Guidelines for Serving Students with Autism Spectrum Disorders in Educational Settings
The Department of Public Instruction appreciates the time and effort spent by the task force members in contributing to the development of this guidance document.

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Special Note
“Unless otherwise specified, citations to “section” or “sec.” are citations to federal regulations implementing IDEA found in the Code of Federal Regulations at 34 CFR Part 300, which consists of 34 CFR secs. 300.1 through 300.818 and appendices A through E.”

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According to the Centers for Disease Control and Prevention (CDC), the numbers of children identified with Autism Spectrum Disorder (ASD) continues to rise. (For the most current data from CDC’s Autism and Disability Monitoring Network (ADDM) see http://www.cdc.gov/ncbddd/autism/addm.html). In North Dakota, the percentage of students identified with an ASD has increased from 1.9% of the total population of students with disabilities in 2004 to 6.2% of that same group in 2013-14. The significant increase in the reported identification rates places challenges on schools across the country and here in North Dakota to provide programs and interventions that meet the unique needs of students identified as having an Autism Spectrum Disorder (ASD).

With new developments in the identification and education of students with ASD in recent years, these guidelines replace a previous version, Guidelines: Identifying, Serving and Educating Children and Youth with Autism, published in 2003. The previous guidelines resulted from collaboration between the Department of Human Services and the Department of Public Instruction. These guidelines combined information from the education and human service systems. The purpose of this revision is to:

- Replace old guidelines;
- Assist school-based practitioners in the field of special education;
- Update language to promote common understanding regarding Autism Spectrum Disorders;
- Promote the use of appropriate assessment tools and evaluation procedures which yield useful information for educational programming;
- Promote consistency and clarity across the state in the process of determining eligibility under the Individuals with Disabilities Education Act (IDEA);
- Promote appropriate, research-based instructional and behavioral interventions for children with Autism Spectrum Disorders;
- Improve placement procedures and practices to provide the necessary supports and services in the least restrictive environment; and
- Promote non-bias considerations for children who are economically disadvantaged, children who are diverse in race and ethnicity, and children who speak a language other than English.

These Guidelines reference the IDEA (2004) special education regulations and promote consistency in identification and programming
for students with Autism Spectrum Disorders. These guidelines are designed as a tool to assist those who are educating children and youth ages 3 – 21 with identified Autism Spectrum Disorders in educational settings.

What is Autism Spectrum Disorder?

Autism has been referred to as a “spectrum disorder”, which suggests that the symptoms and characteristics associated with the disorder present themselves in variety of combinations, ranging along a continuum from mild to severe. It is typically characterized by impairments in socialization, verbal and non-verbal communications, and the capacity for imaginative thinking that results in exaggerated and stereotyped interests, behaviors, and activities. As such, two children, both of whom have a diagnosis of autism, may vary widely in terms of their functioning and their corresponding educational needs within each of these domains. Given this diversity in individuals with autism, professionals in the field began to use the term Autism Spectrum Disorder.

While the IDEA continues to include the disability category of Autism, the recent revision to the Diagnostic and Statistical Manual of the American Psychological Association (DSM-V, 2013) now includes Autism Spectrum Disorder in place of several other diagnoses previously used to describe the “spectrum” of characteristics and levels of severity seen in individuals with the disorder.

The Educational Definition of Autism

Autism, as defined under IDEA, is a developmental disability significantly affecting verbal and non-verbal communication and social interaction, generally evident before age three 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 emotional disturbance. (IDEA 34 C.F.R §300.8(c)(1)(i))
Autism Spectrum Disorder is included in the fifth edition of the Diagnostic and Statistical Manual (DSM-V), published in 2013 by the American Psychiatric Association (APA). ASD replaced 5 separate disorders (autistic disorder, Asperger’s disorder, childhood disintegrative disorder, Rett’s disorder, and pervasive developmental disorder-not otherwise specified) previously included under the “umbrella” of autism spectrum disorders in the DSM-IV. In addition, individuals who have marked deficits in social communication, but whose symptoms do not otherwise meet criteria for autism spectrum disorder may be evaluated for social (pragmatic) communication disorder as a new category in the DSM-V.

These guidelines embrace the use of the term Autism Spectrum Disorder (ASD) as defined in the DSM-V, in an effort to promote consistency in identification and communication across the state. Therefore, the use of the term ASD will be considered synonymous with Autism as defined under IDEA, 2004. For a listing of terminology commonly used within the field of educating students with ASD, please refer to Appendix A.

The goal for all students is to graduate with college or career ready skills, and be prepared to live as independently as possible. For students with ASD to accomplish this goal, the classroom and school experience must be designed to do more than teach academics. The student with ASD needs pivotal experiences that successfully prepare him or her to:

- Participate effectively in a learning group;
- Use unstructured time wisely;
- Self-regulate emotions and behavior;
- Complete a work schedule;
- Complete a learning schedule;
- Complete work independently using visual supports or other necessary accommodations;
- Get and keep a job;
- Go on to higher education if desired; and
- Pursue a vocational or technical career.

To the maximum extent appropriate, students with ASD must be educated with peers who do not have disabilities. A student with ASD who is found eligible for special education services will have an Individualized Education Program (IEP) developed that addresses the specially designed instruction they will need to access and benefit from the general education curriculum. In addition, these students benefit from access to peer relationships, as well as the school and community based learning experiences available to all children.
Characteristics of Learners with ASD

Students with ASD exhibit a range of difficulties with self-regulation and communication that make it challenging for them to meet classroom and school behavioral expectations consistently. Careful observations of all environments and regular progress monitoring of the effectiveness of behavioral interventions will be required. Data should guide any adjustments made to the intervention menu. Effective environmental supports like visual cues, social narratives, maybe needed to promote student use of pro-social behaviors. Implementing with fidelity evidence-based strategies found to be effective with students with ASD promotes the development and use of more pro-social behaviors. Students with ASD are capable of benefiting from instruction in all or part of the general education curriculum.

Students with ASD, like all students, are unique individuals who possess their own learning characteristics with respect to strengths and challenges. The nature of ASD as a “spectrum disorder” suggests that individuals with ASD have unique learning needs and challenges. The broad range of intellectual functioning, behavioral issues, family situations, individual needs and interests make it impossible to make generalizations about treatment and intervention protocols. As a result, there is no single approach that works for all students with ASD (NRC, 2001).

By definition, we know that students with ASD experience challenges with the core areas of communication, social interactions, and restricted, repetitive patterns of behavior across multiple contexts (DSM-V, 2013). Williams (2011), identifies the major learning characteristics of autism spectrum disorders as:

- Language delays and/or deficits
- Abnormal ways of relating to people, objects, or events
- Unusual reactions to sounds, sights, taste, touch or smell
- Uneven developmental abilities, scattered strengths and weaknesses.

The combination of cognitive and educational strengths and needs present in each student with ASD creates significant educational programming challenges.

Rydell (2012) indicates that each student with ASD has a unique learning style profile, and the characteristics of the student’s learning profile often inhibits successful social interactions across persons, places and circumstances. Identifying appropriate interventions for students with ASD requires an understanding of how a child learns and their communication skills.
Determining the extent the ASD impacts the student’s progress in the general education curriculum will require a comprehensive evaluation of all areas of the individual student’s functioning (Mesibov, 2004). Due to the wide range of abilities and skills found in students with ASD, the selection of assessment tools should include more than just academic functioning; the tools should include assessments to determine learning styles, group participation skills and independent functioning skills.

Generally noted strengths of individuals with ASD include: visual processing, adherence to structure (routines and organization), concrete thinking, splinter skills, and memory. Instruction should apportion content in smaller amounts and where possible incorporate student interests/motivations. Additional unique strengths that may be seen include: logical thinking, the arts, hyperlexia (ability to decode at an early age), large spoken vocabulary, honesty and sense of direction.

Generally noted weaknesses include: weak auditory processing and working memory, organization (ideas, materials, activities); understanding whole concepts and relationships within the concept and between concepts; abstract or inferential thinking; attention/distractions (shifting attention or transitions between activities, especially from preferred to non-preferred tasks or from individual interests to other’s); understanding time (beginning, middle, and end); generalization of routines to other environments; knowing when to apply learned skills and routines; understanding the function and use of language; skill deficits that are masked by verbal skills; difficulty understanding other’s perspectives (Theory of Mind) (Adapted from Mesibov, G.B., & Shea, V. (2009) “Culture of Autism” Charlotte, ND: TEACCH; Neil, T. (2012). ASD PowerPoint document. Indianapolis: HANDS in Autism Program and Resources).

While no two students with ASD will be alike, educators must learn the individual strengths and differences that each student possesses, and recognize that targeting the student’s strengths and incorporating his/her special interests into learning activities may be the key to unlocking his/her learning potential.

By age three, children may be referred from North Dakota Early Intervention to the Local Education Agency (LEA), to determine Part B eligibility. In addition, a child could be referred to the LEA through a Child Find screening or a direct referral from a parent or agency. Additional information related to the Part C to Part B early childhood transition process is located in the NDDPI Guidelines, *Understanding Early Childhood Transition: A Guide for Families and Professionals.*

http://www.dpi.state.nd.us/speced1/childhood/transition-guide.pdf
For school-aged students enrolled K-12 who have not previously been identified as a student with a disability, the district will utilize its written referral process to document the specific areas the ASD may be impacting the student’s learning. The information contained in the referral will inform the multidisciplinary team (MDT) which leads the evaluation planning process to ensure that a comprehensive and appropriate evaluation is conducted. (See Guidelines: Evaluation Process, Referral for Evaluation, available at http://www.dpi.state.nd.us/speced1/laws/evalproc.pdf).

The parent(s) plays a critical role in the MDT process. For many parents, the transition process to school-based services or the district referral process represents the initial contact with school professionals. As members of the MDT, parents are able to contribute valuable information about their child including developmental milestones, healthcare issues, behavior in the home and other settings, homework completion, recreational interests and vocational interests, to name a few examples. In return, the MDT must be certain to assist the parents in fully understanding the scope of their student’s needs.

This initial contact with school professionals should be characterized by open communication and help to set the tone that the school desires a trusting, collaborative, mutually respectful relationship with the parent(s). School staff should be cognizant of the stress experienced by many parents of students with ASD as they begin the school experience. To alleviate such stress and build a solid foundation for collaboration, the communication between the school and parent(s) must be child-centered and focused on creating optimum levels of success for the child with ASD.

Once a referral for a comprehensive evaluation is made, a multidisciplinary team (MDT) will be identified. The membership of the MDT may represent the same roles as the IEP team. Input must be obtained by multidisciplinary team members who, because of their expertise or special knowledge of the student, can observe, gather data, and assess any aspect of the student’s functioning that may be impacted by the suspected disability. See Guidelines: Evaluation Process, Referral for Evaluation.
Evaluation MDT Participants

The MDT should include a professional with knowledge of ASD due to the complexity of this disability, and the need for specially designed interventions. The number of persons involved in the evaluation process may vary from student to student and will be driven by the assessment plan. Information will be gathered from/by the following persons during the evaluation of a student suspected of having an ASD:

1) the parent(s) or guardian of the child;
2) the child’s general education classroom teacher;
3) a special education teacher,
4) someone knowledgeable regarding ASD (could be a School Psychologist);
5) other professional personnel as appropriate; such as, but not limited to Occupational Therapist, Speech Language Pathologist, Physical Therapist, Behavior Specialist, health professional; and
6) the child, when appropriate.

