

Some individuals with ASD will engage in repetitive motor mannerisms. This pattern of behavior may be attributed to excitement, distress, or any range of emotion. The motor movements can include hand flapping, preoccupation with the fingers, spinning, twirling, or uncharacteristic motor movements. The behaviors can range from being very noticeable to more subtle behaviors such as gentle rocking or fidgeting. The motor mannerisms can be apparent in

individuals along the entire autism spectrum.

(iv) Persistent preoccupation with parts or objects.

Individuals with ASD often become preoccupied with parts, objects, or processes. This behavior exhibits itself in a fascination with how an object works (such as a sprinkler, furnace, or dishwasher). The preoccupation can, at times, appear to be more focused on how an object actually works than the function that it serves. A child may be focused on one particular part of a toy rather than the enjoyment of actually playing with it as other children would. This preoccupation can create significant behavior challenges in a variety of environments (for example, the need to check out the stove in every restaurant, or the need to see the furnace in every home or building that is visited). The preoccupation with parts of objects can vary in intensity, and be prevalent in individuals of all ages along the entire autism spectrum.

R 340.1715 (3) Determination may include unusual or inconsistent response to sensory stimuli, in combination with subdivisions (a), (b), and (c) of subrule 2 of this rule.

Sensory issues often affect the ability to interact with others. Specific areas of sensation include: touch (tactile), movement (vestibular), input to muscles and joints (proprioception), hearing (auditory), sight (visual), taste (gustatory), and smell (olfactory). People with ASD tend either to seek or avoid certain sensations. Responses to sensory stimuli can be over-reactive/hypersensitive (distress to sound, sensitivity to light, discomfort to different textures, smell and/or taste aversions) or under-reactive/ hyposensitive (lack of attention to sound, decreased awareness of pain/injury).

R 340.1715 (4) While autism spectrum disorder may exist concurrently with other diagnoses or areas of disability, to be eligible under this rule, there shall not be a primary diagnosis of schizophrenia or emotional impairment.

Thought disorders (such as schizophrenia) refer to problems in the way a person processes and organizes thoughts. For example, the person with schizophrenia may be unable to connect thoughts into logical sequences. While some characteristics may seem similar to ASD, schizophrenia has its own definition and diagnosis. Likewise students determined eligible for emotional impairment might have some characteristics similar to ASD, they will not fully meet the eligibility criteria for ASD.

GENERAL CONSIDERATIONS RELATED TO POSSIBLE ASD

Pre-Referral Process

The Berrien Regional Education Service Agency recommends a pre-referral process to be implemented as an integral part of the referral procedures for any suspected disability. The purposes of this process are to:

- Identify a problem,
- Identify a student's strengths and needs,
- Identify potential diagnostic/prescriptive interventions, and
- Implement those interventions with the anticipated outcome of resolving a student's academic and/or behavioral challenges in the general education setting.

Following this process helps ensure that students are being educated in the least restrictive environment as required by Act 451 of 1976 and the *Individuals with Disabilities Education Act* of 2004 (IDEA 2004), and reduces the frequency of inappropriate referrals to special education. It is important that appropriate educational interventions be implemented and documented for a minimum of 45 school days prior to referring a student for special education services.

The pre-referral process is most effectively conducted by an instructional support team composed of general and special education teachers and related services personnel operating at the local building level. Depending on the district, students will be referred to a "student support team," "child study team," "building team," "diagnostic/prescriptive team," or other team with a similar function. Regardless of the name, the committees function in a similar manner. It is important to remember that information generated during the implementation of this process provides a source of information for the IEP team to use in determining if special education services are necessary for an individual student. It is appropriate for all teachers working with the student to be involved in the documentation of the student's classroom performance and the educational alternatives utilized to increase his/her ability to function in general education.

Members of an instructional support team vary by districts and buildings, but generally include diagnostic staff. Teacher consultants for ASD, autism classroom staff, or other staff knowledgeable in ASD are generally not involved in these building based teams but should be consulted for assistance in reviewing information collected, or requested to do an informal classroom observation. This assistance will help the instructional support team in determining whether there is reason to suspect that the student has an Autism Spectrum Disorder, what pre-referral strategies should be attempted, and whether a referral for evaluation should be made.

The student study team may complete checklists, conduct observations, and review previous records. Parent input and participation should also be included. If other medical, genetic and/or behavioral conditions exist, information should be gathered about these conditions. Ideas for potential pre-referral strategies may be explored in Appendix B.

Children under the age of 3 and preschool children are not typically involved in a formal educational program, therefore, the pre-referral process must be conceptualized differently. While different, the requirement remains that Early On and MET personnel document a disability and the need for special education and related services. CFR §300.320(a)(1)(ii) specifies, for preschool children, as appropriate, how the disability affects the child's participation in

appropriate activities. This indicates the need to carefully document the child's performance relative to developmental expectations in multiple settings and consider what impact setting changes could have on the presenting area(s) of concern. Data relative to progress on an Individual Family Service Plan is one source to consider prior to any eligibility determinations.

Multidisciplinary Evaluation Team (MET) Process

The following section contains a discussion of the Multidisciplinary Evaluation Team (MET) process that should be followed when evaluating a student for ASD.

Special Education Rules Related to MET Process

The following rules address issues and definitions related to the ASD evaluation process:

Rule 340.1721a (1) Evaluation procedure. Each student suspected of having a disability shall be evaluated by a multidisciplinary evaluation team.

Rule 340.1701b(b) "Multidisciplinary Evaluation Team" means a minimum of two persons who are responsible for evaluating a student suspected of having a disability. The team shall include at least one special education or other specialist who has knowledge of the suspected disability.

Rule 34CFR§300.536 Reevaluation. Each public agency shall ensure... (b) That a reevaluation of each student in accordance with §300.532-300.535, is conducted if conditions warrant a reevaluation, or if the student's parent or teacher requests a reevaluation, but at least once every three years.

Rule 340.1715 (5) Autism spectrum disorder defined; determination. A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, including, at a minimum,
A psychologist or psychiatrist,
An authorized provider of speech and language under R340.1745 (d),
A school social worker.

Definition/Purpose of MET

The Multidisciplinary Evaluation Team (MET) is a group of persons who have responsibility for evaluating or reevaluating a student with a suspected disability. This team conducts a comprehensive assessment, which varies depending on the student's age, physical condition, and nature of the presenting problem. The purpose of an evaluation conducted by school personnel is to determine the presence of an educational disability and the need for special education services. Information gathered during the evaluation process must provide data that supports the presence or absence of an Autism Spectrum Disorder and the resulting adverse effect on educational performance in academics/achievement, social, and behavioral areas. Once a student is determined eligible through Autism Spectrum Disorder or another Michigan eligibility category, the selection of programs and services is determined by the student's individual needs. These needs are documented in the present level of academic achievement and functional performance statement.

Steps for Completing MET

Members of the MET typically gather background information, review the student's education record, collect parents' input related to their part of the MET, and review important medical and

educational assessments. Observations are another important part of the evaluation and it is critical for MET members to observe the student in several school environments, including the home and other locations when appropriate. It is helpful to interview the students who can communicate. Information also must be collected from teachers, who often provide input to the team through interviews and checklists.

The evaluation team compiles all the information and considers the unique characteristics of the student, and how those characteristics relate to that student's school performance in accordance with the criteria set forth in state law. When making eligibility decisions, the parent(s) and relevant professionals discuss the implications of the information gathered through the assessment process. For the parent, information collection for evaluation purposes and eligibility implications may be hard to discriminate (i.e., evaluation plan and consent meeting and parent interview are times when not only information/data is collected, but when there is some discussion of the implication of the information being collected). Parents should be apprised on the MET recommendations or a summary of data collected prior to the IEP Team meeting to encourage meaningful participation in the IEP Team planning process. The MET may recommend that the student is eligible for special education under one (or more) of the 13 categories, or may recommend that the student is ineligible. A student referred for evaluation as a possible student with Autism Spectrum Disorder may meet qualifications in other eligibility areas. (See chapter titled "Issues of Eligibility.")

Initial Consent or Evaluation Review and Plan (ERP)

Great care must be taken to determine the parents' initial understanding of autism and the meaning it may have for examining their child's unique strengths and needs in the context of an educational eligibility evaluation. The evaluation team should discuss these issues prior to beginning its assessment, and should approach each family with sensitivity. It is necessary to help parents understand the difference between an educational eligibility assessment and a medical diagnosis. It is essential to discuss the function of a school-based ASD evaluation with parents, and the process by which the team will consider information provided from outside evaluations.

Information Needed for Determination of ASD

- Developmental history
- Communication skills and characteristics
- Social skills
- Behavior concerns
- Adaptive behavior/functional
- Cognitive abilities
- Sensory-motor skills
- Educationally relevant medical information

Berrien County ASD Central Evaluation Team

Two Central Evaluation Teams (CET) have been established in Berrien County to assist district diagnostic personnel in the identification of student's with Autism Spectrum Disorder. The teams have been divided into a North and South team covering the following districts:

North CET

Benton Harbor Area Schools
Berrien Springs Public Schools
Coloma Community Schools
Eau Claire Public Schools
Lakeshore Public Schools
St. Joseph Public Schools
Watervliet Public Schools
River and Riverside
Charter Schools

South CET

Brandywine Community Schools
Bridgman Public School District
Buchanan Community Schools
Galien Township Schools
New Buffalo Area Schools
Niles Community Schools
River Valley Schools

The CET will consist, at a minimum, of a psychologist, a school social worker, and an authorized provider of speech and language. The purpose of the CET is to assist in the evaluation for Autism Spectrum disorder when the student's eligibility is not easily defined or where a second opinion is desired. CET members should have diagnostic experience with sufficient numbers of student's with ASD to insure an accurate, differential recommendation of eligibility.

