2007

AUTISM SPECTRUM DISORDER

Evaluation and Eligibility Guidelines

• Presented by •

St. Clair County Regional Educational Service Agency

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INTRODUCTION

The primary objective of the ASD Guidelines Committee was to develop standards to increase consistency in the identification and evaluation of students with ASD throughout our intermediate school district.

Over the last 10 years, significant progress has been made by both the medical and educational communities in their understanding and treatment of children with ASD. This document reflects differences in medical, diagnoses, and educational eligibility using the current research, best practices, and case law related to the identification and assessment of students suspected of having an Autism Spectrum Disorder.

INTRODUCTION TO AUTISM SPECTRUM DISORDER (ASD)

What is Autism Spectrum Disorder (ASD)?

ASD is a developmental disability that typically appears during the first three years of life. It is the second most common developmental disability, next to mental retardation (USDHHS-NIMH, 2004). Within the past 30 years there have been over 20 studies on the prevalence rates of autism. These prevalence rates range from approximately one (1)
per 2,000 persons to as many as one (1) of every 150 people (Center for Disease Control (CDC). It is three to four times more prevalent in boys than girls and knows no racial, ethnic, or social boundaries. Family income, lifestyle, and educational levels do not affect the occurrence of ASD (USDHHS-NIMH, 2004).

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

There is no known single cause of ASD. Researchers are investigating a number of theories including the link between heredity, genetics, and medical conditions, but they have not yet identified a single “trigger” that causes ASD to develop. It is not caused by the psychological environment in which a child grows up (Tanguay, 2000).
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Diagnosing ASD

There are no medical tests for diagnosing ASD. An accurate diagnosis 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. 9/3 /05
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.)

Explanation 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.

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 and 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:

R 340.1715 (2) (a) (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 have repetitive behaviors with the intent of showing excitement or interests. They may not derive meaning from their own or others' nonverbal behaviors.

R 340.1715 (2) (a) (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.

R 340.1715 (2) (a) (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.

R 340.1715 (2) (a) (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.

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

R 340.1715 (2) (b) (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.

R 340.1715 (2) (b) (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 include the following: establishing and maintaining eye contact, understanding and reacting t o 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.

R 340.1715 (2) (b) (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.

R 340.1715 (2) (b) (iv) Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level.

Children with ASD often do 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 1of the following:

R 340.1715 (2) (c) (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 consequential 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.

R 340.1715 (2) (c) (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 the insistence of sameness and the inflexibility to change within and across environments.

R 340.1715 (2) (c) (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.

R 340.1715 (2) (c) (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.

R 340.1715 (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.

See Chapter 2 titled *Addressing Concerns Related to Possible ASD* for a thorough discussion on the pre-referral, referral, and evaluation process for students suspected of having ASD.

Discussion of IDEA Definition of Autism

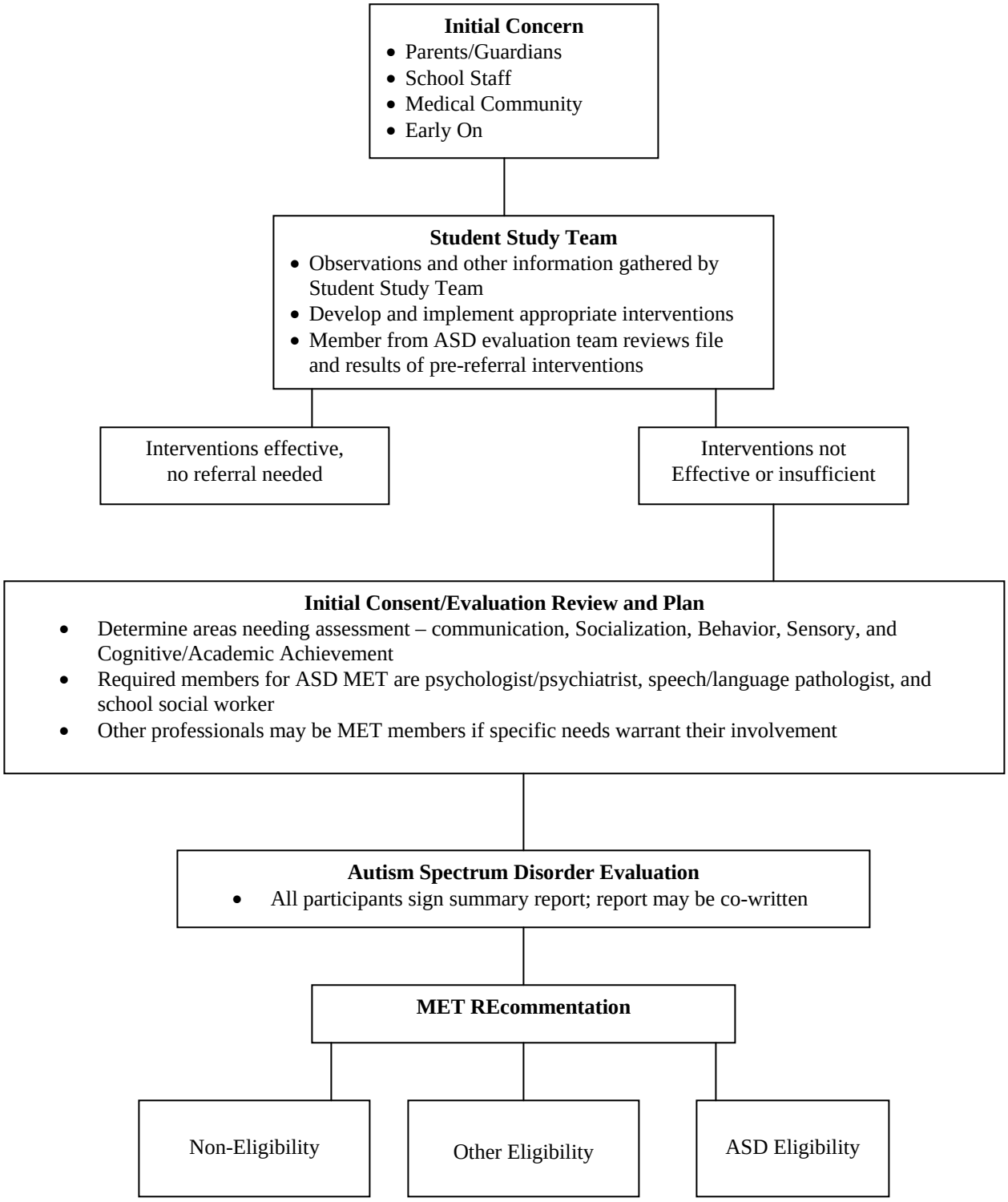
The IDEA definition of Autism can be found in Appendix B. In general, it is a shorter and less involved definition. A comparison of the IDEA and Michigan definitions can be found in Appendix C.

Addressing Concerns Related To Possible ASD

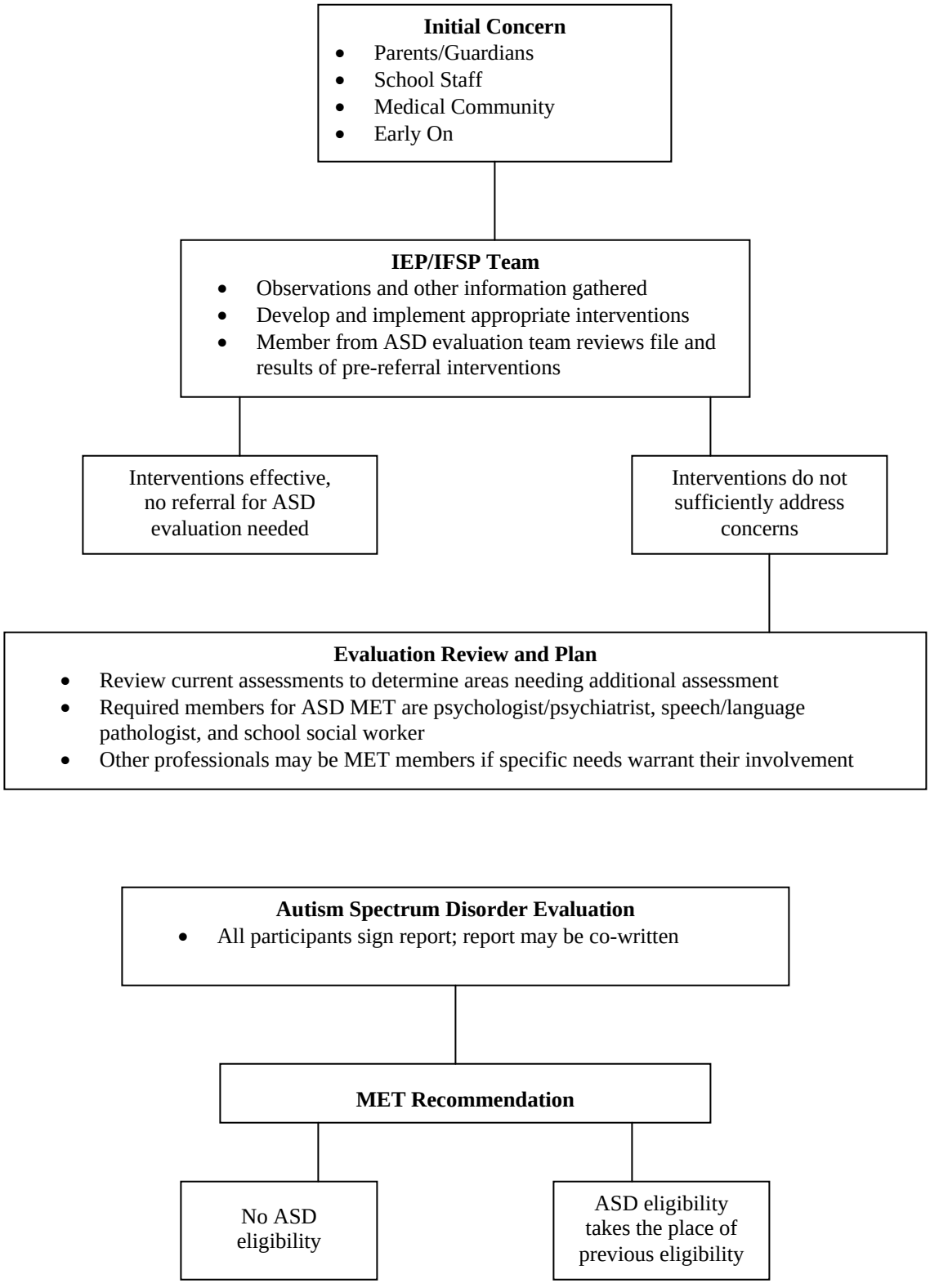
Students both within and outside of the special education system may come to staff members' attention as possibly exhibiting characteristics of an Autism Spectrum Disorder. When this occurs, there is a process that must be followed to determine whether or not an evaluation is necessary and, if so, how that evaluation will be conducted and the impact it will have on the student's educational program. The following flow charts provide a visual summary of this process for students being referred for an initial special education evaluation, and for those currently receiving special education services who are suspected of having an ASD.

AUTISM SPECTRUM DISORDER ELIGIBILITY

Flow Chart for Initial Referrals to Special Education



Flow Chart for Students Currently Receiving Services



PRE-REFERRAL PROCESS

The St. Clair County RESA 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 comprehensive educational interventions have been 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 a student study 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 a student study team vary by districts and buildings, but generally include diagnostic staff. Teacher consultants for ASD, 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 student study 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.