Evaluation Procedures

The evaluation process begins with a review of existing data from all available sources that considers relevant functional, instructional, and developmental information about the child. Given the multiple areas of functioning that may be impacted in a student suspected of having an Autism Spectrum Disorder, it is important for the MDT to develop a Student Profile that considers all areas of suspected disability.

Whether the evaluation to be conducted is an initial evaluation, a reevaluation or an evaluation for individual program needs, completing the Student Profile will guide the development of the assessment plan for the student. Appendix C provides suggestions for questions to guide the completion of the Student Profile for students suspected of having an ASD.

The Assessment Plan should identify areas in which additional information is needed based on the Student Profile: Evaluation Form section, Questions to Answer through Assessment. Given the complexities and needs of student with ASD, it is important to develop specific questions related to the child’s needs, methods of learning, and the learning environment. The more specific the questions posed, the greater the likelihood that the team will select assessment procedures that yield educationally relevant data.
Guidelines for Serving Students with ASD in Educational Environments

Sec. 300.304 (c)(1)(i)(ii)  

(c) Other evaluation procedures. Each public agency must ensure that-

(1) Assessments and other evaluation materials used to assess a child under this part-

(i) Are selected and administered so as not to be discriminatory on a racial or cultural basis;

(ii) Are provided and administered in the child’s native language or other mode of communication and in the form most likely to yield accurate information on what the child knows and can do academically, developmentally, and functionally, unless it is clearly not feasible to so provide or administer;

Best Practice: Evaluation of ASD

For a complete review of the guidance available for developing the Assessment Plan, refer to Guidelines: Evaluation Process.

The MDT’s primary purpose for assessing a student suspected of having an ASD is to determine whether the student meets the educational eligibility criteria listed in IDEA (Autism). Determining educational eligibility requires the team to determine if sufficient evidence exists on the adverse impact the impairment has on the student’s learning and educational performance and the need for specially designed instruction.

Factors that influence the choice of specific evaluation procedures include:

- The student’s age;
- The degree of language proficiency in both English and their native language, if appropriate;
- Cultural diversity;
- Severity and nature of the disability;
- Progress in school;
- Years of support from interventions and other services such as counseling and any English language programs; and
- The consistency of results of previous assessments.
An evaluation process guided by best practice has two features: 1) it incorporates a developmental approach; and 2) it recognizes the lifelong impact ASD has on an individual’s adaptive functioning, (Wilkinson, 2010). The Assessment Plan identifies specific activities and assessment tools to be administered to student. The criteria for selecting the assessment tools and activities include: the child’s age, developmental history, the Student Profile questions and data from previous evaluations and assessments. Wilkinson suggests that the evaluation process include the following components:

- Record review
- Developmental and medical history
- Medical screening and/or evaluation
- Parent/caregiver interview
- Parent/teacher ratings of social competence
- Direct child observation (See Appendix D for Assessment Considerations)
- Cognitive assessment
- Academic assessment
- Adaptive behavior assessment
- Communication and language assessment
- Sensory processing
- Executive function and attention
- Motor skills
- Family system
- Coexisting behavioral/emotional problems

**Eligibility Determination**

An assessment plan for ASD should include the use of diagnostic instruments with sensitivity and specificity for autism. Allowing sufficient time for parent interviews and direct, structured observations across settings will be very important.

When assessing younger children, the assessment plan will focus on the student’s abilities in the five developmental domains (cognitive, communication, motor, adaptive, and social/emotional), while for older students the focus will include educational ability, skills and performance.

See Appendix E for a listing of Assessment Tools for use in the assessment of students who may have ASD.

The MDT must determine whether the student who has been assessed meets the eligibility criteria for the **educational impairment** of Autism, under the IDEA.
Clinical Diagnosis versus Educational Eligibility Determination, (Aspy & Grossman, 2007)

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on a set of criteria; (DSM-V).</td>
<td>Based on federal law (IDEA).</td>
</tr>
<tr>
<td>Refers to specifics in ASD definition by level of severity.</td>
<td>Refers to broad disability category of Autism.</td>
</tr>
<tr>
<td>Used in private settings.</td>
<td>Used only in public school system.</td>
</tr>
<tr>
<td>May be determined by an individual or team.</td>
<td>Must be determined by a team.</td>
</tr>
</tbody>
</table>

Eligibility Criteria

A clinical diagnosis of ASD is not required in order to determine whether a student meets the eligibility criteria for the educational disability category of Autism, under the IDEA. The MDT must consider relevant medical information made available by parents or professionals; however, the existence of a medical diagnosis may not be the sole component for making an eligibility determination. In some cases, a student may meet the criteria for ASD, but does not demonstrate the need for special education and related services.

**Eligibility** for special education services requires:
1. Meeting the criteria as defined by category under IDEA (see below) for the educational definition of autism;
2. Demonstrating the adverse effect the disability has on educational performance; and
3. Demonstrates a need for specially designed instruction that can only be provided through special education and related services.

The MDT will make a determination of eligibility upon completion of the assessments for children and youth, ages 3-21 in North Dakota schools.

*Note:* The IDEA regulation for the MDT’s Determination of Eligibility can be found at 34 CFR Sec. 300.306.
Educational Definition of Autism

Autism, as defined under IDEA is a developmental disability significantly affecting verbal and non-verbal communication and social interaction, generally evident before age three 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 education performance is adversely affected primarily because the child has an emotional disturbance.

(IDEA 34 C.F.R §300.8(c)(1)(i))

The MDT may find the following chart helpful in guiding their discussions related to the child’s eligibility for services under the IDEA category of Autism. A best practice in identifying a student with an ASD would be that the student exhibits behavior(s) in each area of the IDEA criteria: Verbal Social Communication, Non-Verbal Social Communication and Social Interactions.
### Educational Criteria: (based on DSM-V criteria)

<table>
<thead>
<tr>
<th>Need to meet one criteria in Verbal Social Communication Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Verbal Social Communication</strong> - persistent deficits in verbal social communications across contexts</td>
</tr>
<tr>
<td>☐ Yes ☐ No The child exhibits: a lack of social-emotional reciprocity (back-and-forth conversation), a reduced sharing of interests, emotions, or affect; a failure to initiate or respond to social interactions</td>
</tr>
<tr>
<td>☐ Yes ☐ No The child exhibits difficulties with: developing, maintaining, and/or understanding relationships (adjusting behavior to suit social contexts), sharing, imaginative play, making friends; or interacting with peers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Need to meet one criteria in Nonverbal Social Communication Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-verbal Social Communication</strong> - persistent deficits in non-verbal social communication behaviors across contexts</td>
</tr>
<tr>
<td>☐ Yes ☐ No The child exhibits problems with: poor integration of verbal and nonverbal communication behaviors/skills, poor eye contact; understanding body language, understanding and using gestures; exhibiting appropriate or any facial expression(s).</td>
</tr>
<tr>
<td>☐ Yes ☐ No The child exhibits hypersensitivity or hyposensitivity to sensory input; or, an unusual interest in sensory aspects of the environment (e.g., indifference to pain/temperature, strong reaction to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Need to meet one criteria in Social Interaction Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Interaction</strong> - restricted patterns of behavior, interests, or activities limit social interactions</td>
</tr>
<tr>
<td>☐ Yes ☐ No The child exhibits: stereotyped or repetitive motor movements, use of objects, or speech (e.g., hand flapping or toe-walking, lining up of toys or flipping objects, echolalia-echoed speech).</td>
</tr>
<tr>
<td>☐ Yes ☐ No The child exhibits: resistance to change, following/an adherence to inflexible routines; or ritualized patterns of verbal or nonverbal social interactions/behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, must take same route or eat same food every day).</td>
</tr>
<tr>
<td>☐ Yes ☐ No The child exhibits intense, very restricted, or fixated interests (e.g., strong attachment /preoccupation with unusual objects, perseverates on topics or interests).</td>
</tr>
</tbody>
</table>
The MDT may identify a student as meeting the educational eligibility criteria in more than one category of disability. However, if the issues that most impact educational performance for a given student relate to an emotional disturbance then, by definition, that student cannot meet the criteria for the educational impairment of ASD. However, if the issues that most significantly impact educational performance relate to ASD, then it is possible for that student to also meet the educational eligibility criteria for an emotional disturbance.

Note: The term does not apply if a child’s education performance is adversely affected primarily because the child has an emotional disturbance. (IDEA 34 C.F.R §300.8(c)(1)(i))

In addition, a child who meets the educational criteria for ASD may require a related service. In such cases, the IEP team will have several options to consider for determining how the students’ related service needs will be provided. In the case of a student who does not meet eligibility criteria under IDEA, but who does demonstrate the need for classroom accommodations during the school day, the MDT may consider a referral for services under Section 504.

Re-Evaluation

The reevaluation process confirms the student has a disability and assures the student’s continuing needs have been identified and are being met. The evaluation planning process for the purpose of reevaluation begins with the members of the IEP team. The IEP team membership may expand to include other personnel based on questions that the team may have about the student’s needs. Parents must be given the opportunity to participate in the reevaluation process. Members of the IEP team must review the existing and current information.

Note: IDEA Regulations regarding reevaluation requirements can be found at 34 CFR Sec.300.303. Review of existing data regulations is located at 34 CFR 300.305.
**Considerations for Secondary-Level Students**

The focus during re-evaluation for the IEP team becomes making an informed decision as to whether the student continues to need special education. If the student does continue to be eligible, the team needs to discuss whether any programmatic changes are necessary to better serve the student and improve outcomes. The IDEA requires that postsecondary goals for students 16 and older be based on age-appropriate transition assessments related to:

1. Education or training;
2. Employment; and where appropriate
3. Independent living skills.

The IEP team will need to consider assessment in these areas as part of any initial or reevaluation for the student age 16 or older. Information from age-appropriate transition assessments will assist IEP teams in making informed decisions about the needs of the student regarding their postsecondary goals.

**IEP Development & Program Considerations**

Once a determination is made that a student has an Autism Spectrum Disorder (ASD) and requires special education and related services, the team develops an IEP. The IEP must be developed and implemented within 30 days of the eligibility determination. Decisions regarding the delivery of services must ensure that the student with ASD receives a free and appropriate public education (FAPE) in the least restrictive environment (LRE).

Just as there are no medical diagnoses that make a child automatically eligible for special education and related services under the category of ASD (autism), there are no automatic service types, service amounts, or locations of where services are to take place. The team developing an IEP for children with ASD should take care to consider the child’s individual abilities and needs to ensure that the present levels of educational performance, goals, objectives or benchmarks, and services are aligned so that the child’s individual and unique needs as determined through evaluation are met.