At any time in the evaluation process members of the CET may be contacted for consultation and assistance relative to the evaluation and eligibility recommendation of ASD. The CET is not designed to take the place of locally assigned diagnostic personnel or Early On team assignments, but to serve as a resource assisting in accurate and comprehensive evaluations of student's suspected to be eligible with Autism Spectrum Disorder.

A request for a second opinion evaluation is to be made to the Supervisor of Ancillary Services and Compliance or the Supervisor of ASD Services following, in most cases, the completion of an evaluation by the local district team. The second opinion evaluation serves as an additional tool to assist in the eligibility determination of cases with competing or confounding information. It is advisable that at least one member of the CET be invited to the consent meeting when planning for the second opinion evaluation. Following the completion of a second opinion evaluation it is recommended that results of the evaluation be shared with the district assigned team. This will facilitate the dissemination of information, particularly to MET members that will participate in future IEP Team decision making meetings. It is not designed to take the place of a parent's right for an Independent Educational Evaluation.

It is recommended that the CET report format be followed in all cases related to the evaluation of ASD (a CET report template is available at the Berrien RESA).

Personnel Required for Autism Spectrum Disorder Determination

Though the law requires only three participants for an ASD evaluation – psychologist/psychiatrist, school social worker, and an authorized provider of speech and language – additional professionals are usually involved in the evaluation process.

It is essential for at least one member of the MET to have knowledge of Autism Spectrum Disorder and experience with sufficient numbers of students with ASD to ensure an accurate differential diagnosis. It is easy to over- and under-identify Autism Spectrum Disorder when professionals have limited experience assessing students with ASD. (*See Issues of Eligibility Chapter*)

Roles of Participants

Parent(s) – It is helpful to involve parents in the evaluation process to obtain detailed information on the student’s history of development and behaviors, current social and behavioral functioning outside of school, and medical or support services being provided to the student.

General and/or Special Education Teacher – Teaching staff provide specific information regarding the student’s performance in the academic, behavioral, and social areas indicating the student’s strengths and challenges. This information must be documented in the MET report, and the teacher(s) providing input must sign the eligibility recommendation.

School Social Worker (SSW) – The SSW provides a comprehensive report, including a developmental history, indicating the student’s social and emotional functioning and its impact on the student’s academic and behavioral functioning. S/he also interviews the parents and documents their concerns, early developmental history, and sensory issues noting any unusual or inconsistent response to sensory stimuli. It is appropriate for the SSW to assist parents with the completion of rating scales when needed. The SSW conducts observations of the student in social contexts (recess, group classroom activities, lunchroom) and utilizes formal assessment instruments when appropriate.

Psychologist – The psychologist assesses the student’s cognitive abilities, achievement levels, and adaptive behaviors. S/he also conducts observations of the student. When testing and observation are complete, the psychologist provides a report detailing the valid and reliable diagnostic techniques and assessments used, including enough information to address whether the cognitive profile of strengths and deficits adversely affect the student’s educational performance. Missing skills or deficit areas that may need to be addressed as IEP goals should be included in the report.

Psychiatrist – When evaluation or diagnostic information from a psychiatrist is included in the evaluation, s/he must provide a report that describes his/her findings and rationale for those findings, in conjunction with educational eligibility criteria.

Speech/Language Pathologist (SLP) – The SLP is responsible for providing a comprehensive report indicating the student’s language and communication skills and deficits, including pragmatics and social interaction skills. S/he will complete standardized testing and/or informal assessment of social communication, expressive language, and receptive language. Skills formally assessed may need to be evaluated in multiple settings to document whether or not the student uses the skills demonstrated in the testing situation. Any gaps in the developmental progression of language should be identified and included in the report.

Occupational Therapist (OT) – The OT is not a required member of the MET team. However, if the pre-referral team documented sensory or motor concerns, it is beneficial to include the OT in the MET to document those concerns and to assist in determining subsequent strategies and/or goals for the student. When an OT is included on the evaluation team, s/he should evaluate the areas of gross motor, fine motor, motor planning, sensory areas and handwriting as appropriate. The OT may either screen or thoroughly test the student, including the use of checklists completed by parent and/or staff.

Physical Therapist (PT) – A PT is not a required member of the MET, but may be included when there are concerns about a physical delay or difference that may or may not be related to Autism Spectrum Disorder. A PT can also assist in ruling out other orthopedic or neurological

conditions that may be responsible for a delay or difference in motor skills. For instance, heel cord tightness or sensory issues can cause toe walking, and it is important to discover the causes of these types of behaviors. A PT may also evaluate the cause of abnormal movement patterns commonly seen in students with an Autism Spectrum Disorder.

ASD Teacher Consultant or Other Consultant – A teacher consultant (specializing in ASD) or other consultant is not a required member of the MET, but may be included when his/her specialized knowledge or training can support the team in the evaluation process. Specific abilities are helpful in the assessment of achievement levels and providing information to the strengths and weaknesses noticed in achievement skills within curricular areas. When a consultant participates as a member of the evaluation team, s/he must provide a report, including observations and results of any formal and informal assessments administered.

ASSESSMENT PROCESS FOR AUTISM SPECTRUM DISORDER

The evaluation of Autism Spectrum Disorder (ASD) is a process that requires a team of professionals. Time must be taken to ensure that information regarding all aspects of a student's development and needs are gathered. The goal of a school-based evaluation for ASD is not to provide a clinical diagnosis for students, but to determine eligibility as well as the need for special education services based upon the characteristics manifested. Because the determination of ASD is a subjective process, it is essential that at least one member of the evaluation team have a broad experience with individuals on the spectrum to avoid under- or over-identification based on exposure to a limited number of students. Professionals involved in the evaluation process must use their professional judgment, because the determination of many of the characteristics of ASD is based on qualitative components that cannot be quantified fully by test results.

As discussed in earlier chapters, there is a triad of impairments that defines ASD. The significance of impairments affecting all 3 areas – social interaction and reciprocity, communication, and stereotypic behavior/restricted range of interests – is critical in distinguishing ASD from other potential impairments. In completing a comprehensive evaluation, however, there are additional areas that may need to be assessed to acquire a complete picture of a specific student's strengths and needs. A recommended assessment model is provided in appendix E of this manual. This assessment model utilizes levels or a process of data collection to assist in decision making relative to ASD. Information is needed in multiple levels in order to make informed decisions as to eligibility for ASD, other special education categories, or non-eligibility.

A comprehensive evaluation is defined as:

- A variety of tools to gather relevant functional, developmental, and academic information about the child, including information from the parent [CFR § 300.304(b)(1)].
- Assessed in all areas related to suspected disability, including, if appropriate, health, vision, hearing; social/emotional status; general intelligence; academic performance; communicative status; motor abilities [CFR § 300.304(c)(4)].
- Sufficiently comprehensive to identify all special education and related services needs, whether or not commonly linked to the disability category [CFR § 300.304(c)(6)].
- Variety of sources, including aptitude/achievement tests, parent input, teacher recommendations, information of physical condition, social/cultural background, adaptive behavior [CFR § 300.306(c)(1)].

Components of ASD Evaluation

Developmental History

Because symptoms of ASD are typically present prior to age three, it is critical to acquire a thorough developmental history of any student suspected of having this disability. Plotts and Webber (2001-02) stated their view that "parents are *the* most important resource available to professionals attempting to diagnose and intervene with ASD." Developmental history information is also beneficial when addressing issues of differential diagnosis and looking at other potential impairment categories. The following information is necessary for any initial evaluation for ASD and should be updated as needed during subsequent evaluations:

- Parents' perception of concern and child's age when concerns began

- Health and medical history
- Prenatal and birth history
- Educational history
- Developmental milestones
- Language acquisition
- Social development/play patterns
- Evidence of skill regression in any area
- Family history of developmental conditions

Communication

Thorough assessment of a student's communication is essential when determining the presence of ASD. Information on communication skills facilitates programming decisions and establishes a baseline for later assessments. While the verbal communication skills of most students with ASD improve over time, these students continue to struggle with using their communication skills for the purpose of regulating social interactions. It is generally the case that as students become more communicatively competent, their pragmatic deficiencies become more glaring (Starr et al., 2003). The following components of expressive, receptive, and pragmatic communication require assessment as well as observation in multiple settings:

- Hearing
- Nonverbal communication such as pointing to desired item, use of eye gaze, or head shakes and nods
- Integration of nonverbal communication with spoken language
- Functional use of language such as requesting items or information, responding to requests, and commenting
- Responses to the communication of others
- Atypical communication such as echolalia, use of others' hands as "tools" to request items, perseveration, pronoun reversals and idiosyncratic remarks
- Conversational abilities such as topic maintenance and selection, and appropriate give and take
- Semantic and/or conceptual difficulties
- Intensity, pitch, and intonation of voice

Social Skills

Difficulties in reciprocal social interactions and understanding and using nonverbal behaviors are key features of ASD, and arguably more critical to its determination than the presence of unusual behaviors (Gillham et al., 2000). Researchers have found that while many symptoms of autism decrease with age, individuals with autism continue to experience significant difficulties with social interactions throughout their lifespan (Starr et al., 2003). Reciprocal social behavior requires a child to be cognizant of the emotional and interpersonal cues of others, to appropriately interpret those cues, to respond appropriately to what s/he interprets, and to be motivated to engage in social interactions with others. Based on this conceptualization of social behavior, the following areas require assessment and observation in multiple settings:

- Use of multiple nonverbal behaviors to regulate social interaction and determine other people's intentions, including eye-to-eye gaze, facial expression, body postures, and gestures
- Imitating actions of others
- Attachment to caregiver(s)

- Problems relating to other people
- Establishing joint attention through pointing and showing
- Social interactions with familiar and unfamiliar adults and peers in familiar and unfamiliar environments
- Presence of peer relationships appropriate to developmental level (social skills need to be considered in light of the students overall developmental level)
- Spontaneous seeking to share enjoyment, interests, or achievements with others by exhibiting behaviors such as showing, bringing, or pointing out objects of interest
- Skills in the area of social and emotional reciprocity, such as turn taking and changing thoughts and actions based on verbal and nonverbal feedback of partner