PRE-REFERRAL INTERVENTIONS

These interventions are meant to address the communication, behavioral, sensoryprocessing, social, and learning differences that students may exhibit in the school environment. Many of these interventions 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 interventions listed here are beneficial for students with a variety of needs and impairments. Staff may find that these interventions work for a particular student; however, that does not necessarily mean the student has ASD. **The following interventions 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 students 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.

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. The MET form utilized throughout this process is referred to in this discussion.

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, may also include 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 t he assessment 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)
These forms provide the evaluation team with t he written permission from the parent(s) showing informed consent for the evaluation.

When first approaching the parents of a student suspected of having an ASD, the reaction will vary. Great care must be taken to determine the parent s' initial understanding of autism and the meaning it may have for examining their child's unique strengths and needs. 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.

Areas to Consider for Determination of ASD
- Developmental history
- Communication skills and characteristics
- Social skills
- Behavior concerns
- Adaptive behavior
- Ability/academic achievement
- Sensory motor concerns
- Educationally relevant medical information

The assessment process for each of these components will be discussed in Chapter 3.

Personnel Required for Autism Spectrum Disorder Determination
Though the law requires only three participants for an ASD evaluation – psychologist/psychiatrist, school social worker, and speech/language pathologist – additional professionals are usually involved in the evaluation process.

It is essential for at least one member of the LEA/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 crucial 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. Although reasonable efforts must be made to gain the

parent(s) participation in the MET, a MET can be held without the parent in attendance.
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.

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, psychomotor skills, 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.

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 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 or other consultant specializing in ASD is not a required member of the MET.

LEA teams will make eligibility determinations. St. Clair RESA consultants will be involved only when LEA team findings are inconclusive and additional input is needed to make the determination.

St. Clair RESA autism consultants will be part of teams in the LEAs that meet regularly on students with autism. Autism Consultant services are to be written in the IEP in the "Supplemental Aids and Services" section of the IEP. A suggested statement is "Team access to St. Clair RESA consultant when team is in need of specific training, support, and strategies." Consultant names should not be indicated on the IEP.

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 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 need to be assessed to acquire a complete picture of a specific student's strengths and needs. Because autistic symptomology changes over the lifespan, it is important to determine a student's level of current functioning in these areas to best address issues of goals and programming. This chapter will detail the specific areas requiring assessment, and the information to collect in each area.

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
- 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 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 are 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. The following areas of adaptive behavior require assessment:

- Communication skills
- Social skills, including play skills
- Daily living/self-help skills – dressing, eating, job skills, money management
- Motor skills (if motor concerns are present)

Ability/Academic Achievement

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. Information on the child's cognitive skills also establishes a baseline for later assessments to measure development and progress. Making a determination of ASD without carefully evaluating the student's cognitive strengths and deficits can lead to inappropriate treatment and ineffective educational intervention.

To date, there is no single cognitive impairment or pattern of cognitive development that occurs in all individuals with ASD. However, the research shows that individuals with ASD display a high rate of uneven cognitive development (Joseph et al., 2002) and they tend to develop certain developmentally later skills (written language, memory, and rule acquisition) before developmentally earlier skills (joint attention and social reciprocity). This constitutes "deviant" (disordered) development rather than "delayed" development (Liss et al., 2001). It is critical to note the presence or absence of these patterns when assessing cognitive skills.

It is typical for students who are younger, or functioning at a younger stage of development, to 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 visuomotor subtests, versus students with average to above average IQ scores who tend to exhibit deficits in visuomotor 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 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 perseverate?
- Whether the skill levels represent delayed or deviant patterns of cognitive functioning

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 student's 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 include:

- Motor planning
- Seeking or avoiding issues 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

Educationally Relevant Medical Information

Medical conditions and interventions, such as medications, may affect a child's behavior or development. A thorough review of the student's medical history is critical. Consider if potential behavioral side effects of various medications are affecting the student.

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.

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 dev ices 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 t o 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 an 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)*, *Parent Interview for Autism (PIA)*, and Developmental History portion of the *Gilliam Autism Rating Scale (GARS)* 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 combined use of the *ADOS* and the *ADI-R* are widely regarded in the research as the "gold standard" tools for assessing the presence of characteristics associated with ASD (de Bildt et al., 2004). The *Gilliam Autism Rating Scale (GARS)* and the *Gilliam AspergerDisorder Scale (GADS)* are questionnaires that compare 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–Revised (PEP-R)* and the *Autism Screening Instrument for Educational Planning–2nd Edition (ASIEP-2)*.

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 (VABS)*, 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)* and the *Achenbach*, both of which have specific forms for parent and teacher ratings. These two instruments are widely used in school evaluations and, because they are not specific to the evaluation of ASD, are not included in the tools section of this document.

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 pathologist s 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*; the *Cognitive Assessment System-Second Edition (CAS-2)*; the *Wechsler Preschool and Primary Scales of Intelligence-3rd Edition (WPPSI-III)*; *Wechsler Intelligence Scale for Children-4th Edition (WISC-IV)*; and the *Stanford-Binet 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 four 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.

Reviews of ASD Tools

This section contains reviews of current research-based assessment tools useful in the evaluation of ASD. Both screening and comprehensive evaluation tools are included. This section will be updated as current tools are revised and new instruments are developed. A summary chart of these assessment tools is included in Appendix D.

Adolescent and Adult Psycho-Educational Profile (AAPEP), 1992

Authors: Gary Mesibov, Eric Schopler, Bruce Schaffer, Rhoda Landrus

Publisher Information: PRO-ED
8700 Shoal Creek Boulevard
Austin, TX 78758
800-897-3202

Age Range: 12 and older
Administration Time: 2 + hours; generally over a period of days

Areas Assessed
- Vocational skills
- Independent functioning
- Leisure skills
- Vocational behavior
- Functional communication
- Interpersonal behavior

Description of Instrument
- Items in each of the areas above are assessed through a *Direct ObservationalScale*, *Home Scale*, and a *School/Work Scale*
- Provides an evaluation of current and potential skills needed for successful semi-independent functioning in the home and the community

Strengths
- Assesses practical and critical areas related to needs of adolescents and adults on the autism spectrum

Potential Concerns
- Limited research available
- Lengthy administration time

Recommended Use of Instrument
- Educational planning and monitoring of progress over time, including development of goals and objectives
- Transition plan development

Cost: $72.00 for manual and forms
$310.00 for complete testing materials kit

Adolescent/Adult Sensory Profile, 2002
Author: Winnie Dunn

Publisher Information: Harcourt Assessment
19500 Bulverde
San Antonio, TX 78259
800-211-8378
www.harcourtassessment.com

Age Range: 11 to 65+

Administration Time: 15 minutes

Areas Assessed
- Sensory processing
- Modulation
- Behavioral and emotional responses

Description of Instrument
- 60 items for individual to complete based on how s/he generally responds to sensations
- Students are characterized by their responsiveness to sensory input including:
  - Taste/smell
  - Movement
  - Visual
  - Touch
  - Activity level
  - Auditory

Strengths
- Allows older students and adults to perform self-evaluation of need areas

Recommended Use of Instrument
- Professional with background in sensory processing should administer and score
- Can be useful in discrimination of characteristics related to a variety of disorders
- Allows examiner to evaluate the role sensory processing plays in the student's daily performance patterns
- Allows for the development of student awareness and strategies to optimize the desired sensory environment

Cost: $99.00

Adolescent Test of Problem Solving (TOPS-A), 1991
Authors: Linda Bowers, Rosemary Huisingh, Mark Barrett, Jane Orman, Carolyn LoGiudice

Publisher Information: LinguiSystems
3100 4th Avenue
East Moline, IL 61244-9700
800-776-4332

Age Range: 12 to 17-11

Administration Time: 40 minutes

Areas Assessed
- Evaluating
- Fair-mindedness
- Analyzing
- Thinking independently
- Clarifying
- Affect

Description of Instrument
- The TOPS-A is designed to examine the adolescent's overall approach to dealing with situations to assess the interaction of his/her language and critical thinking skills
- The test uses a picture stimulus book along with verbal and written stories to limit the affects of poor auditory memory or reading deficiencies
- Test items are based on Richard Paul's research on critical thinking, and are based on relevant situations that adolescents frequently encounter

Strengths
- High reliability and validity accurately identifies students with language-learning disorders
- Assesses communication and thinking skills that are necessary for appropriate educational planning

Recommended Use of Instrument
- Part of a comprehensive communication assessment

Cost: $99.95

Asperger's Syndrome Diagnostic Scale (ASDS), 2001
Authors: Brenda Smith-Myles, Stacey Jones Bock, Richard L. Simpson

Publisher Information: PRO-ED
8700 Shoal Creek Boulevard
Austin, TX 78758
800-897-3202

Age Range: 5 to 18 years

Administration Time: 10-15 minutes

Areas Assessed
- Language
- Social skills
- Maladaptive behavior
- Sensorimotor
- Cognitive

Description of Instrument
- Parent(s) and/or school staff respond to 50 "Yes or No" questions; individuals providing ratings must know the student well (have regular sustained contact for two or more weeks)
- Total score used to determine the likelihood that the student has Asperger's Syndrome

Strengths
- Assesses a broad range of skills necessary for appropriate educational planning

Potential Concerns
- May not be able to discriminate between Asperger's and other forms of PDD
- Includes some characteristics not endorsed by DSM-IV-TR conceptualization of Asperger's Syndrome
- Normed on a small group of students with a variety of disorders

Recommended Use of Instrument
- Screening to determine need for further evaluation

Cost: $94.00

Australian Scale for Asperger's Syndrome Screening Tool, 1998
Author: Tony Attwood

Publisher Information: In *Asperger's Syndrome: A Guide for Parents and Professionals* (1998) Jessica Kingsley Publishers

Age Range: Higher functioning school-age students

Administration Time: 10-15 minutes

Areas Assessed
- Social/emotional
- Communication
- Cognitive
- Specific interest
- Movement
- Other characteristics

Description of Instrument
- Rating scale completed by parents and/or teachers
- 24 items rated on a scale of 0 -6
- 10 "Yes or No" behavioral characteristics
- Majority of "yes" responses and ratings between 2 and 6 indicate a need for further evaluation

Strengths
- Quick and easy to administer and score

Potential Concerns
- No available studies of reliability or validity
- Very brief measure of characteristics; some characteristics not supported by DSM-IV-TR characteristics for Asperger's Disorder

Recommended Use of Instrument
- Screening to determine if further evaluation may be needed

Cost: $18.95 for book

Autism Diagnostic Interview - Revised (ADI-R), 2003
Authors: Michael Rutter, Ann LeCouteur, Catherine Lord

Publisher Information: Western Psychological Services
12031 Wilshire Boulevard
Los Angeles, CA 90025-1251
800-648-8860

Age Range: 2 to Adult

Administration Time: 1-2 hours

Areas Assessed
- 3 Domains
  - Language and communication
  - Reciprocal social interactions
  - Restricted, repetitive, and stereotyped behaviors and interests
- 8 Content Areas
  - 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

Description of Instrument
- 93-item parent interview scored by examiner using diagnostic algorithms
- Parent(s) or caregiver must be familiar with both current behavior and developmental history