**IEP Team Composition**

The composition of the IEP team is identified in the Individuals with Disabilities Education Act (IDEA) regulations at 34 CFR Sec. 300.321, and discussed in detail in *Guidelines: Individual Education Program Planning Process*. 
Parents are critical partners in the IEP process for any student with a disability. IEP teams must make every effort to ensure that one or both parents of the child with ASD have an opportunity to participate in the process. This participation is an important element in developing the foundation of trust and collaboration needed to provide an appropriate educational program for the student with ASD. 34 CFR 320.321 encourages parents to invite other individuals who may be knowledgeable about their child.


Special Considerations

IEP PLAAFP

The complex nature of students with ASD suggests that development of the PLAAFP give due consideration to those characteristics that define ASD. Therefore, the IEP team should review and prioritize the needs for the following areas to determine those most in need of intervention during the coming IEP year:

Verbal Social Communication-
- Communication skills - most effective system of communication, emerging skills reported anecdotally
- Using and understanding the function of language

Non-verbal Social Communication-
- Using and understanding aspects of nonverbal communication (eye-gaze, facial expressions, gestures)

Social Interaction-
- Responding appropriately to social situations
- Initiating social interactions
- Pragmatic skills
- Participating in peer groups (large and small group settings)
- Self-monitoring/regulating sensory input (tactile, visual, sound, smell/taste)
- Adjusting to changes in environment and routines using supports (visual, auditory, verbal)

1 Adapted from Technical Assistance Advisory, SPED 2007-1: ASD, Massachusetts Department of Elementary and Secondary Education, 2006.
• Making transitions
• Limiting his/her engagement in repetitive activities or stereotypic behaviors

Special Factors

The narrative of the PLAAFP tells the story of the student with ASD. It identifies the needs that require specially designed instruction. The identified needs help the team prioritize the development of measurable goals, as well as how, when, and where the special education and supplementary aids and services will be provided.

The IEP team will review the “Consideration of Special Factors” section of the IEP and indicate those that may apply to the student with ASD. If any of the IDEA special factors are identified (behavior, limited English proficiency, blind or visual impairment, deaf or hearing impaired, communication, and assistive technology) the IEP will document the team’s intervention in those areas, including any necessary services, supports, and/or accommodations. For a more complete discussion of “Consideration of Special Factors”, refer to Guidelines: Individualized Education Program Planning Process.

Assistive Technology

When considering special factors for students with ASD, access to assistive technology services may play a key role in providing FAPE. Districts are required to ensure that assistive technology and assistive technology services are provided when determined to be necessary.

| 34 CFR 300.308FR | Each public agency shall ensure that assistive technology devices or assistive technology services or both, as those terms are defined in 300.5-300.6, are made available to a child with a disability if required as a part of the child’s:
|------------------|----------------------------------------------------------------------------------------------------------------------------------|
a)    | Special education under 300.17; |
| b) | Related services under 300.16; or |
| c) | Supplementary aids and services under 300.550(b)(2). |
Generally speaking, assistive technology refers to tools and strategies that assist students with learning and accessing the curriculum. These tools and strategies may range from low tech (e.g., pencil grips, picture communication systems) to high tech (e.g., computers, iPads, and switches).

The Wisconsin Assistive Technology Initiative (WATI), sponsored by the Wisconsin Department of Education, is a rich resource for IEP team members, aiding in the assessment and decision making process for the use of assistive technology for students with ASD. The WATI and other resources for determining assistive technology needs are available in TIENET.

Behavior

The impact of ASD on a student’s educational performance and ability to make progress in the general education curriculum may require additional supports in the area of behavior and social/emotional development. Students exhibiting challenging behaviors should be considered to have skill deficits and not as intentionally misbehaving. Challenging behaviors can limit the access of students with ASD to the general education curriculum and their access to non-disabled peers. To address the need for supports to promote student use of more pro-social behaviors and social/emotional development, the IEP team should discuss:

- The need for a functional behavioral assessment to determine the function of the challenging behavior and appropriate replacement behaviors that need to be taught.
- The need for supports for executive functioning skill deficits, (e.g. organization), generalizing learned skills to other environments, and/or understanding a whole concept or idea/abstract ideas and concepts.

The IEP team will develop measurable annual goals for those areas of need identified in the PLAAFP. Students with ASD who may be involved in the alternate assessment process are required to have short term objectives (STOs) that support the annual goals. IEP teams may choose to develop STOs for any student with ASD in order to identify intermediate steps between present levels of performance and the student’s annual goals. For a complete discussion of writing measurable annual goals, STOs and characteristics of service, please see Guidelines: Individualized Education Program Planning Process, as well as Transition to the North Dakota Standards in English and Mathematics based on the Common Core Standards: Tips and Considerations for Writing Standards-Based IEP Goals.
Focus Areas: Specially Designed Instruction

There is a direct relationship between the needs identified in the PLAAFP and the annual goals. Annual goals set the direction for the specially designed instruction the student needs as a result of their disability. IEP teams are encouraged to consider the framework of Universal Design for Learning (UDL) as they develop the plan for students with ASD. UDL is a set of principles for curriculum development that give all individuals equal opportunities to learn. It represents a blueprint for creating instructional goals, methods, materials, and assessments that work for all students. For more information on UDL, please visit the Center for Applied Special Technology (CAST) website at http://cast.org/index.html.

34 CFR 300.93 (b)(3)

Specially designed instruction:
(3) Specially designed instruction means adapting, as appropriate to the needs of an eligible child under this part, the content, methodology, or delivery of instruction-

(i) To address the unique needs of the child that result from the child’s disability, and

(ii) To ensure access of the child to the general curriculum, so that the child can meet the educational standards within the jurisdiction of the public agency that apply to all children.

Students with ASD require direct, specially designed instruction in academic, social, and emotional skills because they have difficulty generalizing skills across multiple contexts. Interventions and strategies must be directly connected to the needs of the student and practiced in multiple settings in order for the student to generalize newly learned skills across multiple contexts.

The complex nature of ASD requires IEP teams to take into consideration a tremendous array of needs that may exist for individual students with ASD. The IEP team will need to consider the following areas when developing the student’s specially designed instruction within each of IEP/Profile domains: (See Appendix G for specific instructional focus areas for developing IEP goals)

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2 The Puzzle of Autism, NEA, 2006.
Cognitive Domain

Executive Functioning
*Characteristics of Executive Functioning:*
Executive functioning involves the mental processes necessary to plan and implement actions. Students with ASD may possess cognitive deficits that inhibit executive functioning. Often, these challenges are manifested through problems with organizational skills, working memory, impulse control, inhibition, and mental flexibility. In addition, deficits in executive functioning impact the student’s ability to initiate actions, monitor those actions, problem solve, and plan for the future. Therefore, the student with ASD may require specialized instruction in this area.

Attention
*Characteristics of Attention:*
Due to their atypical patterns of attending, students with ASD do not receive information in the same manner as typically developing peers. Students with ASD may experience difficulty sustaining attention for extended periods of time, or shifting attention when necessary. Attention may be restricted by the individual’s limited range of interests, or focus on irrelevant aspects of a situation that may lead to missing key information.

Educational programming that employs structure and supports for students with ASD can assist in mediating the impact of attention challenges. The student with ASD may require specialized instruction to improve attending skills and time on-task. For more capable students with ASD, it is important that these students learn to recognize when they are on task, and to self-monitor this behavior. This is another important skill that will increase the independence of the student in their daily life situations.

Academic Domain

Academic Performance
*Characteristics of Academic Performance:*
Academic performance refers to tasks related to traditional reading, written language, and math skills, as well as science and social studies. The range of communication challenges, especially the student’s ability to use and understand language, combined with other characteristics associated with having an ASD contribute to the wide variance in cognitive abilities and learning profiles seen in this population. Students with ASD are more likely to have difficulties with abstract concepts and nuances, while demonstrating a greater ability to learn by
rote through symbolism and analogy (National Research Council, 2001). These issues will often present challenges in learning academic content.

Students with ASD may demonstrate uneven skill development. Some areas of development may be significantly delayed, while others are more advanced and even gifted. Areas of giftedness may include memory, focus, calculation, block design, music, and art (NRC, 2001). Determining what skills to teach and how to teach them are important, individual considerations for each student with ASD. Accommodations and modifications to academic requirements are important aspects for the IEP team to consider during IEP development.

**Communication Domain**

**Communication**

*Characteristics of Communication:*
Students with ASD demonstrate a considerable range of language and communication deficits. Generally, the impairment impacts both the understanding and use of language. Communication skills may range from the use of nonverbal gestures, picture exchange communication systems (PECS), and single words or phrases to fluid speech and language at the higher ends of the spectrum. In some cases, these skills may even be advanced, although deficits may exist in the area of pragmatics (the social use of language).

Pragmatic deficits may result in the student with ASD appearing to be uninterested in communication, but is actually the result of the student’s inability to understand the need to communicate (processing reciprocity and turn taking) or the information that needs to be communicated. Manifestations may range from echolalia (repetition of speech without communicative intent), to perseveration on words or phrases to convey different messages to individuals who are highly verbal on a limited set of topics, and/or overly formal and/or have atypical speech patterns (Johnson, 2007).
Communication is one of the most important considerations for the student with ASD, and presents one of the greatest challenges for educators and families. For most children, the complex process of language development and communication occurs automatically. Students with ASD often do not develop the skills for spontaneous communication, and therefore, must be taught. Assisting students with ASD to develop the skills to make requests, interact socially, share and seek information, express emotions, and to avoid aversive situations must be a priority. The IEP team must support all forms of communication, depending on the individual student’s needs, including verbal, signing, pictorial, and augmentative communication devices. For many students with limited or no verbal communication, a total communication system - or a combination of approaches (e.g., verbal and pictorial, pictorial and sign) - may be most beneficial.

**Physical**

This section of IEP/Profile domains should include relevant medical, vision, motor and sensory considerations to be addressed during the development of the IEP.

**Sensory Processing**

*Characteristics of Sensory Processing:*

Sensory motor processing refers to the individual’s ability to take in information from the environment, organize it, make sense of it and respond appropriately. Sensory processing difficulties can interfere with learning, cause distraction, and/or instigate behavioral problems. The individual with ASD may find that they have over- (hyper) or under- (hypo) sensitivity to sensory input from any of the seven senses: visual, auditory, olfactory, oral, tactile, proprioceptive (perception of the body in space in relation to objects), and vestibular (balance and movement). Some students with ASD may be hypersensitive in some areas, while hyposensitive in others. Preferences or aversions to various sensory stimuli are highly individualized in students with ASD.

Students with ASD may consider activities that include certain stimulation as aversive and seek to avoid participating in them. A student who is sensitive to noise may seek to avoid eating in noisy cafeterias, sitting in assemblies or other activities that produce loud noises. The individual who is under-stimulated may seek activities that provide the desired sensory input. In either case, students with ASD experience sensory challenges everyday that will impact their ability to learn or participate in social activities.
Developing a sensory profile for the student with ASD provides an important opportunity for parents and the IEP team to collaborate. This profile guides the team toward identifying appropriate strategies to be used and taught to the student. Typically, the occupational therapist (OT) is knowledgeable in the assessment of sensory issues.