Behavioral Concerns

Behaviors that are restricted in range, repetitive, and/or stereotyped are risk factors for ASD and should be noted throughout the assessment process. The severity, frequency, and impact on educational performance of a student's behaviors must be evaluated. The following behaviors require observation and documentation:

- Interests and preoccupations that are more intense or focused than what would be considered normal for the student's developmental level
- Persistence in carrying out specific non-functional routines or rituals, including an inability or unwillingness to modify those routines or rituals such as lining up toy cars, watching the same five-minute segment of a video over and over, turning off lights when entering a room, and displaying difficulty when transitioning between activities
- Stereotyped and repetitive motor mannerisms (such as hand flapping, flicking fingers in front of eyes, and rocking torso back and forth)
- Persistent preoccupation with parts of objects such as visually inspecting the wheels of a toy car while spinning them or poking at the eyes on a doll

Adaptive Behavior

Adaptive behavior is defined as the development and application of abilities required for the attainment of personal independence and social sufficiency (Stone et al., 1999). Adaptive behaviors are strong predictors of outcome, since they require the student to use whatever capacities s/he possesses to function within the everyday environment. These skills are particularly important in individuals with ASD because it is these, rather than cognitive level, that contribute most to the individual's ability to function successfully and independently in the world (Paul et al., 2004). Adaptive behavior scores obtained on very young children may also prove more stable than cognitive scores throughout childhood, and are better able to predict language acquisition in nonverbal children than performance IQ scores (Stone, Ousley et al., 1999).

Research has shown that adaptive behavior is critical to assess when differentiating ASD from other developmental disorders. Adaptive behavior tends to be impaired relative to cognitive abilities in individuals with ASD. Individuals with ASD typically show an uneven pattern of skill development across adaptive behavior domains with lowest skills in social domains, highest skills in daily living domains, and intermediate skills in communication (Stone, Ousley et al., 1999).

Discrepancies between mental age and adaptive behavior scores can be greater in students with ASD than in students with cognitive impairment, particularly in the areas of socialization and communication. Adaptive behavior scores are generally lower in students with autism relative to IQ-matched comparison groups, meaning that even students considered to have “high functioning” ASD show significant deficits in adaptive behaviors (Carter et al., 1998). Children with ASD do not function in their environment as well as other children with similar cognitive capabilities, and social functioning is specifically impaired, even relative to global functioning (Liss et al., 2001).

Adaptive behavior assessment also assists with the development of goals and programming, and can serve to monitor a student’s development over time and across settings. While different tests group adaptive skills in different ways, it is helpful to assess the following skill areas: Communication, Community Use, Functional Academics, Home Living, Health & Safety, Leisure, Self-Care, Self-Direction, Social, Work.

Cognitive Factors

In assessing a student for ASD, knowing the child’s developmental or mental age provides a context for evaluating behavior characteristics, including the presence or absence of symptoms specific to ASD. Information about the student’s cognitive level assists the team in determining whether symptoms can be explained on the basis of global delay, or whether there is an uneven or deviant developmental pattern that is present (Vig and Jedrysek, 1999). Assessment of cognitive ability, therefore, can help in differential diagnosis of ASD, cognitive impairment, or a combination of the two. Research has shown that 75% of students with Autism Spectrum Disorder obtain verbal IQ scores in the cognitively impaired range on formal assessments (Ritvo et al., 1989). Though standard measures of intelligence may have low validity with some students due to the nature of their disability, these tests still provide some measure of academic success. Making a determination of ASD without carefully evaluating the student’s cognitive strengths and deficits can lead to inappropriate treatment and ineffective educational intervention.

It often occurs that students who are younger, or functioning at a younger stage of development, exhibit a significant discrepancy between their verbal and nonverbal cognitive abilities. This discrepancy tends to lessen with age for children who develop functional language. These younger/lower-functioning students tend to exhibit nonverbal strengths on visuoperceptual and visuospatial subtests, versus students with average to above average IQ scores who tend to exhibit deficits in visuospatial tasks (graphomotor skills, writing skills, and attention) (Mayes and Calhoun, 2003). When verbal and full-scale IQ scores are above 70, most students with autism will not show a significant discrepancy between verbal and performance abilities (Filipek et al., 1999).

Cognitive factors to evaluate may include:

- Processing
- Memory
- Reasoning and concept formation
- Attending
- A profile of strengths and deficits and whether there are splinter skills
- Evaluating patterns of response – Does the child persevere?

Sensory Motor Factors

Students with Autism Spectrum Disorder often react differently to sensory stimuli. Research indicates that the level of sensory symptoms present in individuals is not necessarily related to their overall mental age or IQ. Therefore, it cannot be fairly assumed that students with higher levels of cognitive functioning have fewer sensory symptoms than students functioning at lower levels of cognitive development, and vice versa (Rogers et al., 2003). Evaluating student responses to various stimuli in multiple environments may be helpful in making the determination of ASD. Rinner (2001-02) stated that using a sensory processing frame of reference is important to understanding behavioral manifestations that may mistakenly be viewed in isolation from precipitating events. Paying attention to sensory issues also expands the possibilities for helpful intervention.

In addition to sensory issues, fine and gross motor skills may need to be evaluated first through a preliminary screening, and then possibly through a formal assessment. Some key areas to assess, observe, and document when looking at sensory differences may include:

- Motor planning
- Tactile sensitivities such as rubbing surfaces, withdrawing from touch
- Proprioceptive sensitivities such as seeking deep pressure, violating another's personal space
- Visual issues such as sensitivity to light or self stimulation in visual field
- Vestibular issues such as spinning or rocking, balance problems
- Olfactory or gustatory sensitivities such as smelling or licking objects, avoiding certain foods
- Auditory issues such as sensitivity to noise, making repetitive sounds

ASSESSMENT TOOLS for AUTISM SPECTRUM DISORDER

There are no conclusive tests that can determine the presence of ASD. However, there are numerous assessment tools, including standardized and non-standardized assessments, which can assist with determining the presence of characteristics along the autism spectrum. It is crucial to understand the appropriate role each may take in the assessment process, as well as the benefits and limitations of each instrument. A combination of tools should be selected to evaluate each child's unique strengths and needs, as well as characteristics that would indicate ASD. The following section covers specific evaluation tools that may be utilized in determining the presence of ASD (consult the assessment model for ASD in appendix E).

Screening Tools

Screening has been defined as a “brief assessment procedure designed to identify children who, because of the risk of a possible learning problem or handicapping condition, should proceed to a more intensive level of diagnostic assessment” (Meisels & Atkins-Burnett, 1994). A level one screening device is used to identify children at risk for ASD from the general population. An example of such a device is the *Checklist for Autism in Toddlers (CHAT)*. Level one screening devices are designed for use in settings such as pediatricians' offices where they are administered to all children whether there are developmental concerns or not (Stone et al., 2004). For this reason, these tools are not included in this document. Level two screening tools are those designed to identify children at risk for ASD from a population of children demonstrating a broad range of developmental concerns (Stone et al., 2004). The *Social Communication Questionnaire (SCQ)*, and the *Asperger Syndrome Diagnostic Scale (ASDS)*, are available level two screening resources that can be useful in determining the presence of characteristics requiring further evaluation. While these screening instruments provide a convenient way to gain some insight into the unique characteristics of students, they are not a substitute for a comprehensive evaluation and should never be used to make eligibility decisions.

Comprehensive Assessment Tools

Once an individual student has gone through appropriate screening procedures, the educational team may determine that a more comprehensive evaluation is warranted. Because many students suspected of having ASD exhibit communication, social, and behavioral difficulties, flexibility is often necessary when assessing these students. Special considerations related to time, environment, and motivation may be necessary to elicit a student's best performance. When these changes are made in the administration of standardized assessments, caution must be taken when interpreting results and making comparisons to peer groups. Performance of students in formal testing situations should be analyzed based not only on the quantitative results, but also on other factors observed during the testing sessions such as:

- Communication style
- Ability to comprehend verbal and non-verbal communication
- Patterns of questions the student could or could not answer
- Sensory differences
- Level of distractibility
- Stereotypic behaviors or an insistence on approaching things in a certain way
- Willingness to persevere with more challenging items

Flexibility and creativity are critical skills for evaluators completing an ASD evaluation. The following guidelines are beneficial when planning and conducting an evaluation for a student with a suspected ASD:

1. Establish trust and rapport with the student prior to assessment.
2. Allow time for several observations.
3. Adapt communication to the student's level of understanding.
4. Utilize nonverbal communication to help convey meaning.
5. Avoid removing the student from preferred planned activities.
6. Determine motivators ahead of time through discussion with classroom staff and parents, and have these items readily available for use throughout the evaluation sessions.
7. Organize testing materials ahead of time to allow for the most efficient flow of activities during the testing session.
8. Consider the importance of seeing the student at the same time each day versus a variety of times, depending on what is being assessed and the student's need for consistency.
9. Address potential safety concerns by having another trusted adult present during testing, if necessary.

The following sections provide information on tools available in each area requiring assessment.

Developmental History Instruments

A thorough developmental history is one of the most important components in the assessment of students with ASD. Understanding the individual student's early development is critical in making a differential diagnosis. Professionals or school districts may have their own developmental history form or set of questions to be used during the evaluation process. Additional commercial questionnaires, such as the *Autism Diagnostic Interview-Revised (ADI-R)*, and the *Gilliam Autism Rating Scale-2 (GARS-2)* look specifically at some of the developmental disturbances associated with ASD.