Strengths
- Exceptionally comprehensive - considered a "gold standard" diagnostic tool for assessment of ASD; particularly when used in conjunction with the ADOS
- Excellent interrater and test-retest reliability
- Able to differentiate ASD from non-autistic developmental disorders if child's mental age is above 2 years

Potential Concerns
- Though it has been tested with children under age 2 years, results are not as reliable for children with a chronological or mental age under 2

Recommended Use
- Developmental history for an initial comprehensive assessment for ASD, and subsequent educational planning
- Use in conjunction with ADOS

Cost: $175.00
Other Considerations: Training videos and materials available through publisher

Autism Diagnostic Observation Schedule (ADOS), 2001
Authors: Catherine Lord, Michael Rutter, Pamela D. DiLavore, Susan Risi

Publisher Information: Western Psychological Services
12031 Wilshire Boulevard
Los Angeles, CA 90025-1251
800-648-8860

Age Range: 2 to Adult

Administration Time: 30-45 minutes

Areas Assessed
- Communication
- Reciprocal social interaction
- Imagination/creativity
- Stereotyped behaviors and restricted interests

Description of Instrument
- Consists of 4 modules, each of which contains a schedule of activities designed for use with children and adults at a particular developmental and language level
    - Module 1 – For participants who do not consistently use phrase speech
    - Module 2 – For participants who use some phrase speech, but who are not verbally fluent
    - Module 3 – For children whose toy play is age-appropriate and who are verbally fluent
    - Module 4 – Intended for verbally fluent adolescents and adults
- Each module consists of structured activities which provide standard contexts in which to observe social interactions, communication, and behaviors relevant to ASD

Strengths
- Considered a “gold standard” diagnostic tool for assessment of ASD; particularly when used in conjunction with the ADI -R
- Excellent interrater and test-retest reliability

Potential Concerns
- Longer than average training and practice required to attain mastery with instrument · High cost of instrument

Recommended Use
- Part of a comprehensive assessment of communication, social interaction, and behaviors associated with ASD, and for subsequent educational planning
- Use in conjunction with ADI -R

Cost: $1,345.00 for complete kit containing all required forms and materials
Other Considerations: Training videos and materials available from publisher

Autism Screening Instrument for Educational Planning – Second Edition (ASIEP-2), 1993
Authors: David Krug, Joel R. Arick, Patricia Almond

Publisher Information: PRO-ED
8700 Shoal Creek Boulevard
Austin, TX 78758
800-897-3202

Age Range: 18 months to Adulthood

Administration Time: Varies depending on number of tests administered

Areas Assessed
- Behaviors
- Vocal behavior
- Interaction skills
- Classroom skills
- Rate of learning

Description of Instrument
- Five separate tests used for diagnosis, educational planning, and progress monitoring
  - *Autism Behavior Checklist (ABC)* – Checklist of 57 behaviors
  - *Sample of Vocal Behavior* – 50 spontaneous utterances
  - *Interaction Assessment* – Observation of play situations that assesses child's skills in relating to others
  - *Educational Assessment* – staying in seat, receptive language, expressive language, body concept, and speech imitation
  - *Prognosis of Learning Rate* – consists of a sequencing task
  - It is appropriate for use with cognitive impairment, ASD, deaf/blindness, or emotional impairment

Strengths
- Sound research basis for content
- Assesses a broad range of skills necessary for appropriate educational planning

Potential Concerns
- Not all portions are applicable for higher functioning students
- Not as comprehensive as the ADOS

Recommended Use of Instrument
- Appropriately used by a multidisciplinary team to address issues of program development and monitoring
- ABC should be used for screening purposes *only*

Cost: $204.00 for kit

Childhood Autism Rating Scale (CARS), 1988
Authors: Eric Schopler, Robert Reichler, Barbara Renner

Publisher Information: Western Psychological Services
12037 Wilshire Blvd.
Los Angeles, CA 90025-1251
www.wpspublish.com

Age Range: No age limits

Administration Time: 15-20 minutes

Areas Assessed
- Relating
- Body use
- Emotional response
- Object use
- Verbal and nonverbal communication

Description of Instrument
- Consists of 15 items rated on a 7-point scale indicating the degree to which the child's behavior deviates from that of a non-impaired child of the same age
- Parents, other caregivers, and/or school staff complete based on experience with student
- Ratings can also be completed based on examiner's observations
- Scores falling below the autism cut-off can be divided into two categories – mild-to moderate autism and severe autism

Strengths
- Quick and easy to complete and score
- Excellent measure of change in severity of symptoms and in treatment effectiveness over time

Potential Concerns
- Developed prior to the DSM-IV-TR conceptualization of ASD
  - Cannot distinguish among PDD subgroups
  - Does not include same conceptualization of a triad of impairments, which can lead to over-identification of children with cognitive impairment
  - Assesses some areas not specific to ASD, such as language delay and activity level
  - May underestimate ASD in older higher functioning students

Recommended Use of Instrument
- Level 2 screening tool to determine need for further evaluation

Cost: $70.00 for starter kit
Other Considerations: Video training available from publisher

Children's Communication Checklist – Second Edition (CCC-2), 2003
Author: Dorothy Bishop

Publisher Information: Harcourt Assessment
32 Jamestown Road
London, NW1 7BY, UK

www.harcourt-uk.com

Age Range: 4 to 16 years

Administration Time: 5-15 minutes

Areas Assessed
- Speech
- Syntax
- Semantics
- Coherence
- Inappropriate initiation
- Stereotyped language
- Use of context
- Nonverbal communication
- Social relations
- Interests

Description of Instrument
- 70-item checklist that assists in identifying communication problems, and may also be used as a secondary diagnostic assessment to distinguish between children with a typical SLI versus pragmatic disorder such as that seen in Autism Spectrum Disorder
- Completed by an adult who has regular contact with the child
- Two composite scores are derived
    - General Communication Composite is used to identify children likely to have clinically significant communication problems
    - Social Interaction Deviance Composite can assist in identifying children with a communication profile characteristic of autism

Strengths
- Good consistency between parent and professional ratings
- Assesses pragmatic communication skills that are typically difficult to measure

Potential Concerns
- Available only through UK-based publisher

Recommended Use of Instrument
- Screening for children who are likely to have language impairment
- Identifying pragmatic impairment in children with communication problems
- Identifying children who should receive further assessment for ASD

Cost: Approximately $120.00 for complete assessment kit (based on current exchange rate)

Communication and Symbolic Behavior Scales Developmental Profile (CSBS DP), 2002
Authors: Amy Wetherby, Barry Prizant

Publisher Information: Brookes Publishing
PO Box 10624
Baltimore, MD 21285-0624
800-638-3775
www.brookespublishing.com

Age Range: 6 months to 6 years; Functional age 6-24 months

Administration Time: 50-75 minutes

Areas Assessed
- Communicative functions
- Gestural communicative means
- Verbal communicative means
- Reciprocity
- Social-affective signaling
- Symbolic behavior

Description of Instrument
- Administered by speech language pathologist, early interventionist, psychologist, or other professional trained to assess developmentally young children
- 24-item checklist for primary caregiver
- Behavior sampling observation
- 4-page caregiver questionnaire

Strengths
- Norm referenced on a culturally diverse group of children
- Good validity
- Meets virtually all of the recommended characteristics of a communication assessment for developmentally young children

Recommended Use
- Checklist can serve as a good initial screening tool
- Behavior sampling observation and caregiver questionnaire can be used for in-depth assessment of communication, social skills, and behaviors

Cost: $599.00 for complete kit, including all toys and other materials needed
Other Considerations: Video training available from publisher

Elementary Test of Problem Solving (TOPS-E), 1994
Authors: Linda Bowers, Rosemary Huisingh, Mark Barrett, Jane Orman, and Carolyn LoGiudice

Publisher Information: LinguiSystems
3100 4th Avenue
East Moline, IL 61244-9700
800-776-4332

Age Range: 6 to 11 years

Administration Time: 35 minutes

Areas Assessed
- Problem solving
- Determining solutions
- Drawing inferences
- Empathizing
- Predicting outcomes
- Using context cues
- Vocabulary comprehension

Description of Instrument
- The TOPS-E is designed to examine the elementary age student's overall approach to dealing with situations in order to see the interaction of his/her language and critical thinking skills
- Black and white photographs provide the stimulus for questions that focus on critical thinking skills and assess how students use their language to think
- Test items are based on the research of Benjamin Bloom, Richard Paul, Howard Gardner, and others
- *Classroom Problem Solving Scale* is completed by the classroom teacher and provides information about a student's problem-solving skills in the classroom

Strengths
- Assesses communication and thinking skills that are necessary for appropriate educational planning

Recommended Use of Instrument
- Part of a comprehensive communication assessment

Cost: $99.95

Functional Communication Profile - Revised (FCP-R), 2003
Author: Larry I. Kleiman

Publisher Information: LinguiSystems
3100 4th Avenue
East Moline, IL 61244-9700
800-776-4332

Age Range: 3 to Adult

Administration Time: 45-90 minutes depending on student variables; can be administered over several sessions

Areas Assessed
- Sensory
- Speech
- Attentiveness
- Voice
- Pragmatic/social
- Expressive language
- Receptive language
- Fluency
- Oral
- Non-verbal communication

Description of Instrument
- Assesses a wide range of communication skills and communication effectiveness
- Can be used with all student s with developmental delays; particularly relevant to ASD
- Establishes level of impairment in each area as normal, mild, moderate, severe, or profound

Strengths
- Can be used with students regardless of the form of communication (sign, nonverbal, augmentative, etc.)
- Provides summaries of each skill area that are beneficial for goal writing and program development

Recommended Use of Instrument
- Part of a comprehensive communication assessment
- Educational program planning and goal writing

Cost: $41.95

Gilliam Asperger's Disorder Scale (GADS), 2003
Author: James E. Gilliam

Publisher Information: PRO-ED
8700 Shoal Creek Boulevard
Austin, TX 78758
800-897-3202

Age Range: 3 to 22 years

Administration Time: 5-10 minutes

Areas Assessed
- Social interaction
- Restricted patterns of behaviors
- Cognitive patterns
- Pragmatic communication skills
- Developmental disturbances (optional subtest)

Description of Instrument
- Parent(s) and/or school staff provide ratings of 32 behaviors
- Parents can complete developmental section to provide information on child's behaviors prior to age three
- Scores used to determine the likelihood that the child has Asperger's Disorder

Strengths
- Good reliability and validity
- Quick and easy to administer

Potential Concerns
- Not appropriate for lower functioning students
- Multiple individuals familiar with the child should complete the ratings to reduce bias

Recommended Use of Instrument
- Part of a comprehensive assessment of communication, social interaction, and behaviors associated with ASD in high functioning students

Cost: $92.00

Gilliam Autism Rating Scale (GARS), 1995
Author: James E. Gilliam

Publisher Information: PRO-ED
8700 Shoal Creek Boulevard
Austin, TX 78758
800-897-3202

Age Range: 3 to 22 years

Administration Time: 5-10 minutes

Areas Assessed
- Stereotyped behaviors
- Social interaction
- Communication
- Developmental disturbances (optional subtest)

Description of Instrument
- Parents and/or school staff rate behaviors based on the frequency with which they occur
- Scores determine the likelihood that the student has autism, as well as the severity of the disorder

Strengths
- Strong reliability and validity
- Quick and easy to administer

Potential Concerns
- Multiple individuals familiar with the child should complete the ratings to reduce bias

Recommended Use of Instrument
- Part of a comprehensive assessment of communication, social interaction, and behaviors associated with ASD