**Social Emotional**

**Social Development and Peer Interaction**

*Characteristics of Social Development and Peer Interaction:*

Impairments in social interactions are of primary importance for the student with ASD, which may include difficulty establishing relationships with peers. Students with ASD may range from appearing to be socially aloof and remote to being overly social and acting inappropriately or odd. Challenges with social functioning should not be seen as unwillingness or a lack of interest in interacting with others, but rather as a social skill deficit. Students with ASD often do not understand social cues and may struggle with behaviors and communication necessary to engage appropriately in social interactions.

Social skill development emerges as an essential focus area for students with ASD. Social skills deficits represent the primary reason for the team’s decision to develop a Behavior Intervention Plan. The elements of effective Behavior Intervention Plans include identifying the function of a problem behavior and the steps for teaching the student a more socially appropriate replacement behavior that serves the same function. The ability to be socially capable allows the student with ASD to successfully participate in meaningful life activities. Deficits in social skills may impact the student at school and in various community activities such as work, interpersonal relationships and recreation.

Social competencies must be carefully assessed and prioritized to determine which necessary skills are to be taught directly. Students with ASD do not learn social skills through observation, but require explicit instruction on necessary skills and supports for employing them in social situations.
**Play and Leisure**

*Characteristics of Play, Recreation, and Leisure:*

Personal time pursuits such as play, recreation, and leisure may not occur naturally for students with ASD. As a result, skill deficits in this area may inhibit social development and productive play. These deficits may result in the student developing perseverative behaviors with objects, using them for self-stimulation or engaging in repetitive acts. Play for students with ASD is often solitary, and just as with communication, no assumption should be made that the student lacks interest in playing with peers, but rather the student with ASD may not possess the skills necessary for successful play interaction.

The IEP team should consider teaching the student with ASD how to use spare time productively as an important life skill. This instruction may include finding appropriate activities and working to expand the time on task for the student. This includes activities for engagement both at home and at school.

**Restricted and Repetitive Patterns of Behavior**

*Characteristics of Restrictive and Repetitive Behaviors:*

Students with ASD will often engage in unusual and distinctive patterns of behavior that may include a preoccupation with objects, an intense interest in specific topics, and/or an intense need for sameness. They may also demonstrate stereotypical or repetitive motor movements, which may take the form of hand-flapping, finger flicking, unusual eye gazing, and habitual toe walking or spinning.

These behaviors will commonly interfere with educational activities by distracting the student from learning new behaviors and completing tasks. These behaviors may also impact social interactions. For example, a narrow range of interests often becomes a dominant element in a “conversation” with another student, resulting in a one-sided interaction or conversation. The IEP team must identify such behaviors and give consideration to their impact. It is important for the team to consider the behavior and its function, which may be the result of hypo- or hypersensitivity to sensory stimuli, difficulties in social situations, limitations in play behaviors, changes in routine and/or anxiety, to name a few. The IEP team should consider environmental adaptations to decrease behaviors that interfere with the student learning more appropriate behaviors that serve the same function.

**Interfering Behavior**

*Characteristics of Interfering Behavior:*

Some students with ASD may display challenging behavior that can interfere with or become a barrier to successful inclusion and learning. These interfering behaviors may take many forms and degrees of
severity. Tantrums may be common, or the behavior may escalate into self-injury, aggression, or property destruction. Typically, interfering behaviors serve a specific function for the student with ASD; they are the student’s most effective form of communication.

As with the other instructional focus areas, the IEP team must address behaviors that interfere with the student’s participation and progress in the general education curriculum. Research has shown that the most effective educational planning to address a student’s interfering behavior(s) will include conducting a functional behavioral assessment, which informs the development of a behavior intervention plan. To change a problem behavior, the IEP team must assess the function of that behavior and teach a functional skill that efficiently accomplishes the same outcome for the student. It is important to recognize that problem behavior serves a function for the student with ASD, and as such, it can be “replaced” by a more appropriate behavior that serves the same function.

**Adaptive**

**Activities of Daily Living**

*Characteristics of Self-Help and Independence Skills:*

Activities of daily living include personal care skills that are necessary for independent living. Students with ASD may exhibit a range of impairments in daily living skills. The deficit areas may include self-care skills related to biological functions (eating, toileting) or to personal, home and community living skills such as dressing, grooming, cleaning and safety related behaviors. Age related Adaptive Behavior areas that should be evaluated include:

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Adaptive Behavior Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 through 5 years</td>
<td>communication, self-care, social skills, and physical development;</td>
</tr>
<tr>
<td>6 through 13 years</td>
<td>communication, self-care, social skills, home living, community use, self-direction, health and safety, functional academics, and leisure;</td>
</tr>
<tr>
<td>14 (younger if appropriate) through 21 years</td>
<td>communication, self-care, social skills, home living, community use, self-direction, health and safety, functional academics, leisure, and work</td>
</tr>
</tbody>
</table>
A fundamental goal of education is the acquisition of skills that will allow the individual to function as independently as possible in their world. Just as with communication, there are many behaviors in this area that typically developing students learn without specially designed instruction. The student with ASD may require specially designed instruction to acquire these skills, whether that involves fine motor tasks or organizational skills such as packing a backpack. Adaptive skills for students with ASD may require explicit, specially designed instruction focused on generalizing those skills across settings.

**Sexuality**

*Characteristics of Sexuality:*

Sexuality is a natural part of life that will present challenges for the student with ASD. Their particular combination of social, communication and sensory difficulties can inhibit sexual development. These challenges may result in the student developing inappropriate ways of expressing their sexuality. For example, the individual may not know what are considered to be appropriate or inappropriate ways of expressing affection, or determining topics for discussion. These students may have difficulty with understanding appropriate times and places to show affection, appropriate social interactions on dates, and privacy boundaries.

Sexuality contributes to personal dignity, quality of life, and interpersonal relationships. As a result, it is an important consideration for IEP teams. As with other areas of instructional focus, teaching should be functional and concrete.

**Self-Advocacy**

*Characteristics of Self-Advocacy:*

Self-advocacy and self-determination incorporate the ability to make choices throughout life that are free from external influences. Students with ASD may have little experience with expressing personal preferences, making decisions based on those preferences, and assuming personal responsibility. Deficits in cognition, communication or a lack of opportunity or skills may contribute to these students’ challenges with self-advocacy.

Promoting self-advocacy requires an individualized program of explicit instruction designed to develop the student’s knowledge, attitudes, and necessary skills to take more control and responsibility for his/her life, as well as multiple opportunities to practice those skills. Instruction in self-advocacy may take the form of providing multiple opportunities for decision making during the course of a school day. While a student with ASD may not be able to execute all aspects of self-advocacy, providing them with multiple opportunities to participate in complex skills - such
as decision-making and problem solving - will contribute to the student becoming a better self-advocate. As with other skills, the student with ASD may require direct, specially designed instruction to develop skills in self-advocacy.

**Ecological**
The development of the IEP/Profile domains section should include relevant family, community, home, neighborhood and functional skill considerations.

As IEP teams develop measurable annual goals and short term objectives to address the needs of students with ASD, they should be reminded of the IDEA mandate that educational interventions and instructional methodologies selected must be validated by scientifically-based research.

The educational needs of students with ASD have received a great deal of attention over the past 20 years, resulting in an expansion of evidence based educational practices that address the complex learning needs of these students. IEP teams need to be knowledgeable about the range of evidence-based practices (interventions, methodologies, and accommodations), and identify those that can address the student’s needs.

The National Professional Development Center on Autism Spectrum Disorders (NPDC-ASD) defined evidence-based practices as those practices for which efficacy is established through peer-reviewed research in scientific journals. Evidence-based practices must use one of the following designs:

- Randomized or quasi-experimental design studies
- Single-subject design studies
- A combination of above evidence

See Appendix H for a list of 27 Evidence-Based Instructional Strategies for Children and Youth with ASD.
As the IEP team develops goals and objectives (when required) for a student with ASD, it must consider the Characteristics of the Services necessary to achieve the goal or objective. The discussion regarding the characteristics of services will involve where, when, how, and by whom the services will be delivered. The IEP team discussion of annual goals should identify and prioritize the target behaviors or skills goal the student will need to access and make progress in the general education curriculum as well as successfully included in the general education classroom. The summary descriptions of the characteristics of services become the basis for identifying or determining the Least Restrictive Environment(s) (LRE) in which the student will receive his/her identified special education and related services.

To determine a proposed goal’s characteristics of services, the IEP team should consider a series of questions for each goal. It is important when determining a student’s LRE that the questions be considered in the following sequence:

1. Can the performance specified in this goal be met in general education activities without accommodation or modification? If no, why not?
2. Can the performance specified in this goal be met in general classroom activities if appropriate accommodations and modifications are made? If the answer is yes, what types of accommodations or modifications are necessary and what special education services, if any, are needed?
3. Can the performance specified in this goal be met if the content difficulty is altered OR if specially designed instruction (totally different) is provided?
4. Can the performance specified in this goal be met if supportive training related to the disability is provided? (e.g., functional communication training, orientation and mobility, fine/gross motor development, etc.)

Least Restrictive Environment (LRE) has been a key concept in IDEA since its inception in 1975. The discussion of the characteristics of services ensures that IEP teams focus on access to the general curriculum and educating the student with ASD with students who are nondisabled, to the maximum extent appropriate. In addition, it leads to the identification of the specific special education, related services and supplementary aids and services necessary to assist the student in progressing toward the target skills or behaviors identified in his/her annual goals and short term objectives.
Supplementary aids and services are critical to the participation of the student with ASD in the general education classroom as well as a range of other school activities, including extracurricular and nonacademic activities.

### Special Education, Related Services, and Supplementary Aids and Services

**34 CFR 300.42**

**Supplementary aids and services:**

Aids, services, and other supports that are provided in regular education classrooms, other education-related settings, and in extracurricular and nonacademic settings, to enable children with disabilities to be educated with their nondisabled children to the maximum extent appropriate.

Generally speaking, supplementary aids and services can be accommodations and modifications to the curriculum under study, the manner in which content is presented, or how a child’s progress is measured. In addition, they may include:

- Direct services and supports to the child; and
- Support and training for staff.

While the terms accommodation and modification are sometimes used interchangeably, it is important to differentiate between these terms.

A modification refers to a change in what is being taught or what is expected from the student. Making an assignment easier so the student is not doing the same level of work as the others is an example of a modification. Modifications change the standard for the student; they change what the student is expected to master.

Examples of modifications may include:

- Reduction of homework or reduction of classwork
- Omitting story problems
- Using a specialized curricula written at a lower reading level
- Alternative reading books at an independent reading level
- Tests written at lower levels of understanding
- Previewing tests as a study guide
- Use of a calculator
- Grading based on pass/fail or work completion
An accommodation, on the other hand, *is a change that helps a student overcome or work around the student’s disability.* The student is still expected to know the same material or answer the same questions. Accommodations do not alter what an assignment or assessment is seeking to measure.