Autism Specific Instruments

Instruments have been designed specifically to assist in determining the presence of social, communication, and behavioral patterns that are consistent with ASD. The formats of these tests vary, and while some of these tools can be used in determining the extent of a student's difficulties, others may be useful for instructional planning. The *Autism Diagnostic Observation Schedule (ADOS)* is a semi-structured, standardized assessment of the characteristics associated with autism. It consists of standard activities that allow the examiner to observe behaviors identified as important to the diagnosis of ASD at different developmental levels and chronological ages. The *Gilliam Autism Rating Scal-2 (GARS-2)* is a questionnaire that compares the child's characteristics to those of children that have been formally diagnosed with an ASD. The *Childhood Autism Rating Scale (CARS)* also allows an examiner to rate a child's behaviors. Tools specific to ASD that provide information related to educational planning and monitoring of progress include the *Psycho-Educational Profile-Third Edition (PEP-3)* and the *Autism Screening Instrument for Educational Planning-3rd Edition (ASIEP-3)*.

Adaptive Behavior Instruments

In a comprehensive assessment, it is important for adaptive behavior to be examined to make a differential diagnosis and to provide helpful information for programming. Certain behavioral

characteristics noted by parents, school staff, or others may be risk factors for ASD, while other patterns may suggest different developmental difficulties. The *Vineland Adaptive Behavior Scales-Second Edition (VABS-II)*, of which there are three forms, *Expanded Interview Edition*, *Survey Edition*, and *Classroom Edition*, are the most researched adaptive behavior assessments in the field of ASD (Paul et al., 2004). They can provide information on developmental patterns critical to a complete evaluation for ASD.

Social/Emotional Instruments

While all assessment instruments designed specifically to assess the presence of ASD explore social characteristics indicative of ASD, it is often important to assess more global aspects of social-emotional development in making a differential diagnosis. The *Social Responsiveness Scale (SRS)* is a rating scale that looks at a variety of feelings and abilities in the social-emotional domain essential to the differential diagnosis of ASD from other disorders. Other instruments that can provide information in this domain are the *Behavior Assessment System for Children–Second Edition (BASC-2)*, *Clinical Assessment of Behavior (CAB)*, and the *Social Skills Rating System (SSRS)*.

Communication/Language Instruments

Assessment tools specifically designed to assess characteristics of ASD provide an abundance of information relative to the determination of communication impairment associated with the disorder. In addition to this information, there are a variety of tools widely used by speech/language pathologists to assess expressive and receptive communication skills. Two instruments particularly useful for determining communication characteristics of young and/or lower functioning children are the *Communication and Symbolic Behavior Scales – Developmental Profile (CSBS-DV)* and the *MacArthur Communicative Development Inventories (CDIs)*. The *Children’s Communication Checklist (CCC)* assists in determining communication problems, particularly in the area of pragmatic language, which may be indicative of an ASD. Other assessments that specifically target a student’s pragmatic language skills and higher-level language functions include the *Test of Pragmatic Language (TOPL)*, *Test of Language Competence (TLC-E)*, and the *Test of Problem Solving (TOPS-E or A, Revised)*. Non-standardized assessments of communicative abilities related to ASD can also provide helpful information for goal development and monitoring of student progress. One such informal assessment tool is the *Assessment of Social and Communication Skills for Children with Autism*, found in Kathleen Quill’s book *Do-Watch-Listen-Say*. Another non-standardized instrument is the *Pragmatic Communication Skills Protocol*, which is helpful in determining strengths and weaknesses in pragmatic skills. A review of research on assessment of communication skills in young children suspected of having ASD (Filipek et al., 1999), and those functioning at younger developmental levels, reveals that tests selected to assess communication with this population should:

- Focus on **functions** of communication
- Analyze preverbal communication (gestures, gaze, vocalizations)
- Assess social-affective signaling
- Profile social, communicative, and symbolic abilities
- Directly assess the child, not only rely on parental report
- Permit observation of initiated and spontaneous communication
- Directly involve caregivers during the assessment

Cognitive Abilities Instruments

There are a number of assessment instruments used to evaluate cognitive abilities in preschool and school-age children. Some of the more widely used instruments include: *The Bayley Scales of Infant Development (BSES-III)*; the *Cognitive Assessment System-Second Edition (CAS-2)*; the *Leiter International Performance Scale-Revised*; the *Picture Test of Intelligence-Second Edition (PTI-2)*; the *Test of Nonverbal Intelligence-Third Edition (TONI-III)*; the *Universal Nonverbal Intelligence Test (UNIT)*; the *Wechsler Preschool and Primary Scales of Intelligence-3rd Edition (WPPSI-III)*; and the *Wechsler Intelligence Scale for Children-4th Edition (WISC-IV)*. An issue frequently raised in the assessment of students with ASD is the difficulty in obtaining reliable and valid scores for some students due to their constellation of communication and behavior deficits that may impair their ability to respond in testing situations. In their review of appropriate procedures for the screening and diagnosis of ASD, Filipek et al., (1999) detail important considerations when selecting cognitive assessment tools for younger, low-functioning, or non-verbal individuals with autism. Cognitive tests should be used which:

- Are appropriate for both mental age and chronological age
- Provide a full range (in the lower direction) of standard scores
- Sample both verbal and nonverbal skills
- Measure and score separately verbal and nonverbal skills
- Provide an overall index of ability
- Have norms which are current and relatively independent of social function

Sensory Motor Instruments

One of the most common instruments used in the assessment of sensory differences is the *Sensory Profile*. There are currently three versions of this tool available: *Infant Toddler Sensory Profile* for ages birth-36 months, *Sensory Profile* for ages 3-10 years, and *Adolescent/Adult Sensory Profile* (including a self-report form) for ages 11 and older. Each of these assessments provides a valid reflection of sensory responsivity in students for its age ranges. Results on these measures can be beneficial for both differential diagnosis and educational planning.

ISSUES OF ELIGIBILITY

The following is a review of various disability categories that share characteristics of autism and must be considered relative to Michigan's educational definition of Autism Spectrum Disorder. Following the discussion of other special education categories is a discussion of clinical diagnoses that are associated with, but different from, autism. The final portion of this discussion covers co-existing conditions/symptoms which overlap with Autism Spectrum Disorder. When considering the most appropriate eligibility for a student, it is recommended that the discussion of the ASD definition in Chapter 1 serve as a foundation for making eligibility decisions concerning ASD. The definition includes the impairment triad of 1) qualitative impairments in reciprocal social interaction, 2) qualitative impairments in communication, and 3) stereotypic behavior/restricted range of interests.

Comparison with Other Special Education Definitions

Cognitive Impairment (CI)

Cognitive impairment and Autism Spectrum Disorder often occur together. Diagnosing cognitive impairment is based on cognitive functioning, academic achievement, and adaptive behavior. Diagnosing Autism Spectrum Disorder is based on disorders in reciprocal social interaction, communication, and stereotypic behavior/restricted range of interests.

Students with cognitive impairment may display autistic features without being eligible under the ASD category. Children with Pervasive Developmental Disorders (PDD) and lower verbal intelligence scores have been shown to display more motor mannerisms and impairments in social skills and language than children with PDD with a higher IQ (Vig and Jedrysek, 1999). This suggests that some of these features may be more related to the child's cognitive level than to the presence of an Autism Spectrum Disorder. Charak and Stella (2001-2002) noted that diagnosticians tend to over-diagnose children with significant cognitive delays as having autism. This is particularly true for children who are nonverbal and function below the mental age of 18 months.

The following are important issues to consider when distinguishing Autism Spectrum Disorder from cognitive impairment:

Reciprocal Social Interaction

1. A student of comparable mental age with ASD has greater difficulty with the development of joint attention than does a student with CI.
2. Difficulty understanding self versus other concepts and sharing emotions is more prevalent in a student with ASD than with CI.
3. Students with ASD have a greater degree of impairment in social interaction and awareness than students with CI of the same mental age.

Communication and Symbol Use

1. Students with ASD demonstrate less verbal and physical imitation than students with CI.
2. Showing objects and integrating gaze with gestures are behaviors commonly seen in students with cognitive impairment, but not in students with ASD when comparing children of comparable mental age. The student with ASD is more likely to hold an adult's wrist and push it toward the desired item.
3. Students with ASD show more ritualistic forms of play compared to students with cognitive impairment.
4. Students with ASD tend to engage in simple manipulation of toys instead of pretend play compared to mental age peers with CI.

Stereotypic Behavior/Restricted Range of Interests

Repetitive motor mannerisms are seen in both ASD and cognitive impairment, but the reasons for these mannerisms may be different. The student with cognitive impairment may have a limited behavioral repertoire and be displaying behavior typical of a child at an earlier developmental age.

Other Features that Help Differentiate ASD from CI

1. Students with ASD tend to display an uneven profile of cognitive development and adaptive behavior, while students with CI tend to have more even developmental profiles.
2. Young children with ASD are more likely to ignore the human voice than children with CI of the same mental age.
3. Students with ASD are more likely to be sensitive to noise.

Early Childhood Developmental Delay (ECDD)

The Early Childhood Developmental Delay (ECDD) eligibility may only be given to students through seven years of age whose primary delay cannot be differentiated through other existing special education criteria. This is a type of "rule out" category, and all other eligibility categories should be considered first.

If a young student clearly fits the ASD category, then s/he should be found eligible as a student with ASD in order to best describe his/her constellation of deficits. If, however, a student has ASD characteristics but does not clearly meet the full ASD criteria, ECDD would be an appropriate label. The diagnostic "picture" of a student may become clearer over time, and ASD or another specific eligibility area may be more evident at the age of seven years.

If a student requires special education, ECDD eligibility provides the opportunity for a student to receive appropriate services. Determining a student eligible as ECDD also allows professionals to obtain a longitudinal picture to determine whether s/he truly meets the criteria for ASD.