Cost: $89.00

Infant/Toddler Sensory Profile, 2002
Author: Winnie Dunn

Publisher Information: Harcourt Assessment
19500 Bulverde
San Antonio, TX 78259
800-211-8378
www.harcourtassessment.com

Age Range: Birth to 36 months

Administration Time: 15 minutes

Areas Assessed
- Sensory processing
- Modulation
- Behavioral and emotional responses

Description of Instrument
- 36 items for children birth to 6 months
  - Sensation seeking
  - Sensation avoiding
  - Sensory sensitivity
  - Low registration
- 48 items for children 7 to 36 months
  - Auditory processing
  - Visual processing
  - Tactile processing
  - Vestibular processing
  - Oral sensory processing
- Completed by parent or caregiver who has daily contact with child; items rated according to frequency with which various behaviors occur

Strengths
- Standardized on a large number of children
- Provides valid and reliable scores

Recommended Use of Instrument
- Professional with background in sensory processing should administer and score
- Intervention and treatment planning

Cost: $149.00

MacArthur Communicative Development Inventories (CDIs), 2005
Authors: Donna Jackson-Maldonado, Elizabeth Bates, Donna Thal

Publisher Information: Brookes Publishing
PO Box 10624
Baltimore, MD 21285-0624
800-638-3775
www.brookespublishing.com

Age Range: 8 to 30 months; developmentally younger students functioning in this range

Administration Time: 20-40 minutes

Areas Assessed
- Language and communication skills

Description of Instrument
- Parents/caregivers complete report forms
- *Words and Gestures* form – ages 8-16 months
- *Words and Sentences* form – ages 16-30 months

Strengths
- Good reliability and validity
- Normed on 1,800 children in multiple locations
- Meets virtually all of the recommended characteristics of a communication assessment for developmentally young children

Recommended Use
- Assessment of expressive and receptive communication

Cost: $90.00

Parent Interview for Autism (PIA), 2002
Authors: Wendy Stone, Elaine Coonrod, Stacie Pozdol, Lauren Turner

Publisher Information: Available in Appendix E

Age Range: Children functioning at the preschool level and below

Administration Time: 30-45 minutes

Areas Assessed
- Social relating
- Affective responses
- Peer interactions
- Motor imitation
- Communication
- Object play
- Imaginative play
- Sensory responses
- Motoric behaviors
- Need for sameness

Description of Instrument
- Structured parent interview designed to gather diagnostically relevant information from parents of young children suspected of having autism
- Provides information relative to the triad of impairments in autism
- 93 items phrased as questions about specific observable behaviors
- Ratings are obtained according to frequency of each item

Strengths
- Developed using sound research basis and comparison to other strong instruments
- Ability to discriminate children with autism from those with other developmental delays or cognitive impairment

Recommended Use of Instrument
- Screening to determine if further evaluation is needed
- Part of a comprehensive evaluation of social, communication, and behavioral characteristics related to ASD

Cost: Free – Published with permission in Appendix E

Psycho-Educational Profile – Revised (PEP-R), 1990
Authors: Eric Schopler, Margaret Lansing, Robert Reichler, Lee Marcus

Publisher Information: PRO-ED
8700 Shoal Creek Boulevard
Austin, TX 78758
800-897-3202

Age Range: 6 months to 7 years
Children 7 to 12 years who are functioning below a 1st grade level

Administration Time: 2 + hours; generally over a period of days

Areas Assessed
- Imitation
- Perception
- Fine motor
- Eye-hand integration
- Cognitive performance
- Cognitive verbal skills

Description of Instrument
- Items in each of the areas above are assessed through observation and structured play activities
- Skills in each area are scored as “pass”, “emerge”, or “fail”

Strengths
- Thorough assessment of skills pertaining to younger and lower functioning students with autism
- Allows for development of appropriate goals and objectives
- High inter-rater reliability; correlates well with some other assessment measures

Potential Concerns
- Lengthy administration t ime
- Limited research available

Recommended Use of Instrument
- Educational planning and monitoring of progress over time; including development of goals and objectives

Cost: $74.00 for manual and forms
$475.00 for complete testing materials kit

Sensory Profile, 1999
Author: Winnie Dunn

Publisher Information: Harcourt Assessment
19500 Bulverde
San Antonio, TX 78259
800-211-8378
www.harcourtassessment.com

Age Range: 3 to 10 years

Administration Time: 15 minutes for short profile

Areas Assessed
- Sensory processing
- Modulation
- Behavioral and emotional responses

Description of Instrument
- 125 questions for parents/caregivers designed to help the examiner understand the student's sensory processing patterns
- *Short Sensory Profile* available as an abbreviated format of the *Sensory Profile*
- Students are characterized by their responsiveness to sensory input including
    - Sensory seeking
    - Emotional reactive
    - Low endurance/tone
    - Oral sensory sensitivity
    - Inattention/distractibility
    - Poor registration
    - Sensory sensitivity
    - Sedentary
    - Fine motor/perceptual

Strengths
- Based on research on over 1,000 children, including children with disabilities, ADHD, and autism

Potential Concerns
- Lengthy – may want to consider using the *Short Sensory Profile* in certain situations

Recommended Use of Instrument
- Professional with background in sensory processing should administer and score
- Can be useful in discrimination of characteristics related to a variety of disorders
- Useful as a discriminative set of data for educational planning

Cost: $149.00

Sensory Profile School Companion
Winnie Dunn, Ph.D, OTR, FAOTA

Publisher Information: Harcourt Assessment
19500 Bulverde
San Antonio, TX 78259
800-211-8378
www.harcourtassessment.com

Age Range: 3 years to 11 years 11 months

A standardized assessment tool for measuring a student's sensory processing abilities and their effect on the student's functional performance in the classroom and school environment. It is intended to be used as part of a comprehensive performance assessment for students ages 3 years 0 months to 11 years 11 months, when combined with other evaluations, observations and reports.

Test components consist of a User's Manual, Teacher Questionnaire, and a Scoring Summary**.**

With the Sensory Profile School Companion, school-based clinicians have the ability to evaluate a child's sensory processing skills and how these skills affect the child's classroom behavior and performance.

Cost: $140.00

Social Communication Questionnaire (SCQ), 2003
Authors: Michael Rutter, Anthony Bailey, Catherine Lord

Publisher Information: Western Psychological Services
12031 Wilshire Boulevard
Los Angeles, CA 90025-1251
800-648-8860

Age Range: Above age 4, mental age must be above 2 years

Administration Time: 10 minutes

Areas Assessed
- Communication skills
- Social functioning

Description of Instrument
- Previously known as the *Autism Screening Questionnaire* (ASQ)
- Helps evaluate communication skills and social functioning in children who may have

Autism Spectrum Disorders
- 40 "Yes or No" questions completed by a parent or other primary caregiver to determine whether an individual should be referred for a complete diagnostic evaluation
- Two forms available – *Lifetime* and *Current*
    - The *Lifetime Form* focuses on the child's entire developmental history, providing a total Score that is interpreted in relation to specific cutoff points. This score identifies individuals who may have autism and should be referred for a more complete evaluation
    - The *Current Form* looks at the child's behavior over the most recent 3-month period

Strengths
- SCQ is a valid screening instrument for ASD, providing a reasonable picture of symptom severity, as evidenced by high agreement between SCQ and ADI -R scores
- Results on the *Current Form* can be helpful in educational planning and measurement of change over time
- Ability to capture information about symptoms that may have been present earlier in a child's development, even though some of these symptoms may not currently be exhibited by the student
- Autoscore forms allow for quick and simple scoring

Recommended Use
- Level 2 screening tool for students suspected of having ASD
- IEP planning and monitoring of progress over time

Cost: $95.00

Social Responsiveness Scale (SRS), 2005
Author: John N. Constantino

Publisher Information: Western Psychological Services
12031 Wilshire Boulevard
Los Angeles, CA 90025-1251
800-648-8860
www.wpspublish.com

Age Range: 4 to 18 years

Administration Time: 15-20 minutes

Areas Assessed
- Social awareness
- Social information processing
- Capacity for reciprocal social communication
- Social anxiety/avoidance
- Autistic preoccupations and traits

Description of Instrument
- 65-item scale measuring the severity of autism spectrum symptoms as they occur in natural social settings
- Completed by parent(s) or school staff

Strengths
- Sensitive and reliable across a wide range of symptom severity
- Measures impairment on a quantitative scale across a wide range of severity, rather than a "yes" or "no" format, which is consistent with the concept of autism as a spectrum disorder
- Helpful in diagnosing milder autism spectrum conditions

Potential Concerns
- New instrument – Just released in March 2005

Recommended Use
- Level 2 screening tool
- Part of a comprehensive evaluation of social development – *Need to give this prior to the ADI-R or other detailed interviews to avoid bias*
- Measuring response to intervention

Cost: $82.50

Vineland Adaptive Behavior Scales (VABS), 1984
Authors: Sara S. Sparrow, David A. Balla, Domenic V. Cicchetti

Publisher Information: American Guidance Service, Inc.
4201 Woodland Road
Circle Pines, MN 55014-1796
800-328-2560

Age Range: Interview Editions: Birth through 18-11 and low-functioning adults
Classroom Edition: 3 through 12-11

Administration Time
- *Interview Edition Survey Form* 20-60 minutes
- *Interview Edition Expanded Form* 60-90 minutes
- *Classroom Edition* 20 minutes

Areas Assessed
- Communication (expressive, receptive, written)
- Daily living skills (personal, domestic, community)
- Socialization (interpersonal relationships, play and leisure time, coping skills)
- Motor skills (gross and fine)
- Maladaptive behavior (included in *Interview Editions*; optional domain)

Description of Instrument
- Semi-structured interview and classroom questionnaire formats gather multiple measures/perspectives of an individual's skills in areas necessary for everyday living
- *Interview Editions* are completed with parent/caregiver while *Classroom Edition* is a questionnaire completed by teacher(s)
- *Survey Form* – 297 items to gather general information on adaptive behavior
- *Expanded Form* – 577 items provide comprehensive assessment of adaptive behavior

Strengths
- Proven to be an accurate resource for predicting autism and Asperger syndrome
- Supplementary norm groups available for early childhood and coming soon for ASD
- Computer *ASSIST* scoring programs available

Potential Concerns
- Lengthy administration time for *Expanded Form*
- Some of the items assess skills that are not as prevalent today as when test was first published

Recommended Use
- Comprehensive assessment of adaptive behavior
- Part of a comprehensive assessment of communication, social interaction, and behaviors associated with ASD
- Useful for differential diagnosis as well as educational program planning and monitoring of progress (*Expanded Form* most beneficial for these areas)

Cost: $199.00 for Starter Kit including *Survey*, *Expanded*, and *Classroom Editions*
Other Considerations: Video training and materials available from publisher

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)

Students can be diagnosed as having a cognitive impairment if their development rate is at or approximately two standard deviations below the mean on a test of intellectual ability. (See Appendix F for the Michigan definition of CI.) Another requirement for eligibility as CI is scoring at or below the 6th percentile on academic achievement tests in reading and math. There must also be impairment in adaptive behavior.

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 student s 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. (See Appendix G for the Michigan definition of ECDD.)

When a Multidisciplinary Evaluation Team (MET) assesses young students, and the results manifest a delay in one or more areas of development equal to or greater than one-half of the expected development, ECDD may be considered. (See Appendix G.)