Many students with ASD benefit from simple accommodations. Some common examples of accommodations include:

- Oral response to questions
- Access to teacher notes or outlines
- Peer note-taker
- Wider lined paper for written tasks
- Highlighted text
- Spell-checker
- Preferential seating
- Extended time on assignments; shortened assignments
- Tests read aloud
- Fewer choices in multiple choice formats
- Multiple choice rather than fill-in-the-blank formats

Instructional and assessment modifications and accommodations are most often made in the following areas:

- **Scheduling**
  - Giving the student extra time for completing a test
  - Breaking up a test over several days
- **Setting**
  - Working in a small group
  - Working one-on-one with the teacher
- **Materials**
  - Providing an audiotape of lectures or books
  - Giving copies of teacher’s lecture notes
  - Using large print books; Braille
- **Instruction**
  - Reducing the difficulty of assignments
  - Reducing the reading level
  - Using a student/peer tutor
- **Student Response**
  - Allowing answers to be given orally or by dictation
  - Using a word processor
  - Using sign language, a communication device, Braille, or a native language other than English.
The IEP team must consider the student’s level of involvement in grade-level assessments, and identify any/all instructional accommodations that will be needed for the state assessment process. See Appendix H for a list of suggested accommodations for students with ASD.

Once IEP goals have been developed and the IEP has been fully implemented, members of the team involved in providing direct programming for the student with ASD should engage in ongoing monitoring of progress towards the targeted skills and behaviors identified in the student’s goals and objectives. Through regular progress monitoring, the team members can determine: whether a skill has been mastered and the student is ready to move to the next level; or, if the student is not progressing at an acceptable rate, a change to the educational program needs to be made.

Data-Driven Practices

While a number of methods exist for monitoring student progress toward IEP goals (e.g., teacher-made tests, anecdotal records, etc.), the most accurate and sensitive method is systematic, ongoing data collection of observable skills and behaviors. Through observation and systematic data collection, teachers and other staff involved in implementing the IEP can objectively evaluate the effectiveness of the instructional strategies employed to promote the student’s acquisition of new skills, as well as the reduction of behaviors that may be interfering with a student’s learning. Systematic data collection is an integral component of monitoring the efficacy of educational practices for students with ASD. Data informs the IEP team if their identified instructional strategies are effective or moves the team to consider alternative instructional strategies if they are not.

The IEP team must determine which data collection procedures are the most appropriate for accurately measuring and evaluating changes in the behaviors and skills identified in the student’s IEP goals. The team may consider collecting data in various educational settings on the following characteristics of the target behavior:

- **Occurrence** - whether the skill/behavior occurred
- **Frequency** - how many times the skill/behavior occurred
- **Duration** - length of time the skill/behavior occurred
- **Latency** - length of time that elapsed between instructional cue and performance of the skill/behavior
- **Prompt** - level of assistance required to perform the skill/behavior.
The data collection system must match the type of behavioral change expected and outlined in the student’s IEP goals and objectives. For example, if the goal is to measure a student with ASD’s peer-related social initiations, a frequency count of initiations may be the most accurate measure. If the goal focused on increasing the amount of time a student spends in interaction with peers, duration would be the most appropriate unit of measure. When measuring a student’s progress in acquiring a skill, such as putting on their coat, the level or number of prompts needed to accomplish the task may be the most appropriate form of data. The selection of data collection procedures is closely tied to the team’s purpose for selecting and targeting the observable behavior(s) identified in the student’s goals and objectives.

Once the unit of measure is established for a particular goal/behavior, a method for collecting and recording the data should be determined. There is no one, best way to collect data across all different skills and behaviors. IEP teams must consider what data collection method is most appropriate for gathering information that will reflect changes in target behaviors. Methods employed must allow teachers to maximize instructional time while gathering valid, reliable, and accurate data for use in progress monitoring.

Data Analysis

Once progress monitoring data has been collected, it must be summarized in a manner that will assist IEP team members in recognizing learning trends. Data should be analyzed regularly and should drive instructional decision making. Summarizing data in clear formats will aid this process. Regular, systematic analysis of the data will provide the team with evidence to determine if the student’s skills and behaviors are progressing in the expected direction, and will provide feedback on the effectiveness of the interventions employed. When an expected rate of progress is not indicated, the IEP team should reconvene to identify what changes in instructional strategies, supports and/or IEP objectives are necessary.

Graphing of data provides a clear, visual depiction of the student’s performance to inform the team, including parents, on a student’s progress. Graphing of data should occur regularly and be systematically evaluated to determine if the student with ASD is making the expected rate of progress toward their goals and objectives. There should be a direct relationship between this graphic representation of data/student progress and the student’s IEP goals and objectives.
Behavioral supports are an essential consideration for many students with ASD. When a student’s behavior impedes his/her ability to progress in the educational setting, it should be noted as a Special Consideration on the IEP. Appendix C of the document, *Guidelines: Individualized Education Program Planning Process* suggests questions for the IEP team to consider when determining whether a student’s behavior impedes his/her ability to learn. This guidance is available at: [http://www.dpi.state.nd.us/speced1/laws/iep/IEP_Guide.pdf](http://www.dpi.state.nd.us/speced1/laws/iep/IEP_Guide.pdf)

When a student’s behavior impedes his/her learning, the IEP team must consider positive behavioral interventions, strategies, and supports to address those behaviors. The first step in that process is to conduct a Functional Behavioral Assessment (FBA).

A FBA is a systematic analysis of the antecedents and consequences that determine the underlying function or purpose of a behavior and leads to the development of an effective Behavior Intervention Plan (Collet-Klingenber, 2008). Interventions that are based on an FBA usually result in significant reductions in problem behavior (Blakely-Smith, 2009). The National Professional Development Center on Autism Spectrum Disorders at the University of North Carolina (Neitzel & Bogin, 2008) recommends the following steps when conducting an FBA:

1. **Establish a Team** - A multidisciplinary team provides a variety of perspectives on the interfering behavior being exhibited by the student with ASD.
2. **Identify the Interfering Behavior** - Members of the MDT should identify the interfering behavior(s) to be assessed. Such behaviors include disruptive or repetitive behaviors that interfere with optimal development, learning, and/or achievement.
3. **Collecting Baseline Data** - Collect data from multiple sources to better understand the conditions under which the interfering behavior(s) occur prior to designing and implementing an intervention strategy.
4. **Developing a Hypothesis Statement** - Based on assessment results, a detailed statement describing the possible functions of the behavior is developed.
5. **Testing the Hypothesis** - The purpose of this step is to confirm that the hypothesis is correct, provided there is no risk of injury or damage. If the behavior involves risk of injury or damage, proceed to Step 6.
6. **Developing Interventions** - As the function of the behavior becomes apparent; team members will develop interventions to reduce the occurrence of the interfering behavior in question using evidence-based practices.
7. **Monitoring Intervention Effectiveness**- Team members will regularly monitor the student’s behaviors through data collection to determine the effectiveness of the intervention.

When the function of the behavior can be determined, the team will develop interventions to reduce the occurrence of the interfering behavior. Teams should employ evidence-based practices to decrease the occurrence of interfering behaviors, and increase the use of more appropriate, replacement behaviors.

For an in-depth discussion of the steps in developing an FBA as presented by the National Professional Development Center on Autism Spectrum Disorders, please visit their website at [http://autismpdc.fpg.unc.edu/](http://autismpdc.fpg.unc.edu/).

Upon completion of the FBA process, the IEP team will begin the development of a Behavioral Intervention Plan (BIP).

The behavior intervention plan (BIP) must be clearly written and should articulate to team members their roles and responsibilities for implementation. With input from parents, the plan may also address the interfering behavior in home and community settings. The process described below represents the evolving practices for conducting an FBA and developing a BIP based on the FBA.

The BIP is based on the hypothesis statement generated from the FBA. The plan should emphasize the development of skills the student needs in order to behave in a more appropriate way and not simply strive to control behaviors. Interventions that focus on controlling behavior often fail to generalize and may only serve to suppress behavior. BIPs must include methods to monitor the fidelity of implementation and monitor the progress of the plan.
Considerations for Developing a BIP

1. Define the target behavior operationally to ensure it is measurable and recognizable by all team members.
2. Identify and plan for teaching more acceptable replacement behaviors that serve the same function as the problem behavior.
3. Manipulate antecedent and event settings that lessen the likelihood problem behaviors will occur, including changes to the classroom curriculum and/or instructional strategies.
4. Manipulate the consequence that makes the target behavior ineffective, irrelevant, and/or inefficient.
5. Consider contextual fit:
   - Data collection procedures that directly measure the target behavior to be decreased and/or the replacement behavior to be increased.
   - Timeline for implementation, evaluation and follow-up.

Steps in Developing the Behavioral Intervention Plan (BIP), (Neitzel & Bogin, 2008)

1. The team will identify appropriate evidence-based practices that address the function of the student’s interfering behavior. A comprehensive BIP will include several intervention strategies designed to increase pro-social behaviors and reduce those considered to be problematic. Strategies should include the following:
   - *Address areas of skill deficits.* Teach the student a more acceptable behavior that serves the same function as the inappropriate behavior (known as a replacement behavior). Examples include asking the teacher for help, employing a break, or requesting attention using effective self-management or coping strategies.
   - *Modify the setting events in the environment that will likely lead to a problem behavior.* Examples include changing seating arrangements to minimize distractions, decreasing work demands when the student has not slept the night before, or altering the sequence of academic instruction.
   - *Manipulate the antecedent events (those things that happen right before the behavior occurs).* Examples include providing warnings, countdowns, or times, to assist with and signal transitions or discussing reinforcement or break options prior to presentation of a difficult task.
• Modify aspects of the curriculum and/or instruction. Examples include shortened instructional sessions or allowing oral, rather than written, responses.
• Find strategies to enhance student motivation. Examples include incorporating preferred materials into activities or allowing the student to engage in a preferred activity when completing a task, contingent on the absence of the interfering behavior.
• Modify the consequent events for the positive, appropriate, or replacement behaviors. Examples include precise praise, shaping, and reinforcing compatible behaviors.