Emotional Impairment (EI)

According to Michigan's Revised Administrative Rules for Special Education, students with an emotional impairment manifest behavior problems primarily in the affective domain over an extended period of time which adversely affects the student's education so that s/he cannot profit from regular learning experiences without special education support. Students with an emotional impairment primarily have difficulty with emotional stability, interaction with and response to others, problem-solving, and self-control. Although students with an emotional impairment may have problems outside of the affective domain, no other major domain is a required part of the EI definition. In contrast, the ASD definition requires a triad of impairments in three domains – reciprocal social interaction, communication, and stereotypic behavior/restricted range of interests.

Students with an emotional impairment must manifest their problems for an extended period of time, which is operationally defined as 90 days or more. In contrast, students with Autism Spectrum Disorder (ASD) are considered to have a lifelong developmental disability. It is possible for a student with an emotional impairment to not manifest his/her disability until middle school, while a student with ASD generally displays characteristics at a much younger age.

The problems present in students with an emotional impairment result in behavior manifested by one or more of the following characteristics:

Inability to Build/Maintain Satisfactory Relationships in the School Environment – Some examples of this characteristic found in students with EI include physical and/or verbal aggression, alienation of others, and excessive attention-seeking. In many instances, students with EI interact back and forth with others but in an inappropriate manner. Students with ASD generally lack skills for engaging in back and forth exchanges.

Inappropriate Types of Behaviors/Feelings Under Normal Circumstances – Students with EI who demonstrate this characteristic may exhibit:

- Rage, extreme overreaction, or panic in response to everyday occurrences
- Distorted or excessive affect
- Delusions, hallucinations, paranoia, or thought disorders
- Extreme mood swings
- Inappropriate sexually-related behavior

While some of the behaviors listed may be present in students with ASD, most of these behaviors would be considered secondary to the required triad of impairments (lack of reciprocal interaction, communication disorder, and stereotypic behavior/restricted range of interests).

General Pervasive Mood of Unhappiness or Depression – Students with EI who qualify under this characteristic exhibit depressive symptoms that typically involve changes in all of these four major areas:

1. *Affective Behavior* – May express feelings of worthlessness, excessive guilt, extreme sadness, and/or suicidal ideation
2. *Motivation* – May demonstrate loss of interest in familiar or new activities, decline in academic performance, and/or refusal to attempt tasks
3. *Physical/Motor Functioning* – May display loss of appetite, experience new problems sleeping, and/or display a deterioration in appearance
4. *Cognition* – May experience changes in attending, thinking, and concentration.

Although students with ASD may have co-occurring depression, the characteristics listed above are insufficient for a diagnosis of ASD.

Tendency to Develop Physical Symptoms or Fears Associated with Personal or School Problems – Very few students with EI establish eligibility under this characteristic. Students with irrational fears tend to exhibit intense, disabling anxiety that often reaches panic proportions. Physical symptoms could include frequent or severe somatic complaints including severe headaches, stomach problems, or racing heart. Students with ASD may display some fear reactions but the nature, severity, and reporting of these symptoms is different in students with ASD because of their communication impairment. While students with EI can describe their

fears and the feelings associated with them, it is difficult for many students with ASD to identify their own internal states and describe them to others (Tsai, 2001).

As discussed above, ASD can co-occur with some behaviors typically associated with an emotional impairment. However, to determine an eligibility of ASD the other two defining features, communication disorder and stereotypic behavior/restricted range of interests, must also be present. On the other hand, if the emotional impairment (including schizophrenia) appears to be the primary presenting concern for a student, s/he may not also be declared as eligible for special education under the Autism Spectrum Disorder label. If a student with ASD has co-occurring emotional difficulties that present unique and specific challenges beyond the ASD, and meet the eligibility requirements for EI, then the student may be given a secondary eligibility of EI.

Other Health Impairment (OHI)

As evaluation teams attempt to make sense of clinical diagnoses versus educational eligibilities, they may consider an eligibility of Other Health Impairment (OHI). This is especially true when Pervasive Developmental Disorder-Not Otherwise Specified (PDDNOS) or other Pervasive Developmental Disorder subcategories such as Asperger's Disorder/Syndrome are identified.

The language in both Michigan's and IDEA's definitions of OHI refers specifically to limitations in strength, vitality, or alertness. It further explains the term "alertness" to include heightened alertness to environmental stimuli that results in limited alertness to the educational environment. It also specifies that there must be a chronic or acute health problem, and that the impairment must adversely affect the student's educational performance. Furthermore, it provides a sample list of chronic or acute health conditions including attention deficit disorder and attention deficit hyperactivity disorder.

Under OHI eligibility, a physician's statement diagnosing Asperger's Syndrome or PDDNOS is a **required**, but **not sufficient** criterion for eligibility under OHI. In addition to the physician statement, there are also multidisciplinary team requirements including the determination of adverse educational impact and the need for special education. In the absence of case law and further OSEP clarification, it is suggested that evaluation teams consider the language in the definition regarding limited or heightened alertness to environmental stimuli when considering OHI as a possible eligibility category for students on the autism spectrum.

Speech and Language Impairment (SLI)

Students being evaluated for an ASD typically will have some type of language disability. When distinguishing between ASD and SLI, the evaluation team must consider the multiple facets of ASD. Students who only exhibit speech and language impairment do not exhibit qualitative impairments in reciprocal social interactions and stereotypic behavior/restricted range of interests. In these cases the evaluation team should consider the more limited eligibility of speech and language impairment. (See Appendix J for Michigan definition of SLI).

If a student qualifies under the eligibility area of ASD it is unnecessary to consider SLI eligibility because the definition of ASD includes qualitative impairments in communication. Students labeled with ASD may have additional articulation, fluency, and/or voice disorders, but these are not defining features of ASD. In such cases, speech and language services would be designed and delivered based on the individual student's needs.

Exclusionary Considerations

In addition to considering the eligibility for special education criteria within the state and federal definitions of ASD, there is a need to consider (1) adverse educational impact and (2) need for special education. Eligibility must result from the condition and its effects on performance, but not from lack of appropriate instruction (for preschool children lack of exposure to developmental activities) or limited English proficiency. Courts and hearing officers frequently refer back to three basic elements in the determination of special education eligibility: (a) criteria within an eligibility category, (b) adverse educational impact, and (c) need for special education programs and services. Important considerations include the following:

1. If a student has a clinical diagnosis of mental retardation or a related disorder, she/he may not automatically qualify for special education.
2. Even though Autism Spectrum Disorder is considered a lifelong disability, a student with ASD may or may not **need** special education services at a given point in time.
3. The IEP Team should address the need for a special education program and/or services based on the student's current functioning, not his/her projected needs.
4. If a student with autism spectrum disorder needs accommodations only, consider providing those through a Section 504 plan.

Adverse Impact

Both Michigan's current definition of Autism Spectrum Disorder and the IDEA definition of a child with a disability specify that adverse impact on education must be determined. The *Revised Administrative Rules for Special Education* state:

R 340.1715; Autism spectrum disorder; determination.

Rule 15. (1) Autism spectrum disorder is considered a lifelong developmental disability that adversely affects a student's educational performance in 1 or more of the following performance areas:

- (a) Academic.
- (b) Behavioral.
- (c) Social.

The IDEA regulations state the following:

CFR § 300.8 Child with a disability

(a) General. (1) Child with a disability means a child evaluated in accordance with §§ 300.304 through 300.311 as having mental retardation and who, by reason thereof, needs special education and related services.

Courts and hearing officers have addressed adverse impact in special education cases involving a number of diagnoses. Case law has determined that even when specific conditions exist that could be the basis for special education eligibility under various eligibility categories, the conditions themselves do not automatically trigger eligibility. Rather, the impact of the disorders is not determinative when the diagnosed conditions do not meet the additional criteria of adverse effect on the student's educational performance.

While one facet of adverse impact may be reflected in a student's grades, this is not the only

factor that must be considered. Although case law is not definitive on this point, determinations of adverse impact or need for special education have been based on such evidence as progress in the general education curriculum. Academic achievement and progress is a fundamental consideration in addressing this issue and should be carefully reviewed. Social and other behavioral factors should also be considered as they relate to overall educational performance and progress in the general education curriculum. For example, if a student diagnosed with Autism Spectrum Disorder is receiving passing grades but is having chronic difficulties in other aspects of his/her school environment, then social/behavioral concerns should be considered when determining the need for special education or accommodations.

Need for Special Education

Michigan addresses the need for special education in the following rule:

Rule 340.1702 (2): Student with a disability means a person who is determined by an individualized education program team or hearing officer to have 1 or more of the impairments specified in this part that necessitates special education or related services, or both . . .

IDEA has similar language regarding need for special education as follows:

Rule 300.8(a) General . . . the term child with a disability means . . . who, by reason thereof, needs special education and related services.

In addition to consideration of adverse impact, a determination must be made of the child's need for special education. The issue of adverse impact is certainly a critical question to consider in determining need for special education, but it may be found that the adverse impact can be addressed with general education accommodations and without special education. It is important for educational teams to review the amount of support that is necessary for the student to be successful. The extent and type of modifications needed will, therefore, be an important consideration to address.

Courts and hearing officers have addressed the need for special education in considering numerous disorders. A student may meet the criteria for one of the eligibility categories and have a disability that also adversely affects educational performance; but if the student does not need special education in order to benefit from his school program, then she/he is not eligible for special education. Also, in *Letter to Gallagher* (1996), OSEP noted that the need for special education in an essential requirement separate from other criteria in determining eligibility.

Lack of Instruction or Limited English Proficiency

An additional component of eligibility determination for all categories is the exclusion from eligibility due to a lack of appropriate instruction in math, the essential components of reading instruction, or limited English proficiency. Although these exclusionary factors may not be applicable in all Autism Spectrum Disorder referrals, these factors still need to be considered. While this is not addressed in Michigan's rules, it is specified in IDEA and so must be addressed. The IDEA 2004 language is as follows:

§614 (b) (5) In making a determination of eligibility . . . a child shall not be determined to be a child with a disability if the determinant factor for such determination is (A) lack of instruction in reading, including in the essential components of reading instruction (as defined in section 1208 (3) of the Elementary and Secondary Education Act of 196); (B) lack of instruction in math; or (C) limited English proficiency.