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 eligibilit y 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 affect the student's education so that s/he cannot profit from regular learning experiences without special education support. (See Appendix H.) 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 stat es 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 category of Other Health Impairment is more broadly defined in both the Michigan rules and IDEA regulations (See Appendix I). OSEP, however, has referred to it in the consideration of eligibility with children diagnosed with Asperger's Syndrome or with PDD-NOS (*Letter to Coe*, 1999 and *Letter to Williams*, 2000). What is not provided is any explanation of how such diagnoses would meet the definition of OHI.

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)
A speech and language impairment (SLI) is a communication disorder that adversely affects educational performance in articulation, fluency, voice, and/or language. An articulation impairment may include omissions, substitutions, or distortions of speech sounds. Fluency interferes with effective communication through abnormal rate, speech interruptions, and/or repetitions. Voice impairments may involve pitch, loudness, and/or voice quality. A language impairment interferes with the understanding and use of language in one or more of the following areas: phonology, morphology, syntax, semantics, or pragmatics. (See Appendix J for Michigan's definition of Speech and Language Impairment.)

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.

CONSIDERATION OF OUTSIDE DIAGNOSES RELATED TO AUTISM SPECTRUM DISORDER

The following information is provided to assist evaluation teams in the process of considering outside evaluations and diagnoses. Though none of the diagnoses described in this section are made by school evaluation teams, students sometimes receive these diagnoses from outside evaluators. The team is then responsible for considering this information in its evaluation of the student. It is also beneficial to have a basic understanding of these clinical diagnoses, and the *Diagnostic and StatisticalManual-Fourth Edition-Text Revision* (DSM-IV-TR) criteria used to determine them. Understanding these criteria assists professionals in helping parents understand how their child's outside diagnosis may or may not correlate with special education eligibility. Children who meet the DSM-IV-TR definition of Autistic Disorder will almost always meet Michigan's definition of Autism Spectrum Disorder. The DSM-IV-TR definition of **Autistic Disorder** can be found in Appendix K. Dahle (2003) reported that the differences in psychiatric and educational classification systems tend to result in confusion for parents, educators, and professionals involved with the person with Autism Spectrum Disorder. Dahle recommended ongoing education of parents and professionals in both education and mental health systems to facilitate collaborative interventions.

Asperger's Syndrome/Disorder
Asperger's Disorder, a subcategory of Pervasive Developmental Disorders as defined in the DSM-IV-TR, is commonly referred to as Asperger's Syndrome. (See Appendix L.) The essential features of Asperger's Syndrome are severe and sustained impairments in social interaction, and the development of restricted, repetitive patterns of behavior, interests, and activities. There are no significant clinical delays in language or cognitive development, or in the development of age appropriate self-help skills, adaptive behavior (other than delays or disorders in social interactions), or curiosity about the environment.

The behaviors that make up Asperger's Syndrome and those that make up autism are similar, but only the early developmental history and degree of the deficits appear to be significant for differentiation. Fitzgerald and Corvin (2001) reported that Asperger's Syndrome is diagnosed at a later age than autism. Harris, Glasberg, and Rica (1996) reported that children with Asperger's Syndrome typically use single words by age two, and communicate with phrases by at least age 3. Therefore, it appears that the onset of symptoms for Asperger's is later than for autism. It may not be until a child enters school that his or her difficulties with peer interaction and a preoccupation with circumscribed interests become apparent.

Children with Asperger's Syndrome may obtain scores within the average range on many standardized language tests, yet still show qualitative impairments in **meaningful** communication. These impairments are the result of language deficits in the areas of pragmatics, syntax, prosody, and the understanding of nonverbal gestures. For example, a child may not understand facial expressions, body language, and other nonverbal forms of communication. These children may not understand humor or words with multiple meanings, and will generally have difficulty with representational play.

Asperger's Syndrome is often distinguished from autism by the lack of significant delay in communication (language skills). In his review of the literature, Tanguay (2000) reported that even when very young, many individuals with the Asperger's diagnosis had normal language development. Although communication (language) is usually presumed to be within normal limits, limitations in recognizing social messages and other pragmatic deficits in social situations are common. Because of this, people with Asperger's Syndrome often have problems with initiation of conversation, understanding and participating in social interactions, and with other subtle social skills. How the person views him/herself and how s/he is affected emotionally should be closely assessed. Klin and Volkmar (1995) reported three communication characteristics that are of clinical interest in Asperger's Syndrome. First, it is typical for individuals to display a constricted range of intonation patterns that do not match the speech content. Second, speech may seem to be off-topic and egocentric. Finally, the person with Asperger's Syndrome may talk incessantly, especially about topics of interest.

Students with Asperger's Syndrome may only receive special education services under the category of Autism Spectrum Disorder (ASD) if the state guidelines for this impairment are met. More children with Asperger's Syndrome may now meet Michigan's new definition of ASD because they may exhibit "marked impairment in pragmatics or in the ability to initiate, sustain, or engage in reciprocal interaction with other" (Rule 340.1715 (2) (b) (ii)).

A student with Asperger's Syndrome may appear to require special education but not meet the definition for Autism Disorder. In its *Letter to Williams*, U.S. Office of Special Education Programs (OSEP) addressed the question of eligibility for children with Asperger's Syndrome under the IDEA. OSEP determined that the diagnosis may need to be considered relative to the IDEA category of Other Health Impairment (refer to the discussion of OHI in this chapter). OSEP stated that even though Asperger's Syndrome was not an enumerated condition within the OHI definition, it would not be inconsistent with Part B of IDEA to evaluate these children to determine whether they could be considered Other Health Impaired. However, OSEP did not provide any further clarification on this issue.

As early as 1995, Klin and Volkmar remarked that the diagnosis of Asperger's Syndrome was becoming more well known, and was seen as a fashionable label by some professionals in the mental health community. These authors stressed that a diagnosis of Asperger's Syndrome should not be used just because an individual is having difficulty in social interaction and peer relationships.

Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS)
The category of PDD-NOS is used when there is a pervasive impairment in the development of reciprocal social interact ion with an impairment in verbal or nonverbal communication skills, or with stereotyped behavior/restricted range of interests. In other words, reciprocal interaction is always impaired and the child with PDD-NOS has one other "piece" of the triad, but not all three pieces (See Appendix M.) PDD-NOS includes "atypical autism," where the child's presenting characteristics do not meet the criteria for Autistic Disorder as defined in DSM-IV-TR because of late age of onset, atypical symptomatology, or sub-threshold symptomatology. Michigan's definition of Autism Spectrum Disorder and that of IDEA are different from the DSM-IV-TR definition of PDD-NOS. The DSM-IV-TR criteria does not necessarily include significant disturbances in *all* of the following: reciprocal social interaction, communication, and stereotypic, behavior/restricted range of interests. Only to the extent that *all* of these additional characteristics are evident would a child qualify as having an Autism Spectrum Disorder under Michigan's definition. To the extent that these students have significant developmental impairments, they may qualify for special education under a cognitive impairment category.

In reference to PDD (not specifically PDD-NOS), OSEP's *Letter to Coe* (1999) indicated that having a diagnosis of PDD did not guarantee eligibility for special education under IDEA. OSEP also noted that a student diagnosed as PDD may be eligible for special education under the IDEA definition of Other Health Impairment (refer to the discussion of OHI found earlier in this chapter). As in its consideration of Asperger's Syndrome, OSEP did not provide any further clarification.

OTHER DISORDERS WHICH MAY CO-OCCUR WITH ASD

In establishing an accurate and reliable diagnosis of ASD, potential overlapping symptoms and possible co-occurring conditions must be differentiated from each other. The multidisciplinary evaluation team must evaluate the specific characteristics of ASD, as well as features of other disorders that impact learning. Diagnostic criteria

should be carefully followed for the purpose of making diagnostic decisions, and interpretation of behavioral differences should be evaluated objectively to avoid making differences "fit" a desired category. Oppositional behavior might be interpreted as resistance to change, for example, but the intent of the behavior is different. Several clinical diagnoses share considerable overlap with Autism Spectrum Disorder, and some can co-occur. While educational interventions should always be based on a student's individual needs, having an accurate diagnostic picture can lead to greater understanding of a student's skills and challenges in different environments. For students with co-occurring conditions, educational support systems may require a unique combination of instruction, intervention, and support in varying degrees.

Attention Deficit Hyperactivity Disorder (ADHD)
Consideration of a diagnosis of ADHD is critical when determining an appropriate eligibility. (See Appendix N for the DSM-IV-TR definition of ADHD.) A student may have either ADHD or ASD in isolation, or in combination as the two can co-occur. Students with Attention Deficit Hyperactivity Disorder (ADHD) present with inattention, distractibility, fidgetiness, impulsivity and hyperactivity. Children with ASD also can present as hyperactive, impulsive, and with a short attention span for some tasks in certain environments. Unlike children with ADHD, however, children with ASD are often able to focus on activities within their specific interest area wit h great intensity and maintain their attention for a long period. Like students with ASD, students with ADHD have impaired perspective-taking abilities and difficulty interpreting and appropriately responding in social situations. Students with ASD and ADHD also have difficulty with sequencing, prioritizing, and performing other basic organizational skills.

Despite the apparent similarities between the two conditions, ASD and ADHD are different disorders. Students with ADHD do not exhibit the triad of impairments in reciprocal social interaction, communication, and stereotypic behavior/restricted range of interests seen in students on the autism spectrum. At times, a student with ADHD may be so distracted that s/he can appear socially disconnected, and his/her impulsivity may interfere with social relationships (Gillberg 1998). However, this is not consistently the case in these students and they do not exhibit the other characteristics necessary for a diagnosis of ASD.

Mood and Anxiety Disorders
Mood and anxiety disorders such as depression and generalized anxiety may also have considerable overlap with symptoms and behaviors observed in persons with ASD. Commonalities may include symptoms such as depression, frustration displayed through behavioral outbursts, aggressive behavior towards others, and argumentative exchanges over rules (Tsai, 2001). Clinical levels of anxiety are not a diagnostic feature of Autism Spectrum Disorder, yet high levels of anxiety are often reported to occur in ASD. Anxiety in persons with ASD typically results from changes in routine, or with difficulty interpreting social situations (Strum, Fernell, & Gillberg, 2004).

Students with mood disorders do not usually present a history of developmental delays, and typically have a period of normal development before the onset of anxiety or depressive symptoms. However, depression is one of the most common co-occuring conditions found in students with ASD. Both anxiety and depression are more likely to occur in adolescence or early adulthood and with more able students with ASD (Gillott, Furniss, & Walter, 2001).

Obsessive Compulsive Disorder (OCD)
The core features of Obsessive Compulsive Disorder (OCD) are recurrent and persistent thoughts, impulses, or images that are intrusive, inappropriate, and cause marked anxiety or distress. (See Appendix O for the DSM-IV-TR definition of OCD.) A key feature of OCD is that the individual recognizes that these thoughts are a product of his or her own mind. Compulsion involves repetitive behavior or mental acts that the person feels driven to perform to reduce anxiety. Students with either OCD or Autism Spectrum Disorder both display ritualistic behavior and resistance to change (Bejerot, 2001). Where they differ is that persons with ASD have obsessive interests that are often enjoyable to them. In contrast, persons with OCD may demonstrate behaviors that look similar, but the behavior is not satisfying or pleasurable to them. OCD generally has a later onset and does not include poor social emotional reciprocity, empathy problems, and social skill difficulties of people with ASD (Mahoney et al., 1998). Social difficulties related to OCD are more often related to the social withdrawal that occurs because of the increasing amount of time and energy the person expends performing rituals. Since OCD and ASD may co-occur, accurate diagnosis and interpretation of specific behaviors is critical to help determine appropriate interventions and support (Gross-Isseroff, Hermesh, & Weizman, 2001).