2. Determine the response to the interfering behavior. Different responses may be necessary for varying levels of the behavior. Considerations may include:
• Modifying the consequent events (what happens in response to the interfering behavior). Often teachers and other staff will ignore the behavior when it occurs, denying the student with ASD reinforcement for the behavior. In some cases, delivery of a consequence may be necessary, including a reviewing of rules, redirecting, or removal of a token.
• In the event that a problem behavior is severe or creates a safety issue, teams may need to include a crisis management plan to ensure the safety both of the student and others, as well as quick de-escalation of the behavior.
### Examples of Evidence-Based Practices to Include in a BIP

<table>
<thead>
<tr>
<th>Function of Interfering Behavior</th>
<th>Prevention/Antecedent Strategies</th>
<th>Possible Replacement Behavior</th>
<th>Reactive Strategies</th>
</tr>
</thead>
</table>
| Gain access to an item, activity or attention | - Give non-contingent reinforcement  
- Give positive attention when appropriate  
- Set up routines and schedule reinforcing activities throughout the day  
- Provide reinforcement for not engaging in behavior | - Establish an appropriate response  
(Functional Communication Training to request an item, activity, or attention) | - Extinguish behavior  
(discontinue reinforcement of problem behavior)  
- Do not provide item, activity or attention if problem behavior is present |
| Escape or avoid tasks/attention | - Reduce or eliminate activities or demands that trigger behavior  
- Alternate tasks (i.e., number, difficulty, novelty, etc.)  
- Set up routines so reinforcing activities follow harder ones  
- Provide reinforcement for not engaging in the behavior | - Establish an alternative method of escaping the task  
(Functional Communication Training to ask for break, termination)  
- Strengthen compliance and tolerance to task through behavioral momentum and task interpersonal | - Extinguish behavior  
(discontinue reinforcement of problem behavior)  
- Continue to repeat the demand and do not allow access to preferred activities until the task is complete |
| Sensory/autonomic | - Enrich the environment  
- Engage the student in preferred activities  
- Provide sensory oriented breaks  
- Provide reinforcement for not engaging in behavior or for engaging in alternative behavior | - Establish an alternative sensory seeking behavior that is more appropriate or less disruptive  
- Establish a method for the student to ask for a break or a time/or place in which behavior is permissible | - Blocking- preventing the child from engaging in the behavior by blocking or physically preventing its completion. |
3. **Create observable and measurable objectives that can be used to measure the effectiveness and progress of the intervention**

These objectives may be drawn from the student’s IEP or drafted when writing the BIP. Examples include:

- Juan will complete tasks in reading group without talking.
- If Sammy needs to leave class, he will ask for a break during whole class instruction using his “Break” card.
- When Kara hears the timer, she will transition between activities by walking directly to the next activity on her visual schedule.

4. **Determine how to implement the BIP.** There are numerous considerations in order to ensure the plan is implemented with fidelity across environments. The following should be outlined:

- Determine if additional materials are needed, such as data collection sheets, timers, visual supports, support staff, etc.
- Determine if environmental modifications are needed.
- Identify reinforcers for the student to enhance motivation.
- Provide information and training to all individuals who will need to implement the plan.
- Provide training on any specific evidence-based practice that may be employed.
- Determine any additional personnel resources necessary.
- Determine a safe, quiet location for the student when crisis behavior occurs.
- Determine strategies for the maintenance, durability, generality, and longevity of appropriate student behavior.

5. **Create a data collection plan for progress monitoring.** Data should be collected once a week at minimum. Data should be gathered on both the interfering behavior as well as the new replacement behaviors. Designate when, where, by whom, and how data will be collected, such as:

- **When:** once a week, daily, on Tuesdays and Thursdays
- **Where:** during snack time, on the playground, in reading group
- **By Whom:** special education teacher, speech-language pathologist, paraeducator
- **How:** checklist, self-management checklist completed by student, frequency count.
6. **Evaluate the fidelity of the implementation of the plan.** Once implemented, it is essential that consistency and accuracy are monitored. Checklists, scripts, and lists may assist staff in achieving this consistency. Implementation should be observed across settings by a team member to ensure accuracy.

7. **Evaluate the effectiveness of the BIP.** The team should develop a schedule to review and analyze data on a regular basis, which is essential to determine the effects of the intervention over time.

8. **Modify the BIP.** Revise the plan anytime the IEP team feels it is necessary or the data supports an adjustment. The FBA/BIP process is not complete until the team’s efforts result in positive behavioral change for the student with ASD. Circumstances that trigger a review/revision include:
   - The student has reached his or her behavioral goal(s) and objective(s), and new ones need to be established.
   - The situation has changed and the plan no longer addresses the student’s needs.
   - The IEP team determines, during a manifestation determination review, that the BIP strategies are not consistent with the student’s IEP or placement.
   - The BIP is not producing positive changes in the student’s behavior.

For additional information on the FBA/BIP planning and implementation process, see information at [http://www.dpi.state.nd.us/speced1/educators/PTR-handout.pdf](http://www.dpi.state.nd.us/speced1/educators/PTR-handout.pdf).

IEP teams shall employ positive behavioral interventions based on the results of an FBA. The FBA provides the foundation for addressing the behavioral needs of students with ASD. However, there are instances when an individual student exhibits behaviors that may pose a risk of physical harm to the student or others, a risk of significant property damage, or are significantly disruptive or dangerous which cannot be modified solely through the use of positive behavioral interventions.

IEP teams in North Dakota are advised to review district policy and consider the inclusion of aversive treatment procedures only under circumstances where the child’s behavior poses an imminent danger of serious physical harm to self or others.
Safety and Crisis Considerations for the Student with ASD

Safety issues may be a concern for the student with ASD, and to prevent safety issues from becoming crisis situations, IEP teams are encouraged to be proactive in their planning. IEP teams should consider including a formal plan to address existing or potential issues with behavior that may place the student at-risk.

An open and honest discussion with parents as members of the IEP team to consider those behaviors, such as wandering, is the first step in being proactive. If concerns exist, whether for elopement or preventing the victimization of the student with ASD from potential bullying scenarios, the IEP team must plan for such potential emergencies.

In cases where risk has been identified by the IEP team, the team must always ensure constant supervision for the student with ASD. For students with such concerns, a safety and emergency plan may represent an extension of a BIP, or a separate consideration all its own. When developing such plans, the IEP team may want to consider inviting additional school staff, with the parent’s permission, to be a part of that discussion. School nurses and security, maintenance, and kitchen staff are possibilities when IEP teams think proactively about student behavior. Once a safety/emergency plan is developed for a given student, it is critical to make sure all individuals who may play a role in the plan (law enforcement, first responders, bus drivers, etc.) are aware of its existence, and provide them with specific strategies and/or tactics that may be appropriate for de-escalating the behavior. Any individual who may play a role in that de-escalation should be provided with the necessary information. Therefore, IEP teams will need to consider the range of possible scenarios for an individual student with ASD.

The team and family may want to consider these elements in the development of a crisis plan:

- Defined setting events, triggers or signs that a crisis situation may develop.
- Tools and strategies for keeping the individual and those around him/her safe in any setting (school, home, community).
- Intervention steps and procedures promoting de-escalation that are paired at each level with increasing levels of agitation.
- Lists of things to do and not to do, specific to the history, fears and needs of the individual student with ASD.
- Hands on training and practice for caregivers and staff members.
- Data collection and monitoring for continued re-evaluation of the plan’s effectiveness.
- Knowledge of the best-prepared facility if hospitalization or an emergency room visit might be necessary.
- Secured guardianship for the parent if the student with ASD is above age 18, and the parent needs to make decisions for the student.
  

IEP teams may want to consider the *Autism Emergency Contact Form* (Debbaudt, 2009) or a similar document that can be developed and shared with the appropriate individuals, including law enforcement and first responders (See Appendix I for an example *Autism Emergency Contact Form*). Parents with concerns regarding behaviors that place their student with ASD at risk in the home and the community may consider similar strategies for informing appropriate individuals about their role in responding to a crisis involving their child with ASD. In all cases, being proactive and giving consideration to potential scenarios may prevent a safety issue from developing into a crisis scenario.

The requirement of educating students in the Least Restrictive Environment (LRE) has been a part of special education law since its inception in 1975. Federal regulations require that children with disabilities, including preschool-aged students and, in particular students with ASD, be educated with children who are nondisabled to the maximum extent appropriate. The requirements of 34 CFR 300.114(a) and North Dakota Administrative Rule 67-23-01-01(3) have come to be known as the LRE Mandate:

Each school district or public agency must ensure that:

1. To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled; and
2. Special classes, separate schooling, or other removal of children with disabilities from the regular education environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

In addition, 34 CFR 300.115 requires that each school district or public agency provide a continuum of alternative placements to meet the needs of students with disabilities. Least Restrictive Environment for an individual student becomes the most inclusive point on the continuum, where a student’s IEP can be satisfactorily implemented with the provision of supplementary aids and services.
Determining the LRE begins with the development of the IEP. The IEP needs to be developed to determine the educational benefit and ability of the student to make progress in the general education curriculum or appropriate preschool activities. (Teams should refer to the LRE Flow Chart- Critical Factors to Consider and other documents in Appendix J)

What is the Least Restrictive Environment?
It is the set of services and the type of environment, or the spot on the continuum of services, in which those services are delivered.

Who makes the LRE decision?
The student’s IEP team, which includes the parents, makes the decision. This requires an individualized inquiry into the student’s unique educational and related service needs.

When is the LRE decision determined?
It is the last of a series of decisions made at the IEP meeting. It is made after goals and objectives are developed, and instructional accommodations and/or modifications are identified.

Making LRE Decisions

The IEP team must make LRE decisions that educate students with ASD in the general education classroom, to the maximum extent appropriate. In their deliberations, the team must consider first the use of supplementary aids and supports before deciding upon a more restrictive setting. Restrictive settings, such as special classes, separate schooling, or other removal from the classroom can only occur when the nature and severity of the disability is such that education in the regular classroom cannot be satisfactorily achieved with appropriately designed educational supports. IEP teams may want to refer to the Least Restrictive Environment & Placement guidance, located in Appendix J, to assist with the decision making process.

Many factors go into the LRE decision for a student with ASD:

- The ability to focus;
- The type of skills needed to learn;
- The individually-designed instruction needed;
- The amount of instruction needed;
- The setting most likely to help the child achieve their goals;
- The school facilities needed to support learning; and
- Other issues unique to each student with ASD.
The IEP team should also consider any potential negative effects of placement on the child and the adequacy of services the child may receive.

The IEP team should also consider:
- Location of services;
- Neighborhood school location;
- Access to nondisabled similar-aged peers;
- Access to community based activities and work locations as appropriate; and
- Age of the student. For students who are 18 to 21 years of age, the community with typical-age peers is the regular education environment.

Individual transition planning will include job placement, work experience, and/or independent living activities in the community.

Note: Specific IDEA regulations for LRE may be found at:

- 34 CFR 300.114 (a) - General LRE Requirements
- 34 CFR 300.115 - Continuum of Alternative Placements
- 34 CFR 300.116 - Placements
- 34 CFR 300.117 - Nonacademic Sections

A link to IDEA resources is available at:
List of Appendices

Appendix A - Frequently Used Terminology

Appendix B - Student Profile Questionnaire

Appendix C - Optional Forms - Questions for Developing Student Profile and/or Assessment Plan

Appendix D - Assessment Considerations - Optional Observation/Interview Protocols

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Appendix F - Instructional Focus Areas for IEP Goals

Appendix G - Evidence-Based Practices

Appendix H - Classroom Accommodations for Students with ASD

Appendix I - Autism Emergency Forms

Appendix J - LRE Considerations

Appendix K - ASD Resource Link
Appendix A - Frequently Used Terminology

The following key terms and definitions are common to discussions of the education of individuals with Autism Spectrum Disorder (ASD).

**Across settings**- refers to the use of a learned skill in a variety of locations outside the teaching location/setting.

**Adaptive behavior**- includes the age-appropriate behaviors necessary for people to live independently and function safely and appropriately in daily life. Although not a complete list, below are some of the commonly referenced adaptive behavior skills:

- Conceptual skills: language, reading and writing, and money, time, and number concepts.
- Social skills: interpersonal skills, social responsibility, self-esteem, gullibility, naïveté, following rules/obeying laws, actively avoiding bullying, and social problem solving.
- Practical skills: activities of daily living, occupational skills, use of money, safety, health care, travel/transportation, schedules/routines, and use of the telephone.