The issue of attendance needs to be addressed under this section of consideration. It is suggested that no later than the student's 12th day of absence instructional intervention be provided to return the student to instructional expectations. Upon reaching 20 or more days of missed instruction it is difficult to determine if deficits are the result of a student-based disability or a lack of instruction. When numerous days of instruction are missed it is crucial to document instructional interventions to establish the provision of appropriate learning opportunities. Without documented interventions and the student's response to those interventions this element of the exclusionary clause can not be addressed.

Social and Cultural Background

A vitally important consideration in the evaluation process is the consideration of cultural differences and socioeconomic influences. As the variance of scores within the data increases careful consideration must be given to the possible impact of social and cultural issues.

The consideration of the following questions is helpful:

1. Was the family of the student involved in the data collection and decision-making process relative to pre-referral interventions and evaluation data collection? This acknowledges the unique contribution that individuals from diverse backgrounds can bring to the process.
2. Was student progress and instructional strategies reviewed in a manner which reflected culturally responsive learning environments (i.e., respect for and training in cultural learning issues)?
3. Was test data interpreted in light of the influence social and cultural issues?
4. Were a variety of assessment strategies utilized?
5. To the extent available were culturally sensitive assessment practices utilized?

§300.306 (c)(1)(i)(ii) In interpreting evaluation data for the purpose of determining if a child is a child with a disability under §300.8, and the educational needs of the child, each public agency must- (i) Draw upon information from a variety of sources, including aptitude and achievement tests, parent input, and teacher recommendations, as well as information about the child's physical condition, social or cultural background, and adaptive behavior; and (ii) Ensure that information obtained from all these sources is documented and carefully considered.

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**APPENDIX A – COMPARISON OF MICHIGAN AND IDEA DEFINITIONS
OF AUTISM SPECTRUM DISORDER/AUTISM**

Michigan Definition	IDEA Definition
Autism Spectrum Disorder is considered a lifelong developmental disability...Autism Spectrum Disorder is typically manifested before 36 months of age. A child who first manifests the characteristics after age 3 may also meet criteria.	Autism means a developmental disability... generally evident before age 3. A child who manifests the characteristics of “autism” after age 3 could be diagnosed as having “autism” if the criteria...are satisfied.
...That adversely affects a student’s educational performance in 1 or more of the following areas: a) Academic. b) Behavioral. c) Social.	...That adversely affects a child’s educational performance.
Autism Spectrum Disorder is characterized by qualitative impairments in reciprocal social interactions, qualitative impairments in communication...	...significantly affecting verbal and nonverbal communication and social interaction.
...And restricted range of interests/repetitive behavior.	Other characteristics...are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines...
Determination may include unusual or inconsistent response to sensory stimuli.	...unusual responses to sensory experiences.
...To be eligible under this rule, there shall not be a primary diagnosis of schizophrenia or emotional impairment.	The term does not apply if a child’s educational performance is adversely affected primarily because the child has an emotional disturbance.
	...The term child with a disability means... who, by reason thereof, needs special education and related services...
	A child may not be determined eligible under this part if the determinant factor for that eligibility determination is (A) lack of instruction in reading including the essential components of reading instruction; (B) lack of instruction; or (C) limited English proficiency
A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team including, at a minimum, a psychologist or psychiatrist, an authorized provider of speech and language... and a school social worker.	

APPENDIX B – PRE-REFERRAL STRATEGIES

Pre-Referral Strategies

These strategies are meant to address the communication, behavioral, sensory-processing, social, and learning differences that students may exhibit in the school environment. Many of these strategies and techniques are elements of good teaching that will be beneficial for all students in general and special education settings. It is critical to recognize that the strategies listed here are beneficial for students with a variety of needs and impairments. Staff may find that these strategies work for a particular student; however, that does not necessarily mean the student has ASD. The following strategies are starting suggestions and do not constitute an exhaustive list.

Transition Problems

Students transition from one activity to another better when they understand what and when things will happen.

1. Provide a visual schedule to prepare the student for the day's activities. Allow the student to cross out/remove activities as they are completed. Use photos, drawings, symbols, or words depending on developmental level and reading ability of the student. The schedule can be provided on the board for the entire class, or at the student's desk for personal use.
2. Use a timer to signal the beginning and end of activities. Visual timers are available that do not make any noise.
3. Provide advance warning for transitions. For example, "Work time will be done in 5 minutes."
4. Provide advance warning for schedule changes. For example, "The assembly is cancelled for this afternoon so we will be playing board games instead." Use the visual schedule to make changes.

Recess Problems

Students participate better when they have some structure regarding peers and activities that are available.

1. Consider restructuring recess, rather than taking it away as a consequence for having problems during that time. Many students need the active recess time to help keep them regulated.
2. Provide a peer or small group of peers to play with the student at recess.
3. Have the student choose the activity s/he will participate in prior to going outside. Help the student by providing a visual or written list of activities that are available if needed.
4. Collaborate with staff supervising recess.

Issues with Frustration/Emotional Self-Regulation

Students feel more secure knowing there is a way they can calm themselves and regain control.

1. Analyze the times, places, and situations where the student is having difficulty. Make accommodations as necessary during those times.

2. Provide a quiet space or “safe spot” for the student to go when s/he needs a break. Make sure the student understands what the space is to be used for and how to access that space. Use a timer to transition the student back into classroom activities if needed.
3. Change the student’s environment; run an errand to the office, get a drink from the fountain, and so on.
4. Provide the student with a set number of passes or break cards to use when s/he is becoming agitated. These passes can be used to access a quiet space, take a walk in the hall, or do something similar.
5. Allow the student to use a stress ball or other sensory tool to assist with calming.

Difficulty Following Directions/Routines

Students follow directions and complete routines better when they do not have to rely solely on their auditory processing skills.

1. Break the instructions into smaller pieces and explain the process step-by-step as the activity proceeds.
2. Write the directions on the board or on a piece of paper for the student to have at his/her desk.
3. For classroom routines, provide the student with a checklist or set of pictures of things s/he needs to do, as with writing a routine for starting the morning.

Sensitivity to Environmental Stimuli

Students participate better and complete more work independently if environmental stimuli are not competing for their attention.

1. Allow the student to wear headphones or earplugs during loud activities.
2. Provide the student with his/her own private “office space” during work activities. Stand a folder up on his/her desk to block out visual stimuli or sit at a desk in a quieter area of the room.
3. Reduce the use of overhead florescent lights, if possible.

Activity Level Is Too High or Too Low

Students can better regulate their activity levels throughout the day when provided with appropriate physical activities.

1. Allow the student to take physical activity breaks during the day (take a walk, do some stretches as a class, run an errand).
2. Provide the student with sensory tools such as stress balls, a seat cushion, stretch bands, etc. to help him/her appropriately manage his/her energy levels.
3. Provide the student with a “Pace Space” in the back of the classroom where s/he can stand/pace during instruction. Use tape on the floor to visually define the area, if needed.

Difficulties with Social Rules/ Social Activities

Students can follow rules for social behaviors and engage with peers more appropriately when provided with concrete rules and structure for activities.

1. Use reminder/cue cards to reinforce social rules (such as, raise your hand) to speak.
2. Make a rule list or book with the student that highlights the specific social rules the student is having difficulty with. Pictures can aid with comprehension.
3. Assign rules for student s during group work activities. Write down the rules for working in groups (no interrupting, talk in a quiet voice, etc).
4. "Caught You" Cards – Decide on a specific social rule or skill to highlight with the class for a period of time (usually a week or more). When you see a student exhibiting that skill, s/he receives a "Caught You" card. The student writes his/her name on the back and enters his/her cards in a drawing for a prize, something like a free time. This is a positive way to help a specific student practice social skills without singling him/her out.
5. Marble Jar – Same idea as above, except each time you see a student practicing the skill appropriately you drop a marble in a jar. When the jar is full (or has a certain number of pre-determined marbles in it) the class wins a prize.
6. Provide a peer or small group of peers to engage with the student during unstructured times.
7. Encourage the student to become involved with extracurricular activities surrounding his/her interest areas.

Difficulties with Organization

Students are more likely to stay organized when the teacher provides visual cues and when organizational skills are directly taught and practiced.

1. Provide labeled containers such as boxes and binders to help the student know where materials and papers belong.
2. Label areas of the student's locker or cubby to help him/her know where to put his/her belongings.
3. Set aside a weekly cleaning/organization time when an adult (or a peer for older students) can assist the student with sorting through papers and organizing materials.
4. Teach the student to use a planner for keeping track of assignments and other responsibilities.

Difficulties with Written Expression

Students can process information and organize their responses better when they do not have to focus on the motor task of writing.

1. Note Taking
 - a. Allow the student access to copies of another student's notes. Carbon notebooks could be used.
 - b. Provide a copy of the overhead notes for the student to follow along and highlight throughout the lecture.
 - c. Provide a scribe to take notes.
 - d. Provide a "fill-in-the-blank" format for students to take notes.
2. Allow the student to use a computer or other keyboard device during writing activities.
3. Provide other ways for students to show what they know. Allow them to take tests verbally, draw pictures or diagrams, etc.