Oppositional Defiant Disorder (ODD)
Students with ASD rarely exhibit malicious intent to cause harm to another person. They would also be less likely to try to conceal misconduct through lying or denial, which would demonstrate their understanding that the behavior is unacceptable. Students with ASD may exhibit agitation or aggressive behavior in response to an interruption in a routine or an intrusion into their personal space. They may also display similar behavior in novel situations, and in situations when they do not understand the social rules. Students with either ODD or ASD may refuse to complete work tasks, fail to comply with requests of adults, or argue with peers and adults. Students with ODD are more likely to discriminate between peers and adults, and across contextually different situations. (The DSM-IV-TR definition of ODD is found in Appendix P.) For example, a student with ODD may target specific peers to taunt, and may refrain from inappropriate behavior in settings when there is more adult supervision or when s/he is more likely to be observed (Rinehart, 2002) and (Green & Gilchrist, 2000).

OTHER DISORDERS NOT RECOGNIZED IN THE DSM-IV-TR

The following diagnoses are not recognized in the DSM-IV-TR, yet are discussed in the literature and frequently given to students by diagnosticians outside of the school system.

Nonverbal Learning Disorder (NLD)
A related problem shared by individuals with nonverbal learning disorders and Autism Spectrum Disorder is the difficulty perceiving or understanding nonverbal cues, such as facial expressions or body language. Individuals with ASD generally have greater social problems, more difficulty interpreting emotional states, and display stereotypic behavior/restrictive range of interests that negatively impacts social functioning. Those with NLD have difficulty interpreting the nonverbal communication of others, but there is rarely impairment in their use of nonverbal communication such as eye gaze, body posture, and gestures to regulate social interaction. Students with NLD also do not display inflexible adherence to specific, nonfunctional routines or rituals. Individuals with NLD have a diminished ability to learn material presented nonverbally, where interpreting verbal information is more difficult in those with Autism Spectrum Disorder (Klin, Volkman, Sparrow, Cicchetti, & Rourke, 1995).

Semantic Pragmatic Disorder
Semantic pragmatic disorder is characterized by near normal vocabulary, grammar, and phonology. However, comprehension is impaired and language use is abnormal in content and function. There are considerable difficulties in initiating or sustaining a conversation, making cohesive links in conversation from topic to topic, and using words out of context (Mahoney et al., 1998). In contrast to Autism Spectrum Disorder, the descriptions of semantic pragmatic disorder include no reference to stereotypic behavior/restricted range of interests.

Sensory Integration Dysfunction
Sensory integration dysfunction is not a defining characteristic of Autism Spectrum Disorder, although it is a commonly observed feature. A student with sensory integration dysfunction may respond to sensory input without the ability to screen out extraneous or irrelevant sensory information. Sensory defensiveness may be exhibited resulting in aggression, avoidance, or intolerance of daily routines (Kranowitz, 1998). Students with sensory integration dysfunction may show problems in their activity level, and may appear disorganized. They may explore the environment inefficiently, lack variety in play activities, and appear clumsy or have poor balance. The student may have difficulty calming down after physical activity, or may seek excessive amounts of sensory input. Students with sensory integration dysfunction differ from those with ASD because they do not show the same difficulties with reciprocal social interaction, communication, impaired perspective-taking, and stereotypic behavior/restricted range of interests.

EXCLUSIONARY CONSIDERATIONS

In addition to considering the eligibility for special education criteria within the state and federal definitions of autism, 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 instruction 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 autism or a related disorder, s/he may not automatically *qualify* for special education.

2. Even though A utism 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 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 autism specify that adverse impact on education must be determined. The *Revised Administrative Rules for Special Education* state:
Rule 340.1715 (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:
300.7 (c) (l) (i) Autism means a developmental disability . . . that adversely affects the child's educational performance.

Courts and hearing officers have addressed the matter of adverse impact in special education cases involving a number of diagnoses. Case law has determined that even when the specific conditions could be the basis for special education eligibility under various eligibility categories, the diagnoses themselves do not automatically trigger eligibility. Rather, the impact of the disorders is 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 ASD 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 300.7(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 s/he is not eligible for special education. Also, in *Letterto Gallagher* (1996), OSEP noted that the need for special education is 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 for lack of instruction in math, the essential components of reading instruction, or limited English proficiency. Although these exclusionary factors may not be applicable in all ASD 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 1965); (B) lack of instruction in math; or (C) limited English proficiency.

SHARING EVALUATION FINDINGS WITH FAMILIES

The process of allowing one's child to undergo an evaluation for an Autism Spectrum Disorder can be a difficult and emotional one for many families. Even when a parent suspects his/her child may be on the spectrum, it becomes all the more real once the evaluation has concluded and eligibility decisions are being made. Families also have varying levels of knowledge and understanding about what ASD is, and what it may mean for their child and family. For all of these reasons, it is critical to approach eligibility discussions and decisions with the needs of the specific family in mind.

When an initial evaluation for ASD has been completed, it is often beneficial for one or more staff members familiar with the family to meet and discuss the evaluation results with the parent(s) prior to holding the MET meeting. This allows parents time to ask questions and express their emotions within a less formal setting. The preliminary meeting can take place on a day prior to the official MET meeting, or at a time just prior to the meeting with the larger group, depending on the team's assessment of what is most appropriate for each family. This type of meeting allows parents some time to process the information prior to attending the IEP team meeting where formal eligibility decisions will be made. The team should consider the benefit of sending a report via mail prior to this preliminary meeting versus presenting and discussing the report with them at the same time. Sometimes a preliminary meeting to discuss evaluation results is impractical. In that case, it is appropriate for a member of the team familiar with the parents to contact them by phone to explain the findings and to inform them they will receive the completed report(s) via mail prior to the MET meeting. Regardless of whether or not a preliminary meeting is held, parents should receive a copy of the completed MET report(s) at least one day prior to the official MET meeting.

AUTISM SPECTRUM DISORDER ELIGIBILITY RECOMMENDATION FORM (MET)

This form identifies all of the requirements for eligibility as a student with an Autism Spectrum Disorder. An explanation of each section is provided below:

Purpose
A box must be checked for either initial eligibility, change in eligibility or ongoing special education eligibility.

Evaluation Findings and Documentation
The team must address where information can be found for each area under this section. State the name and date of the report, such as Psychological Report - 5/11/02.

Diagnostic Assurance Statements
Each section must be checked to reflect the appropriate number of characteristics from those listed.

- At least 2 in the list of qualitative impairments in reciprocal social situations
- At least 1 in the list of qualitative impairment in communication
- At least 1 in the list of restricted, repetitive, and stereotyped behavior

Eligibility Recommendation
The evaluation team members review the evaluation findings as well as the diagnostic assurance statements. The parent(s) must be given opportunity to participate in this discussion. The evaluation team makes a recommendation of eligibility to the IEP team. The IEP team then reviews all of the information provided and makes a determination of eligibility.

Present Level of Academic Achievement and Functional Performance (PLAAFP)

If the evaluation team recommends that the student be determined eligible under the Autism Spectrum Disorder rule (R340.1715), it must describe the student's present level of academic achievement and functional performance. This statement describes the student's deficit areas as defined through the evaluation findings and serves as the starting point for instruction.

The Michigan Special Education Rule R340.1721a(2)(b) states that the report of the MET must include information needed to determine a student's present level of academic assessment and functional performance and educational needs that necessitate special education programs and/or services.

With the uneven development typically found in the profile of a student with Autism Spectrum Disorder, it is critical to determine areas of need and performance levels. By definition, communication and social skills would be affected. Other areas that may be affected include academic achievement, behavior, and motor functioning. In the present level of academic achievement and functional performance (PLAAFP), it is important to look at all documented areas of need requiring special education programs and services. The deficit areas must directly relate to each area checked under the *Diagnostic Assurance Statement s* Section.

Participant Signatures and Reports
All of the information listed in the *Evaluation and Findings and Documentation* section must be included in these reports. It is recommended that report sections be clearly labeled to identify this information. The MET could include separate reports or one coauthored report with all participants' signatures. Every person who signed the *Eligibility Recommendation* must have information included in the attached report(s). The minimum required participants (psychologist/psychiatrist, school social worker and a speech/language pathologist) must include a signed report.

PROCESS FOR RE-EVALUATION

If a student already receiving special education services is suspected to have an Autism Spectrum Disorder, an Evaluation Review and Plan (ERP) must be completed. An ERP is also required for a student with Autism Spectrum Disorder eligibility who is due for a three-year re-evaluation. When completing the ERP, it is important to have an in depth discussion about the student's needs, giving consideration to the previous evaluations and/or interventions attempted, to determine what additional information is needed to complete the process. It is not necessary to duplicate interviews, histories, and evaluations previously completed. However, it is important to update previous findings based on new information.

The overall questions to consider during the ERP process are: Is the student successful in his/her current educational curriculum/setting? If not, what prevents him/her from being successful, and what interventions/supports are needed?

After reviewing pertinent information, the team may determine that there is sufficient documentation to re-determine eligibility without further formal testing in all areas. However, the team must have enough current information to determine the PLAAFP. At a minimum, informal testing, classroom-based assessments, and observations should still be conducted. The team's findings should be summarized and documentation referenced.

The IEP team, including the parent and a team member who has expertise in the area of Autism Spectrum Disorder, will meet t o develop an ERP which should include the following in its review of existing evaluation data:

- Parent input
- Current classroom assessments and observations
- Observations by related service providers
- Speech/language evaluation
- Social work evaluation
- Psychological evaluation
- Sensory profile

The parent is a key member of the ERP team, and may offer or request additional information.

A challenge in determining re-evaluation needs is the "lifelong" nature of Autism Spectrum Disorder. The question of continued eligibility may not be in question unless there is a concern about the validity of the original

determination, or the adverse impact of the disability has diminished to the point that the student no longer needs special education.

DEVELOPING INDIVIDUALIZED EDUCATION PROGRAMS

Related Michigan Rule
Rule 340.1721e (2) Individualized education program team meeting; … individualized education program. An individualized education program shall be based on all diagnostic, medical and other evaluative information requested by the team, or provided by the parent or student who is disabled and shall include all of the following information in writing: (a) A statement of the student's present level of educational performance. (b) A statement of annual goals, including short-term objectives. (c) Appropriate objective criteria and evaluation procedures and schedules for determining whether the objectives are being achieved…

IEP TEAM REPORT SECTIONS

Present Level of Academic Achievement and Functional Performance (PLAAFP)
The PLAAFP for an IEP that follows an initial or three-year re-evaluation should be taken from the Eligibility Recommendation (formerly called MET Summary) form. The PLAAFP should also, however, reflect any additional information that is provided at the IEP team meeting. The evaluation team members who did the assessment, and the IEP team members who work with the student should develop the PLAAFP collaboratively. In subsequent IEP t eam reports, it is expected that progress has been made on goals and objectives, and the PLAAFP statement should be updated to reflect the student's progress.