**Applied Behavior Analysis (ABA)** - the science in which procedures derived from the principles of behavior are systematically applied to improve socially significant behavior to a meaningful degree, as well as to experimentally demonstrate that the procedures employed were responsible for the improvement in behavior (Cooper, Heron, & Heyward, 1987).

**Asperger’s disorder**- one of the five previous autism spectrum disorders eliminated with the DSM-V revisions, characterized by no clinically significant delays in language or cognitive development.

**Assessment**- a process of gathering information and data, both subjective and objective, about the individual student and their level of performance or achievement over a period of time concerning student progress and their attainment of the expected curriculum/daily living skills/previous IEP goals and objectives, in order to improve teaching and learning.

**Assistive technology**- refers to any item, piece of equipment, or product system, whether acquired commercially, off-the-shelf, modified, or customized, that is commonly used to increase, maintain, or improve functional capabilities of individuals with disabilities (Technology-Related Assistance to Individuals with Disabilities Act of 1988, PL 100-407).

**Auditory processing**- how the brain processes and interprets what is heard.

**Autistic disorder**- eliminated with the DSM-V revisions, characterized by the presence of markedly abnormal or impaired development in social interaction and communication and a markedly restricted repertoire of activities and interests. Delays with onset prior to age three and
manifestations of the disorder vary greatly, depending on the individual’s developmental level and chronological age.

**Community based instruction** - systematic instruction of people with disabilities in functional skills within the natural community setting where such skills are used, in order to ease/enhance transitions to independent living, community participation, and employment.

**Comorbid**- refers to the presence of multiple disorders simultaneously in an individual.

**Developmental period**- generally means the period of time between birth and the eighteenth birthday.

**Diagnostic and Statistical Manual for Mental Disorders (DSM-V)** is a classification system used by mental health professionals to classify mental disorders. Current revision, published in 2013 by the American Psychiatric Association includes ASD.

[www.dsm5.org](http://www.dsm5.org)

**Early Intervention (EI)** - describes specialized services provided to infants, toddlers, and their families (birth to age three), who are at-risk for developmental delay.

**Echolalia**- the repetition of sounds, words, or phrases heard in the environment.

**Education settings** - a continuum that includes general classes, special classes, special schools, home, community-based, and hospitals and institutions as determined appropriate by the IEP team.

**Emotional regulation** - the ability to control emotions, stabilization and to recognize one’s own emotional state and makes changes as necessary.

**Evaluation** - systematic collection and analysis of data that compares a student's achievement with other students or with a set of standards needed to make decisions.

Under IDEA, evaluation means “procedures used to determine whether a student has a disability and the nature and extent of the special education and related services that the student needs.”

The evaluation process follows assessment and integrates all data to produce a student profile that informs decisions about identification, eligibility, services and instruction.

**Evaluation Team** – is a multi-disciplinary team, including parents, who have expertise in evaluating a child in all areas of suspected disability, including but not limited to, intellectual functioning and adaptive behavior.

**Evidence-based practice**- educational practices/instructional strategies supported by relevant scientific research studies or research-based “best practices.”
Executive function - a collection of brain processes that are responsible for planning, flexibility, abstract thinking, rule acquisition, initiating appropriate actions, inhibiting inappropriate actions, and selecting relevant sensory information.

Fidelity of implementation - refers to implementation of an intervention, program, or curriculum according to research findings and/or developer specifications.

Functional Behavioral Assessment (FBA) - a comprehensive and individualized strategy designed to:

- Identify why a behavior occurs;
- Develop and implement a plan to modify variables that maintain the behavior;
- Teach new behaviors that serve the same function using positive interventions.

Functional communication - refers to the ability to receive and convey a message, regardless of the mode; to communicate effectively and independently in a given environment.

Hidden curriculum - a term used to describe the unwritten social rules and expectations of behavior that typically developing children/adults learn without instruction.

IDEA - the Individuals with Disabilities Education Act of 2004 - the federal statute relative to education and services for students with disabilities, ages 3-21.

IEP - a written statement for each child with a disability that is developed, reviewed, and revised in a meeting in accordance with 34 CFR 300.320 through 300.324 (IDEA, 2004).

Least Restrictive Environment (LRE) – refers to the educational setting that permits a child with a disability to receive the greatest educational benefit while participating in the general education environment to maximum extent possible.

Motor planning - the planning and execution of a series of movements.

Natural environment - refers to the place where events or activities usually occur for children who are typically developing.

Natural supports - the use of persons, practices, or things that naturally occur in the environment to meet the support needs of the individual.

Nonverbal behaviors - deliberate behaviors other than speech/vocalizing.

Nonverbal communication - facial expression, gestures, body language, and the distance you keep from other people when talking with them. There are some estimates that say as much as 90% of communication comes from nonverbal elements of communication.

Obsessive-Compulsive Disorder (OCD) – a chronic anxiety disorder most commonly characterized by obsessive, distressing, and repetitive thoughts and related compulsions.
Pervasive Developmental Disorder (PDD) – refers to a group of disorders with a common dysfunction in the socialization and communication domains. PDD was eliminated in the DSM-V in favor of Autism Spectrum Disorder.

Positive Behavior Intervention Plan- a plan that defines how a setting will be changed to improve a learner’s behavioral success.

Pragmatic language- The social use of language; the use of language and communication behaviors needed to interact effectively and appropriately with others.

Repetitive behaviors- Behaviors that appear to have no function other than to provide some sensory input that are repeated frequently (e.g., finger flicking, rocking); also known as “stereotypies”.

Sensory integration/processing- is the neurological process that organizes sensation from one’s own body and the environment and makes it possible to use the body effectively within the environment (Ayers, 1972).

The two major patterns of sensory dysfunction are:

- **Over-responsive (hypersensitive)**-responds to sensory input more intensely, more quickly, and/or for a longer period of time. The person may display patterns of sensory avoidance or hyper-reactivity to sensory input.
- **Under-responsive (hyposensitive)** - responds less to sensory input. Person misses stimuli that others notice easily; Person needs stronger input to regulate. (Dunn, 2007)

Social cognition/social thinking- describes how a person processes and interprets information about other people and their actions.

Social learning/thinking- learning to understand others’ perspectives and to behave in ways they will consider socially appropriate.

Social narratives- phrases, sentences, or stories that help explain a social behavior or a situation to an individual.

Supplementary aids and services- means aids, services, and other supports (trainings) that are provided in general education classes, other education-related settings, and in extracurricular and nonacademic settings, in order to enable children with disabilities to be educated with nondisabled children to the maximum extent appropriate.

Transition- refers to any environmental change, such as a change of location, activity, or support personnel. Transitions can be minor, such as changing activities in the classroom, or major, such as moving from early childhood to elementary, elementary to middle schools, middle school to high school, and high school and a student’s life beyond graduation.

Universal Design for Learning (UDL) - refers to a set of principles for curriculum development that give all individuals equal opportunities for learning.
Visual supports-are tools that are used to increase the understanding of language and environmental expectations, as well as to provide structure and support for individuals with ASD. These may include items such as photographs, schedules, picture symbols and calendars.
Appendix B - Optional Forms- Student Profile Questionnaire

Optional Student Profile Questions for suspected Autism Spectrum Disorders

Child’s Name: ______________________________ Age: ________
Mother’s Name: ______________________________ Father’s Name: ______________________________
Occupation: ______________________________ Occupation: ______________________________
Employer: ______________________________ Employer: ______________________________

Siblings: ______________________________

Others Living in the Home: ______________________________

Significant Medical: ______________________________

Family Health History (indicate any inherited or family diseases, mental disabilities, significant health problems evident in child’s blood relatives):

Prenatal and Birth History: Complications during pregnancy (i.e., gestational diabetes, preterm labor, toxemia, etc.)

Weeks Gestation: ________ Delivery Type: C – section or vaginal

Birth Weight: __________

Pertinent information regarding neonatal period (first 28 days):

_____ no concerns _____ hyperbilirubinemia _____ feeding difficulties

_____ respiratory distress _____ oxygen therapy _____ infection

_____ other: Describe: ______________________________
Guidelines for Serving Students with ASD in Educational Environments

**Sensory Systems Review:**

**Vision:** Formally Evaluated? Yes or No When:  
Results:  
Do/did you have concerns about your child’s visual response (avoids eye contact, holds objects close to eyes, needs reminders to look at objects/people, interest in mirrors/lights)  
Comments:  

**Hearing:** Formally Evaluated? Yes or No When: ________________________  
Results:  
Did / Does your child have frequent ear infections? Yes or No PE Tubes? Yes or No  
Do/did you have concerns about your child’s hearing (i.e., lack of response, ignored sounds, delayed response, startled or covered ears to everyday sounds, distracted by extraneous noise)  

**Tactile / Touch:** Do you have any concerns with how your child explores materials? Reacts to touch? Etc.?  
Does/did your child avoid/become irritated by certain clothing Yes No  
Show sensitivity to certain textures/temperatures Yes No  
Persistently mouth objects Yes No  
Over / Under react to mild pain Yes No  
Resist bathing, brushing teeth, haircuts Yes No  
Exhibit clingy behavior Yes No  
Show discomfort when approached / touched Yes No  
Insist on large personal space Yes No  
Have picky eating habits Yes No  
Insist on holding an object in hand(s) Yes No  
Other: Yes No  
Comments:  

**Vestibular: (Body movement through space):** Do you have concerns regarding the way your child moves?  
Does/Did your child:  
Fall or trip often Yes No  
Lose balance easily Yes No  
Have problems hopping or skipping Yes No  
Like to rock, swing or spin Yes No  
Have head-neck-shoulder rigidity Yes No  
Resist movement activities Yes No  
Bump into objects Yes No  
Use one hand for two-handed activities Yes No
Walk with a bouncing gait Yes No
Other: Yes No
Comments:

**Proprioceptive: (Awareness of body position)**
*Does/Did* your child:

- Flap hands, stamp, clap, jump to unusual degree Yes No
- Toe-walk Yes No
- Climb in inappropriate places Yes No
- Bang head Yes No
- Grind/Clench teeth Yes No
- Exhibit clumsy/awkward movements Yes No
- Touch/Hold objects lightly Yes No
- Have difficulty positioning self on furniture Yes No
- Become physically rough with others/objects Yes No
Other: Yes No
Comments:

**Speech and Language Development:**
Describe early concerns, if any, regarding your child’s speech/language development (i.e. delays. echolalia. jargon speech, repetitive speech, pronoun reversals).

What is your child’s current mode of communication? Primary Language?

Did your child meet developmental milestones such as:
- Coo/babble as an infant? Yes No
- Respond to voices? Yes No
- Imitate actions (e.g.. “So Big”)? Yes No
- Imitate sounds (e.g.. “Moo”)? Yes No
- Imitate words? Yes No
- Use gestures/facial expressions to indicate wants? Yes No
- Make eye contact? Yes No
- Respond to simple directional - commands Yes No
- Experience arrests or regressions in language development? Yes No
If so, describe:
Describe current concerns, if any, regarding your child’s communication (i.e., rarely initiates conversation, has difficulty understanding humor, likes to talk about topics of interest to him/her).