**APPENDIX C – CHART OF ASSESSMENT TOOLS FOR
AUTISM SPECTRUM DISORDER**

Name of Instrument	Age Range	Areas Assessed
Adaptive Behavior Assessment System – Second Ed. (ABAS-II), 2003	0 to 89-11	Assess communication, community use, home living, health & safety, leisure, self-care, self-direction, social, work, functional academics, and motor skills (young children)
Assessment of Basic Language & Learning Skills-Revised (ABLIS-R)	3 to 9 years	Identifies deficiencies in language, academic, self-help, and motor skills.
Autism Diagnostic Interview-Revised (ADI-R), 2003	2 to adult	Language and communication, Reciprocal social interactions, Restricted, repetitive, and stereotyped behaviors and interests, Background/early development, Acquisition/loss of language or other skills, Language and communication functioning, Social development and play, Interests and behaviors, Behaviors of clinical importance
Autism Diagnostic Observation Schedule (ADOS), 2001	2 to adult	Communication, Reciprocal social interaction, Imagination/creativity, Stereotyped behaviors and restricted interests
Autism Screening Instrument for Educational Planning-Third Edition (ASIEP-3)	2 years through 13-11	Behaviors, Vocal behavior, Interaction skills, Classroom skills and Rate of learning
Bayley Scales of Infant Development-Third Ed. (BSID-III), 2005	1 to 42 months	Core battery of five subtests – cognitive, language, motor, social-emotional, and adaptive behavior
Brigance Inventory of Early Development-Second Ed. (IED-II)	Birth to 7-0 years	Measures motor-skills, language, academic/cognitive, daily living, and social-emotional.
Childhood Autism Rating Scale (CARS), 1988	No age limits	Relating, Body use, Emotional response, Object use, Verbal and nonverbal communication
Children’s Communication Checklist-Second Edition (CCC-2), 2003	4 to 16 years	Speech, Syntax, Semantics, Coherence, Inappropriate initiation, Stereotyped language, Use of context, Nonverbal communication, Social relations, Interests
Clinical Assessment of Behavior (CAB)	2-0 to 18-0 years	Adjustment, psychosocial strength/weaknesses, and problem behaviors.
Cognitive Abilities Scale-Second Ed. (CAS-2)	3 months to 3 years	Provides general cognitive score and a non-vocal score.
Communication and Symbolic Behavior Scales Developmental Profile (CSBS DP), 2002	6 months to 6 years	Communicative functions, Gestural communicative means, Verbal communicative means, Reciprocity, Social-affective signaling, Symbolic behavior
Functional Communication Profile-Revised (FCP-R), 2003	3 to adult	Sensory, Speech, Attentiveness, Voice, Pragmatic/social, Expressive language, Receptive language, Fluency, Oral, Non-verbal communication

Gilliam Asperger's Disorder Scale (GADS), 2003	3 to 22 years	Social interaction, Restricted patterns of behaviors, Cognitive patterns, Pragmatic communication skills, Developmental disturbances (optional subtest)
Gilliam Autism Rating Scale-Second Ed. (GARS-2)	3 to 22 years	Stereotyped behaviors, Social interaction, Communication, Developmental disturbances (optional subtest)
Krug Asperger's Disorder Index (KADI)	6 to 22 years	Helpful in distinguishing Asperger's from other forms of high functioning autism.
Leiter International Performance Scale-Revised (Leiter-R)	2 to 20 years	Nonverbal measure of intelligence
Merrill-Palmer-Revised (M-P-R)	1 month to 6-6 years	Measure cognitive, social-emotional, language/communication, self-help, & motor
Parent Interview for Autism (PIA), 2002	Preschool level and below	Social relating, Affective responses, Peer interactions, Motor imitation, Communication, Object play, Imaginative play, Sensory responses, Motoric behaviors, Need for sameness
Picture Test of Intelligence-Second Ed. (PTI-2)	3-0 through 8-11	Measures verbal abstractions, form discrimination, and quantitative concepts
Psychoeducational Profile-Third Ed. (PEP-3)	6 months to 7 years	Imitation, Perception, Fine motor, Eye-hand integration, Cognitive performance, Cognitive verbal skills
Social Skills Rating System (SSRS)	3 to 18 years	Measures social skills, problem behaviors, and academic competence
Social Communication Questionnaire (SCQ), 2003	Above age 4, mental age above 2	Communication skills, Social functioning
Social Responsiveness Scale (SRS), 2005	4 to 18 years	Social awareness, Social information processing, Capacity for reciprocal social communication, Social anxiety/ avoidance, Autistic preoccupation and traits
Test of Nonverbal Intelligence-Third Ed. (TONI-III)	6 to 90 years	Measures intelligence, aptitude, abstract reasoning, and problem solving.
Universal Nonverbal Intelligence Test (UNIT)	5-0 to 7-11 years	Nonverbal measure of cognitive ability
Vineland Adaptive Behavior Scales-Second Ed. (VABS-II), 1984	<i>Interview Edition:</i> birth through 18-11 and low-functioning adults <i>Classroom Edition:</i> 3 through 12-11	Communication (expressive, receptive, written), Daily living skills (personal, domestic, community), Socialization (interpersonal relationships, ;lay and leisure time, coping skills), Motor skills (gross and fine), Maladaptive behavior (included in <i>Interview editions</i> , optional domain)

APPENDIX D – PARENT INTERVIEW FOR AUTISM

PARENT INTERVIEW FOR AUTISM – CLINICAL VERSION (PIA-CV)
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INSTRUCTIONS TO PARENTS: "I have some questions for you about _____'s behavior in different areas. For each behavior I mention, I'd like you to decide how often it occurs, and choose the number from 1 to 5 that fits best. Please describe your child's **current** behavior."

1	2	3	4	5
Almost Never	Once in a While	Sometimes	Frequently	Almost Always

Social Relating

"The first questions are about _____'s social behavior.

Tell me about how _____ interacts with others:"

- 1 2 3 4 5 1) Does _____ enjoy interacting with familiar adults?
- 1 2 3 4 5 2) Does _____ look at you while you are playing with him/her?
- 1 2 3 4 5 3) Does _____ look at you when you are talking to him/her?
- 1 2 3 4 5 4) Does _____ come to you for comfort when he/she is sick or hurt?
- 1 2 3 4 5 5) Does _____ ignore people who are trying to interact with him/her?
- 1 2 3 4 5 6) Does _____ "look through" people as if they weren't there?
- 1 2 3 4 5 7) Does _____ enjoy being held or cuddled?
- 1 2 3 4 5 8) Does _____ hug you back when you hug him/her?
- 1 2 3 4 5 9) Does _____ become stiff or rigid when you are holding or hugging him/her?
- 1 2 3 4 5 10) Does he/she go limp when you hold or hug him/her?
- 1 2 3 4 5 11) Does _____ come to you for a kiss or a hug on his/her own, without you asking him/her to?
- 1 2 3 4 5 12) Does he/she enjoy being kissed?
- 1 2 3 4 5 13) Does _____ seem to enjoy affection only on his/her own terms
Examples?
- 1 2 3 4 5 14) Does _____ smile back at you when you smile at him/her?

- 1 2 3 4 5 15) Does _____ seem to be “hard to reach,” or in his/her own world?
 1 2 3 4 5 16) Does _____ actively avoid looking at people during interactions?
 1 2 3 4 5 17) Does _____ look at people more when they are far away than when they
 are interacting with him/her?

Affective Responses

- 1 2 3 4 5 18) Does _____ seem to understand how others are feeling?
 Examples?
 1 2 3 4 5 19) Does he/she understand the expressions on peoples' faces?
 1 2 3 4 5 20) Is it difficult to tell what _____ is feeling from his/her facial expression?
 What makes it hard to tell?
 1 2 3 4 5 21) Does _____ smile during his/her favorite activities?
 1 2 3 4 5 22) Does _____ smile, laugh, and cry when you expect him/her to?
 1 2 3 4 5 23) Does _____'s moods change quickly, without warning?
 Examples?
 1 2 3 4 5 24) Does _____ become very frightened of harmless things?
 Examples?
 1 2 3 4 5 25) Does _____ laugh for no obvious reason?
 1 2 3 4 5 26) Does _____ have severe temper tantrums?

Peer Interactions

“The next questions are about _____'s peer relationships.

Tell me about how _____ gets along with other children:”

- 1 2 3 4 5 27) Does _____ prefer to play alone instead of with other children?
 1 2 3 4 5 28) Will _____ ever join in play with another child?
 1 2 3 4 5 29) Does _____ enjoy playing with other children?
 1 2 3 4 5 30) Does _____ seem to be interested in making friends with other children?
 1 2 3 4 5 31) Does _____ hurt other children by biting, hitting, or kicking?

Motor Imitation

“The next set of questions have to do with _____'s ability to imitate or copy other people's movements or activities.”

- 1 2 3 4 5 32) Does _____ imitate simple gestures such as waving goodbye or clapping hands?
- 1 2 3 4 5 33) Does _____ imitate the things you do around the house, such as sweeping or dusting? Examples?
- 1 2 3 4 5 34) Do you have difficulty trying to get _____ to imitate your movements when you want him/her to?
- 1 2 3 4 5 35) Does _____ imitate words or sounds when you want him/her to?

Communication

"The next set of questions have to do with _____'s language and communication skills.

Tell me how _____ communicates:"

Nonverbal Communication

"In addition to talking, there are lots of other ways that children can communicate their needs and wants, such as making sounds, or pointing, or gesturing."

- 1 2 3 4 5 36) How often does _____ communicate to you in ways other than talking?
- 1 2 3 4 5 37) Can you understand what _____ is trying to communicate?
- 1 2 3 4 5 38) Can other people understand _____?
- 1 2 3 4 5 39) Does _____ become frustrated when he/she tries to communicate?

*"The next questions are about the **reasons** that _____ communicates. Here's a list of the different reasons for communicating." (give card)*

How often does _____ communicate to:"

- 1 2 3 4 5 40) Let you know he/she wants something, like food or a toy?
- 1 2 3 4 5 41) Get you to do something for him/her?
Example?
- 1 2 3 4 5 42) Let you know he/she doesn't want something?
How does he she let you know?
- 1 2 3 4 5 43) Get your attention?
Example?
- 1 2 3 4 5 44) Show off?
Example?
- 1 2 3 4 5 45) Ask questions about an object or event?
Example?