The PLAAFP is a statement that addresses the student's areas of need as defined under the *Diagnostic Assurance S atement s* on the Eligibility Recommendation form, and should include the following:

1. Baseline assessment data such as achievement tests, classroom performance data, documented observations
2. A specific narrative summary that will serve as a starting point for instruction and the writing of goals and objectives
3. A statement regarding the extent to which the student can be involved in and make progress in the general education curriculum
4. Statements regarding any other needs related to the disability

Annual Goals and Short Term Objectives
Areas of need identified in the PLAAFP statement must be addressed with either an annual goal, or through the supplementary aids/services, or a transition plan. In Michigan every annual goal written must still include at least two short -term objectives.

Social goals – By definition, students with ASD will have deficits in the social domain that will require at least one annual goal. Examples include, but are not limited to, initiation of social interaction, turn taking, and appropriate participation in group projects.

Communication goals – Students with ASD have deficits in the communication domain that will require at least one annual goal. Examples include, but are not limited to, requesting a desired item, appropriately communicating frustration, and maintaining a conversational topic.

Academic and Learning goals – Students with ASD may have academic and learning needs. Goals and objectives must be developed for academic areas that the PLAAFP defines as specific deficits for the student. Annual goals should not be developed for those subjects in which the student does not have an academic deficit . Examples of possible learning goals include, but are not limited to, organization of materials and completion of assignments.

Adaptive Behavior goals – Students with ASD may have needs related to self-care skills and community participation. Examples include, but are not limited to, feeding, dressing, using transportation appropriately, and eating in a restaurant.

Other goals may be necessary when additional deficits are determined, such as in the areas of motor development or sensory needs. Examples include, but are not limited to, handwriting, participation in sensorimotor routines, and transitioning between activities.

Objective criteria and evaluation procedures; Schedules for determining whether the objectives are being achieved. – All annual goals must include at least two short –term objectives. These objectives must be measurable, and include the schedule for evaluation as well as the criteria for success.

Responsibility for Goals and Objectives – All annual goals should include the title(s) of the person(s) who will be working with the student on this goal. Staff recorded here are responsible for work on the goals and objectives with the student, keep data related to the student's progress, and report progress on goals and objectives in the manner determined by the IEP team. Shared responsibility for goals with teachers and related service staff is encouraged as a practice, since students with ASD will generalize skills better when implemented by multiple people across multiple settings.

Reporting Progress – All service providers must report progress on IEP goals and objectives at the same frequency as report cards for same age peers in the school. When responsibility is shared for a goal, all providers must document progress and collaborate on the progress report. Progress report comments and data are essential to provide sufficient information to assess a student's progress. If the progress is not sufficient for the student to meet his/her goals and objectives, an IEP team meeting must be convened to review the student's program and re-evaluate/redetermine appropriate goals.

Accommodations and Modifications
34CFR§300.346 Development, review and revision of IEP (2) Consideration of special factors. The IEP team also shall – (i) In the case of a child whose behavior impedes his or her learning or that of others, consider, if appropriate, strategies, including positive behavioral interventions, strategies, and supports to address that behavior.

If the student requires a positive behavior support plan, it should be referenced in the *Accommodations and Modifications* section of the IEP team report. This section requires that the frequency and location of the plan be defined. Most often, a positive behavior support plan will be implemented daily. Locations may vary depending upon the plan. Examples may include on the bus, in all settings, in non-structured settings like recess/lunch/passing time, and in general education classes.

State and District wide Assessments
All students must be given access to state and district wide assessments. The IEP team must consider appropriate accommodations or an alternate assessment as needed by the student.

Transportation Needs
Students with ASD may require special transportation due to safety factors related to the student's behavioral issues or difficulty with social judgment. Some students with ASD may require an assigned seat, or door -to-door pickup and drop-off. If a safety vest or harness is required, it must be noted in the transportation section of the IEP.

Extended School Year (ESY)
The regulations implementing the Individuals with Disabilities Education Act (IDEA) define extended school year (ESY) services as "special education and related services that are provided to a child with a disability beyond the normal school year of the public agency in accordance with the child's IEP; and at no cost to the parents of the child." IDEA requires each school district to ensure that ESY services are available for individual students if the IEP team determines that ESY services are necessary for the student to receive a free appropriate public education. This is a decision based upon the individual student's need(s).

Note: Refer to the St. Clair County RESA *IEP Team Manual Instructions* for information on how to complete the Kent Intermediate School District Individualized Education Program forms.

APPENDIX A – MICHIGAN 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 psycho logist or psychiatrist, an authorized provider of speech and language under R 340.1745(d), and a school social worker.

APPENDIX B – IDEA DEFINITION OF AUTISM

300.7 **Child with a disability**
(c)(1)(i) Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3, that adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. The term does not apply if a child's educational performance is adversely affected primarily because the child has an emotiona l disturbance, as defined in paragraph (b)(4) of this section.
(ii) A child who manifests the characteristics of "autism" after age 3 could be diagnosed as having "autism" if the criteria in paragraph (c)(1)(i) of this section are satisfied.

300.7 (a) **General**
...The term child with a disability means… who, by reason thereof, needs special education and related services.

300.534 (b) A child may not be determined eligible under this part if (1) the determinant factor for that eligibility determination is (i) Lack of instruction in reading or math, or (ii) Limited English proficiency.

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

Name of Instrument	Age Range	Areas Assessed	Page #
Adolescent & Adult Psycho-Educational Profile (AAPEP), 1992	12 and older	Vocational skills, Independent functioning, Leisure skills, Vocational behavior, Functional communication, Interpersonal behavior	
Adolescent/Adult Sensory Profile, 2002	11 to 65+	Sensory processing, Modulation, Behavioral and emotional responses	
Adolescent Test of Problem Solving (TOPS-A), 1991	12 to 17-11	Evaluating, Fair-mindedness, Analyzing, Thinking independently, Clarifying, Affect	
Asperger's Syndrome Diagnostic Scale (ASDS), 2201	5 to 18 years	Language, Social skills, Maladaptive behavior, Sensorimotor, Cognitive	
Australian Scale for Asperger's Syndrome Screening Tool, 1998	Higher functioning school-age students	Social/emotional, Communication, Cognitive, Specific interest, Movement, Other characteristics	
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-Second Edition (ASIEP-2), 1993	18 months to adulthood	Behaviors, Vocal behavior, Interaction skills, Classroom skills and Rate of learning	
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 to16 years	Speech, Syntax, Semantics, Coherence, Inappropriate initiation, Stereotyped language, Use of context, Nonverbal communication, Social relations, Interests	
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	
Elementary Test of Problem Solving (TOPS-E), 1994	6 to 11 years	Problem solving, Determining solutions, Drawing inferences, Empathizing, Predicting outcomes, Using context cues, Vocabulary comprehension	

Functional Communication Profile – Revised (FCP-R), 2003	3 to adult	Sensory, Speech, Attentiveness, Voice, Pragmatic/social, Expressive language, Receptive language, Fluency, Oral, Nonverbal 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 (GARS), 1995	3 to 22 years	Stereotyped behaviors, Social interaction, Communication, Developmental disturbances (optional subtest)	
Infant/Toddler Sensory Profile, 2002	Birth to 36 months	Sensory processing, Modulation, Behavioral and emotional responses	
MacArthur Communicative Development Inventories (CDIs), 2005	8 to 30 months	Language and communication skills	
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	
Psycho-Educational Profile-Revised (PEP-R), 1990	6 months to 7 years, 7 to 12 who are below 1st grade	Imitation, Perception, Fine motor, Eye - hand integration, Cognitive performance, Cognitive verbal skills	
Sensory Profile, 1999	3 to10 years	Sensory processing, Modulation, Behavioral and emotional responses	
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	
Vineland Adaptive Behavior Scales (VABS), 1984	*Interview Edition:* birth through 18-11 and low-functioning adults *Classroom Edition*: 3 through 12-11	Communication (expressive, receptive, written), Daily living skills (personal, domestic, community), Socialization (interpersonal relationships, play and leisure time, coping skills), Motor skills (gross and fine), Maladaptive behavior (included in *Interview editions*, optional domain)	

APPENDIX E – PARENT INTERVIEW FOR AUTISM – CLINICAL VERSION

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 people's 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) Do '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 andwants, 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 Lego’s 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 75) Is _____overly interested in watching the movements of his/her hands or fingers?
1 2 3 4 5 76) Is _____overly interested in watching objects that spin? 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

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APPENDIX F – MICHIGAN DEFINITION OF COGNITIVE IMPAIRMENT

R 340.1705 Cognitive impairment; determination.
Rule 5.

1) Cognitive impairment shall be manifested during the developmental period and be determined through the demonstration of all of the following behavioral characteristics:
    a) Development at a rate at or below approximately 2 standard deviations below the mean as determined through intellectual assessment.
    b) Scores approximately within the lowest 6 percentiles on a standardized test in reading and arithmetic. This requirement will not apply if the student is not of an age, grade, or mental age appropriate for formal or standardized achievement tests.
    c) Lack of development primarily in the cognitive domain.
    d) Impairment of adaptive behavior.
    e) Adversely affects a student's educational performance.
2) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include a psychologist.

APPENDIX G – MICHIGAN DEFINITION OF EARLY CHILDHOOD DEVELOPMENTAL DELAY

R 340.1711 Early childhood developmental delay defined; determination.
Rule 11.

1) "Early childhood developmental delay" means a child through 7 years of age whose primary delay cannot be differentiated through existing criteria within R 340.1705 to R 340.1710 or R 340.1713 to R 340.1716 and who manifests a delay in 1 or more areas of development equal to or greater than 1/2 of the expected development. This definition does not preclude identification of a child through existing criteria within R 340.1705 to R 340.1710 or R 340.1713 to R 340.1716.
2) A determination of early childhood developmental delay shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team.

APPENDIX H – MICHIGAN DEFINITION OF EMOTIONAL IMPAIRMENT

R 340.1706 Emotional impairment; determination; evaluation report.
Rule 6.

1) Emotional impairment shall be determined through manifestation of behavioral problems primarily in the affective domain, over an extended period of time, which adversely affect the student's education to the extent that the student cannot profit from learning experiences without special education support. The problems result in behaviors manifested by 1 or more of the following characteristics:
    (a) Inability to build or maintain satisfactory interpersonal relationships within the school environment.
    (b) Inappropriate types of behavior or feelings under normal circumstances.
    (c) General pervasive mood of unhappiness or depression.
    (d) Tendency to develop physical symptoms or fears associated with personal or school problems.
2) Emotional impairment also includes students who, in addition to the characteristics specified in subrule (1) of this rule, exhibit maladaptive behaviors related to schizophrenia or similar disorders. The term "emotional impairment" does not include persons who are socially maladjusted, unless it is determined that the persons have an emotional impairment.
3) Emotional impairment does not include students whose behaviors are primarily the result of intellectual, sensory, or health factors.
4) When evaluating a student suspected of having an emotional impairment, the multidisciplinary evaluation team report shall include documentation of all of the following:
    (a) The student's performance in the educational setting and in other settings, such as adaptive behavior within the broader community.
    (b) The systematic observation of the behaviors of primary concern, which interfere with educational and social needs.
    (c) The intervention strategies used to improve the behaviors and the length of time the strategies were utilized.
    (d) Relevant medical information, if any.
5) A determination of impairment shall be based on data provided by a multidisciplinary evaluation team, which shall include a comprehensive evaluation by both of the following:
    (a) A psychologist or psychiatrist.
    (b) A school social worker.