- 1 2 3 4 5 46) Ask your permission to do something?
Example?
- 1 2 3 4 5 47) Get you to play with him/her?
Example?
- 1 2 3 4 5 48) Get you to look at something he/she's interested in?
Example?

Language Understanding

- 1 2 3 4 5 49) Does _____ respond when you call his/her name?
- 1 2 3 4 5 50) Does _____ understand what you say to him/her?
How can you tell?
- 1 2 3 4 5 51) When you point at something, does _____ look in the direction you point in?
- 1 2 3 4 5 52) Can _____ follow simple directions such as "Get your coat?"
- 1 2 3 4 5 53) Can _____ follow longer directions that contain more than one idea, such as "Get your coat and bring me your shoes?"
- 1 2 3 4 5 54) Does _____ listen to you when you read him/her short stories?
- 1 2 3 4 5 55) Does _____ seem interested in conversations that other people are having?

Object Play

"The following questions are about _____'s play skills.

Tell me how _____ likes to play:"

- 1 2 3 4 5 56) Does he/she play with lots of different toys?
- 1 2 3 4 5 57) Does _____ use his/her toys in appropriate ways, the way they were designed to be used? (e.g., rolling a toy car, putting Legos together, pushing the buttons on a pop-up toy)
- 1 2 3 4 5 58) Does _____ use toys in unusual ways, such as spinning them, or lining them up over and over again?
Examples?
- 1 2 3 4 5 59) Does _____ play with toys or other objects in the same exact way each time? Examples?

Imaginative Play

- 1 2 3 4 5 60) Does _____ use his/her imagination when playing with toys or other objects –such as pretending that a teacup is a hat or that a comb is an airplane?
Examples?

- 1 2 3 4 5 61) Does _____ play pretend games by him/herself, such as pretending to be a superhero? Examples?
- 1 2 3 4 5 62) Does _____ play pretend games with other children, like playing “mommy,” “daddy,” or “teacher?” Examples?
- 1 2 3 4 5 63) Does _____ play many different pretend games?

Sensory Responses

“The next questions are about the way _____ uses his/her senses, such as hearing and vision.”

- 1 2 3 4 5 64) Does _____ fail to respond to painful events, such as falling down or bumping his/her head? What does he/she do when hurt?
- 1 2 3 4 5 65) Is _____ overly sensitive to being touched?
- 1 2 3 4 5 66) Does _____ examine objects by sniffing or smelling them?
- 1 2 3 4 5 67) Does he/she examine objects by licking or tasting them?
- 1 2 3 4 5 68) Is _____ overly interested in the way things feel?
- 1 2 3 4 5 69) Does he/she enjoy touching or rubbing certain surfaces? Examples?
- 1 2 3 4 5 70) Is _____ overly sensitive to sounds or noises? Examples?
- 1 2 3 4 5 71) Does _____ cover his/her ears at certain sounds? Examples?
- 1 2 3 4 5 72) Does it seem like _____ does not hear well?
- 1 2 3 4 5 73) Does _____ ever ignore loud noises? Examples?
- 1 2 3 4 5 74) Is _____ overly interested in looking at small details or parts of objects? Examples?
- 1 2 3 4 5 77) Is _____ overly interested in looking at lights or shiny objects? Examples?
- 1 2 3 4 5 78) Does _____ look at things out of the corner of his/her eyes? Examples?
- 1 2 3 4 5 79) Does _____ do things without looking at what he/she is doing? Examples?

Motoric Behaviors

“These questions are about the way _____ moves and uses his/her body.”

- 1 2 3 4 5 80) Does _____ spin or whirl him/herself around for long periods of time?
- 1 2 3 4 5 81) Does _____ move his/her hands or fingers in unusual or repetitive ways (e.g., flapping or twisting them)? Example?
- 1 2 3 4 5 82) Does _____ walk in unusual ways (e.g., on his/her toes)? Example?

- 1 2 3 4 5 83) Does _____ hurt him/herself on purpose, such as by banging his/her head, biting his/her hand, or hitting any part of his/her body? Example?

Need for Sameness

"These questions relate to _____'s flexibility in adapting to change.

"Tell me how _____ responds when something out of the ordinary happens and his/her routines must be changed:"

- 1 2 3 4 5 84) Does _____ insist on certain routines or rituals, such as insisting on wearing a certain jacket when he/she goes outside? Examples?
- 1 2 3 4 5 85) Does _____ become upset if changes are made in his/her daily routines – for example, if a different parent puts him/her to bed? Examples?
- 1 2 3 4 5 86) Does _____ become upset if changes are made in the household – such as if furniture is moved? Examples?
- 1 2 3 4 5 87) Does _____ have certain favorite objects or toys that he/she insists on carrying around? What are they?
- 1 2 3 4 5 88) Does _____ become upset when things don't look right –such as if the rug has a spot on it or books in a bookshelf are leaning? Examples?
- 1 2 3 4 5 89) Does _____ become agitated or upset by new people, places, or activities? Example?
- 1 2 3 4 5 90) Does _____ insist on wearing only certain clothes or types of clothes? Example?
- 1 2 3 4 5 91) Does he/she become upset when new clothes are put on?
- 1 2 3 4 5 92) Does _____ have certain mealtime rituals, such as eating from only one specific plate? Example?
- 1 2 3 4 5 93) Does _____ have unusual food preferences, such as only eating foods of certain color or texture? Example?

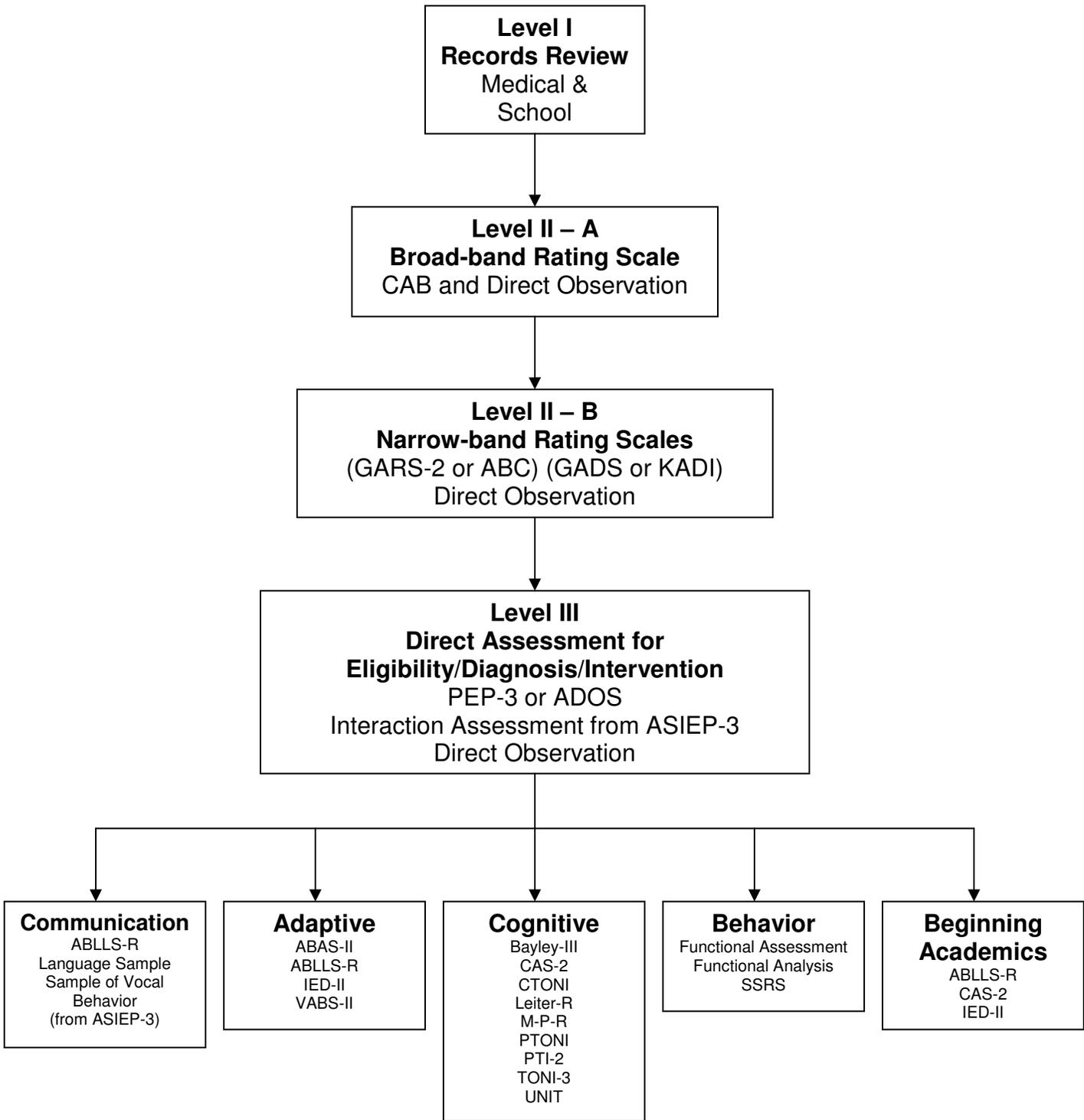
Thank you for completing this interview.

References

Stone, W.L., & Hogan, K.L. (1993). A structured parent interview for identifying young children with autism. Journal of Autism and Developmental Disorders, 23, 639-652.

Stone, W.L., Coonrod, E.E., Pozdol, S.L., & Turner, L.M. (2003). The Parent Interview for Autism-Clinical Version (PIA-CV): A measure of behavioral change for young children with autism. Autism: The International Journal of Research and Practice, 7, 9-30.

APPENDIX E – ASSESSMENT MODEL FOR AUTISM SPECTRUM



For verbal, higher-functioning children achievement tests such as the KTEA-II or WIAT-II, and intelligence tests such as the WISC-IV can be used.