APPENDIX I – MICHIGAN AND IDEA DEFINITIONS OF OTHER HEALTH IMPAIRMENT

R 340.1709a Other health impairment defined; determination.
Rule 9a.

1) "Other health impairment" means having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, which results in limited alertness with respect to the educational environment and to which both of the following provisions apply:
   (a) Is due to chronic or acute health problems such as any of the following:
      (i) Asthma.
      (ii) Attention deficit disorder.
      (iii) Attention deficit hyperactivity disorder.
      (iv) Diabetes.
      (v) Epilepsy.
      (vi) A heart condition.
      (vii) Hemophilia.
      (viii) Lead poisoning.
      (ix) Leukemia.
      (x) Nephritis.
      (xi) Rheumatic fever.
      (xii) Sickle cell anemia.
   (b) The impairment adversely affects a student's educational performance.
2) A determination of disability shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include 1 of the following persons:
   (a) An orthopedic surgeon.
   (b) An internist.
   (c) A neurologist.
   (d) A pediatrician
   (e) A family physician or any other approved physician as defined in 1978 PA 368, MCL 333.1101 et seq.

§ 300.7 Child with a disability.

(a) General. (1) As used in this part, the term *child with a disability* means a child evaluated in accordance with §§ 300.530-300.536 as having mental retardation, a hearing impairment including deafness, a speech or language impairment, a visual impairment including blindness, serious emotional disturbance (hereafter referred to as emotional disturbance), an orthopedic impairment, autism, traumatic brain injury, another health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services...
…(9) *Other health impairment* means having limited strength, vitality or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that –
   (i) Is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, and sickle cell anemia; and
   (ii) Adversely affects a child's educational performance.

APPENDIX J – MICHIGAN DEFINITION OF SPEECH AND LANGUAGE IMPAIRMENT

R 340.1710 Speech and language impairment de fined; determination.
Rule 10.

1) A "speech and language impairment" means a communication disorder that adversely affects educational performance, such as a language impairment, articulation impairment, fluency impairment, or voice impairment.
2) A communication disorder shall be determined through the manifestation of 1 or more of the following speech and language impairments that adversely affects educational performance:
   (a) A language impairment, which interferes with the student's ability to understand and use language effectively and which includes 1 or more of the following:
      (i) Phonology
      (ii) Morphology
      (iii) Syntax
      (iv) Semantics
      (v) Pragmatics
   (b) Articulation impairment, including omissions, substitutions, or distortions of sound, persisting beyond the age at which maturation alone might be expected to correct the deviation.
   (c) Fluency impairment, including an abnormal rate of speaking, speech interruptions, and repetition of sounds, words, phrases, or sentences, that interferes with effective communication.
   (d) Voice impairment, including inappropriate pitch, loudness, or voice quality.
3) Any impairment under subrule (2) (a) of this rule shall be evidenced by both of the following:
   (a) A spontaneous language sample demonstrating inadequate language functioning.
   (b) Test results on not less than 2 standardized assessment instruments or 2 subtests designed to determine language functioning which indicate inappropriate language functioning for the student's age.
4) A student who has a communication disorder, but whose primary disability is other than speech and language may be eligible for speech and language services under R 340.1745(a).
5) A determination of impairment shall be based upon a comprehensive evaluation by a multidisciplinary evaluation team, which shall include a teacher of students with speech and language impairment under R 340.1796 or a speech and language pathologist qualified under R 340.1792.

APPENDIX K – DSM-IV-TR DEFINITION OF AUTISTIC DISORDER

Diagnostic criteria for 299.00 Autistic Disorder

A. A total of six (or more) items from (1), (2), and (3), with at least two from (1), and one each from (2) and (3):
   1) Qualitative impairment in social interaction, as manifested by at least two of the following:
      (a) 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
      (b) Failure to develop peer relationships appropriate to developmental level
      (c) A lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest)
      (d) Lack of social or emotional reciprocity
   2) Qualitative impairments in communication as manifested by at least one of the following:
      (a) 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)
      (b) In individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
      (c) Stereotyped and repetitive use of language or idiosyncratic language
      (d) Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level
   3) Restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:
      (a) Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
      (b) Apparently inflexible adherence to specific, nonfunctional routines or rituals
      (c) Stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements)
      (d) Persistent preoccupation with parts of objects

B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years:
   1) Social interaction, (2) language as used in social communication, or (3) symbolic or imaginative play.

C. The disturbance is not better accounted for by Rett's Disorder or Childhood Disintegrative Disorder.

APPENDIX L – DSM-IV-TR DEFINITION OF ASPERGER'S DISORDER

Diagnostic criteria for 299.80 Asperger's Disorder

A. Qualitative impairment in social interaction, as manifested by at least two of the following:
   1) 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
   2) Failure to develop peer relationships appropriate to developmental level
   3) A lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest to other people)
   4) Lack of social or emotional reciprocity

B. Restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:
   1) Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
   2) Apparently inflexible adherence to specific, nonfunctional routines or rituals
   3) Stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements)
   4) Persistent preoccupation with parts of objects

C. The disturbance causes clinically significant impairment in social, occupational, or other important areas of functioning.

D. There is no clinically significant general delay in language (e.g., single words used by age 2 years, communicative phrases used by age 3 years).

E. There is no clinically significant delay in cognitive development or in the development of age appropriate self- help skills, adaptive behavior (other than in social interaction), and curiosity about the environment in childhood.

F. Criteria are not met for another specific Pervasive Developmental Disorder or Schizophrenia.

APPENDIX M – DSM-IV-TR DEFINITION OF PERVASIVE DEVELOPMENTAL DISORDER NOT OTHERWISE SPECIFIED

299.80 Pervasive Developmental Disorder Not Otherwise Specified (Including Atypical Autism)

This category should be used when there is a severe and pervasive impairment in the development of reciprocal social interaction associated with impairment in either verbal and nonverbal communication skills, or with the presence of stereotyped beha vior, interests, and activities, but the criteria are not met for a specific Pervasive Developmental Disorder, Schizophrenia, Schizotypal Personality Disorder, or Avoidant Personality Disorder. For example, this category includes "atypical autism" – presentations that do not meet the criteria for Autistic Disorder because of late age at onset, atypical symptomatology, or subthreshold symptomatology, or all of these.

APPENDIX N – DSM-IV-TR DEFINITION OF ATTENTION DEFICIT/HYPERACTIVITY DISORDER

Diagnostic criteria for Attention-Deficit/Hyperactivity Disorder

A. Either (1) or (2):

1) Six (or more) of the following symptoms of **inattention** have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Inattention

(a) Often fails to give close attention to details or makes careless mistakes in school work, work, or other activities
(b) Often has difficulty sustaining attention in tasks or play activities
(c) Often does not seem to listen when spoken to directly
(d) Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)
(e) Often has difficulty organizing tasks and activities
(f) Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
(g) Often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)
(h) Is often easily distracted by extraneous stimuli
(i) Is often forgetful in daily activities

2) Six (or more) of the following symptoms of **hyperactivity-impulsivity** have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Hyperactivity

(a) Often fidgets with hands or feet or squirms in seat
(b) Often leaves seat in classroom or in other situations in which remaining seated is expected
(c) Often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
(d) Often has difficulty playing or engaging in leisure activities quietly
(e) Is often "on the go" or often acts as if "driven by a motor"
(f) Often talks excessively

Impulsivity

(g) Often blurts out answers before questions have been completed
(h) Often has difficulty awaiting turn
(i) Often interrupts or intrudes on others (e.g., butts into conversations or games)

B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 years.

C. Some impairment from the symptoms is present in two or more settings (e.g., at school [or work] and at home).

D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.

E. The symptoms do not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder and are not better accounted for by another mental disorder (e.g., Mood Disorder, Anxiety Disorder, Dissociative Disorder, or a Personality Disorder).

Code based on type:

314.01 Attention-Deficit/Hyperactivity Disorder, Combined Type: if both Criteria A1 and A2 are met for the past 6 months

314.00 Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type : if Criterion A1 is met but Criterion A2 is not met for the past 6 months

314.01 Attention-Deficit/Hyperactivity Disorder, predominantly Hyperactive-Impulsive Type : if Criterion A2 is met but Criterion A1 is not met for the past 6 months

Coding note: For individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria, "In Partial Remission" should be specified.

APPENDIX O – DSM-IV-TR DEFINITION OF OBSESSIVE COMPULSIVE DISORDER

Diagnostic criteria for 300.3 Obsessive Compulsive Disorder

A. Either obsessions or compulsions:

Obsessions as defined by (1), (2), (3), and (4):

1) Recurrent and persistent thoughts, impulses, or images that are experienced, at some time during the disturbance, as intrusive and inappropriate and that cause marked anxiety or distress
2) The thoughts, impulses, or images are not simply excessive worries about real- life problems
3) The person attempts to ignore or suppress such thoughts, impulses, or images, or to neutralize them with some other thought or action
4) The person recognizes that the obsessional thoughts, impulses, or images are a product of his or her own mind (not imposed from without as in tho ught insertion)

Compulsions as defined by (1) and (2):

1) Repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the person feels driven to perform in response to an obsession, or according to rules that must be applied rigidly
2) The behaviors or mental acts are aimed at preventing or reducing distress or preventing some dreaded event or situation; however, these behaviors or mental acts either are not connected in a realistic way with what they are designed to neutralize or prevent or are clearly excessive

B. At some point during the course of the disorder, the person has recognized that the obsessions or compulsions are excessive or unreasonable. **Note:** This does not apply to children.

C. The obsessions or compulsions cause marked distress, are time consuming (take more than 1 hour a day), or significantly interfere with the person's normal routine, occupational (or academic) functioning, or usual social activities or relationships.

D. If another Axis I disorder is present, the content of the obsessions or compulsions is not restricted to it (e.g., preoccupation with food in the presence of an Eating Disorder; hair pulling in the presence of Trichotillomania; concern with appearance in the presence of Body Dysmorphic Disorder; preoccupation with drugs in the presence of a Substance Use Disorder; preoccupation with having a serious illness in the presence of Hypochondriasis; preoccupation with sexual urges or fantasies in the presence of a Paraphilia; or guilty ruminations in the presence of Major Depressive Disorder).

E. The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

Specify if:

With Poor Insight: if, for most of the time during the current episode, the person does not recognize that the obsessions and compulsions are excessive or unreasonable.

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APPENDIX P – DSM-IV-TR DEFINITION OF OPPOSITIONAL DEFIANT DISORDER

Diagnostic criteria for 313.81 Oppositional Defiant Disorder

A. A pattern of negativistic, hostile, and defiant behavior lasting at least 6 months, during which four (or more) of the following are present:

1) Often loses temper
2) Often argues with adults
3) Often actively defies or refuses to comply with adults' requests or rules
4) Often deliberately annoys people
5) Often blames others for his or her mistakes or misbehavior
6) Is often touchy or easily annoyed by others
7) Is often angry and resentful
8) Is often spiteful or vindictive

Note: Considers a criterion met only if the behavior occurs more frequently than is typically observed in individuals of comparable age and developmental level.

B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.

C. The behaviors do not occur exclusively during the course of a Psychotic or Mood Disorder.

D. Criteria are not met for Conduct Disorder, and, if the individual is age 18 years or older, criteria are not met for Antisocial Personality Disorder.

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