Does your child demonstrate any of the following (only address these if the child is verbal):
Monotonous/Melodic vocal intonation? Yes No
Unusual Volume/Pitch? Yes No
Lack of expressive body language? Yes No
Limited use of descriptive language? Yes No
Difficulty understanding nonverbal - cues including facial expression, vocal tone? Yes No
Trouble understanding nonliteral language (irony, humor)? Yes No
Perception of the world in concrete terms? Yes No
Tendency to engage in a one-sided conversation about favorite topic? Yes No
Difficulty with turn-taking in conversation? Yes No
Comments:

**Emotional and Social Development:**
What concerns, if any, do you have regarding your child’s behavior/social skills?

As an infant, did your child like to be held? Yes or No
Comments:

As an infant/young child, how did your child interact with other children? adults?

Does/did your child demonstrate emotional reactions sometimes unrelated to the events/objects around them? Yes or No
Comments:

Does your child demonstrate any the following:
Social isolation/withdrawal? Yes No
Disinterest in other people/aloofness? Yes No
Prefers interaction with inanimate objects? Yes No
Inappropriate or peculiar social approaches? Yes No
Difficulty making/maintaining friendships? Yes No
Insensitivity to other person’s feelings? Yes No
Inflexibility in negotiating shared activities? Yes No
Frustration due to repeated failures to engage others in making friends? Yes No
Reliance on formalistic rules of behavior and rigid social conventions? Yes No
Comments:

**Repertoire of activities and interests:**
As an infant/young child what were some of your child’s favorite activities/toys?

Does/did your child engage in odd or inappropriate play for prolonged periods? Yes No
Comments:

Does/did your child demonstrate a perseverative interest in certain activities/topics (e.g., watching videos)?
Comments:

*Does/did* your child over-react to changes in routines or schedules? Yes No
Comments:

Does/did your child seem overly concerned with order and routine in his/her play (lining things up, needing things in certain order)? Yes No
Comments:

Does/did your child demonstrate an insistence on following certain routines/rituals? Yes No
Comments:

Does/did your child have any seemingly unreasonable fears and anxious reactions to the fears? Yes No
Comments:

**Acquisition of Skills:**
Does/did your child show an early interest in letters / words? Yes No
Comments:
Does / did your child have difficulty learning new skills (e.g.. bike riding)? Yes No
Comments:

Does your child demonstrate any unusual or seemingly advanced skills (e.g.. amazing memory, musical skills, math skills)? Yes No
Comments:

School History:
Did your child have a preschool experience? Yes No At what age?
Comments:

Where has your child attended school (have parent list chronologically)?

What special services has your child received in school?

What concerns have your child’s teachers noted?

In what extra-curricular activities does your child participate? Have these been positive experiences?

Developmental Interview for suspected Autism Spectrum Disorder

Developed by Renae Diener, Sherburne & N. Wright Special Education Cooperative

Monticello, MN  55362  (612) 295-5185
Autism Team Questions
Teacher Report Form
Elementary Students

Student’s Name: ____________________ Date: ______________ Evaluator: ________________________________

Qualitative Impairments in Social Interaction:

1. How does ______ interact/play with other students his own age when there are more than two together? What does the interaction look like? Imitative play present? Would he/she ever initiate the contact?
2. When others approach him/her how does he/she react? Does he/she ever actively avoid other children?
3. Does he/she have any particular friends or a best friend?
4. Does he/she ever show you things that interest him/her? Offer to share things with you or other children? Does ______ ever seem to want you to share in his/her enjoyment of something (smile to show pleasure)?
5. Does his/her facial expressions/emotional reactions usually seem appropriate to the particular situation as far as you can tell? How does he/she show feelings? Does ______ ever try to comfort others if they are sad, hurt, or ill?
6. How does _____ let you know he/she wants help or to gain your attention? Does he/she look directly at a person when someone is trying to attract his/her attention?

Qualitative Impairment in Communication:

1. Does ______ spontaneously point at things around him/her? How about other common gestures (to elicit help or attention)? Shakes head yes or no? Does he/she avoid looking at others when his/her name is called? How does ______ ask for things he/she wants (or does he/she avoid doing this)?
2. Does ______ engage in pretend games or play? How about imaginative play or his/her ability to make up stories?
3. Would ______ ever talk with you just to participate in some form of conversation? Does initiate conversation with peers or adults? If not asked a direct question will he/she build on the conversation?
4. Can _____ bring up appropriate/variety of topics in conversation? Are there times when uses socially inappropriate questions or statements (e.g. asking personal questions or making comments at awkward times)?
5. Has ______ ever tended to use rather odd phrases or say the same thing over and over in almost the same way? If yes, what happens if you interrupt him/her or refuse to comply? Any examples of echolalia or delayed echolalia?
6. Does he/she ever use words that he/she seems to have invented or made up by himself/herself? Does _____ ever put things in odd, indirect ways or have “idiosyncratic” ways of saying things such as “hot rain” for “steam”?

7. Has _____ ever got his personal pronouns the wrong way around (e.g. “you want a drink” instead of “I want a drink”)?

**Restricted, Repetitive or Stereotyped Patterns of Behavior:**

1. Does _____ have any special hobbies/interests that are unusual in their intensity? Does he/she share this interest with others? Does it seem at all compulsive? Does it interfere with his/her doing things?

2. Are thing that _____ seems to have to do in a very particular way or order, that is, rituals that he/she has to do or has to have you do (e.g. putting things in special places/order)? How does he/she react if unable to complete whole sequence or is disrupted during the course of his/her actions?

3. Does _____ have any odd ways of moving his/her hands or fingers (e.g. flicking fingers in front of eyes)? Do they interfere with getting things done and what happens if you try to get him/her to stop? Any circumstances in which this behavior increases (e.g. stress)?

4. Any complicated movements of his/her whole body (e.g. spinning, repeatedly bouncing, and arm flapping while rocking)? Interfere with other activities and what happens if you attempt to stop him/her?

5. How does he/she play with his/her toys or objects around him? Are objects used as they are intended or is the focus on parts of the object? Does he/she ever collect or gather together certain sorts of objects and if yes what does he/she do with them? Does he/she ever line things up or do the same thing over and over with them?

6. Does he/she seem particularly interested in the sight, feel, sound, taste or smell of things or people? Examples may include: sniffing objects, feeling the texture of things, looking at things for long periods of time, licking or tasting objects to see how they feel or taste. Any hypersensitivity to the environment/clothing?

**School-Related Questions:**

1. How does _____ handle transitions throughout the school day (e.g. activity to activity, room to room)? What if transitions are not announced? Can he/she follow the daily schedule (i.e. is a visual needed)?

2. How does _____ handle changes in the daily routine? What if you give them warning of the change ahead of time? What if the environment is changed or imperfect (e.g. overhead crooked, materials moved, emergencies/fire drills)?
3. How does ______ follow verbal directions? Do you need to often repeat directions and visually show him/her what needs to be done? How is his/her ability to attend during school? Is he/she able to quickly shift attention to a new task?

4. What is motivating to the child? Any particular likes and dislikes?

5. Is the child able to complete tasks (i.e. at skill level) independently?

Adapted from Lord & Rutter, Autism Diagnostic Interview – R. Third Edition-Short Form
Autism Team Questions

Teacher Interview & Questionnaire

Middle School & High School Students

Student Name: ________________________________________________________________

Name of person completing form: ______________________________________________

What is your role with this student? ____________________________________________

How long have you known this student? _________________________________________

Date of completion: __________________________________________________________

Directions:
Please answer the following questions based on your observations. Feel free to give specific behavior examples. Thank you for taking the time to contribute to this student’s evaluation.

Quantitative Impairments in Social Interaction:

Please use check marks to indicate your answers.

1. When interacting with other students his/her own age does the student initiate the contact?
   ____ Yes
   ____ No

2. During passing times between classes or before class starts, does the student converse with peers?
   ____ Yes
   ____ No

What does his/her behavior look like during this time? (Examples)
3. When asked to work within a small group on an assignment is the student able to actively participate with peers?
   - Yes
   - No

4. Does the student offer to help peers?
   - Yes
   - No

5. Does the student have a best friend or does he/she associate with a peer group?
   - Yes
   - No

   When observed at lunch, in the hallways, after school, or during class does the student typically “hang-out” and socialize with others?
   - Yes
   - No

6. Are there any concerns with the student being teased by peers or difficulties with being accepted by his/her peer group?
   - Yes
   - No

   Is the student typically observed alone or with peers?
   - With Peers
   - Alone

   Does the student have any behaviors that interfere with developing same-aged friendships? (Please provide examples)

7. Does the student share his/her interests with others or share enjoyment (i.e., smiling, laughing, remaining engaged in the interaction) with peers or teachers?
   - Yes
   - No
Have you observed the student to be able to share humor with others (i.e., jokes, expressions)?
   ____ Yes
   ____ No

8. When interacting with others do the student’s facial expressions match the social situation he/she is in? For example, laughing during a serious conversation.
   ____ Yes
   ____ No

9. Can you identify by observing the student’s facial expressions and non-verbal behaviors when he/she is happy, angry, anxious?
   ____ Yes
   ____ No

10. From your observations does he/she appear aware of the moods of others around him/her by reading the non-verbal cues of others?
    ____ Yes
    ____ No

Qualitative Impairment in Communication:

1. When approached by peers and adults does the student respond to direct questions?
   ____ Yes
   ____ No

   Does the student ask another question to keep the conversation going?
   ____ Yes
   ____ No

2. How does the student let you know he/she wants help in the classroom? (Check all that apply)
   ____ Raises hand
   ____ Move to where the adult is to seek out help
   ____ Sits passively and waits for the adult to address them
   ____ Verbal request without raising hand
   ____ Other (please describe)
3. Please CHECK the following non-verbal behaviors that you have observed the student to consistently use:
   ____ Spontaneously points at items in the environment
   ____ Shakes his head to indicate “yes” or “no”
   ____ Establishes eye contact when speaking with others
   ____ Uses hands while talking (gestures)

4. When asked to write a creative story or to use imagination within an assignment is the student successful?
   ____ Yes
   ____ No

5. Does the student demonstrate understanding of the following (Check all that apply).
   ____ Figurative language
   ____ Idioms
   ____ Inferences
   ____ Have not observed/not enough information

6. Is the student able to talk about a variety of topics in conversation?
   ____ Yes
   ____ No

7. Is the student able to stay on topic during class discussions?
   ____ Yes
   ____ No

8. Is there ever a need to interrupt the student from continuing to talk because they have missed the cue to stop?
   ____ Yes
   ____ No

9. Does the student use any of the following speech and language patterns (Please CHECK all that apply)?
   ____ Tending to use odd phrases or saying the same thing over and over in almost the same way.
   ____ Echolalia (exact repetition speech)
Delayed echolalia (exact or partial repletion of speech that is produced at a significantly later time after originally heard; e.g., repetition of segments from videos or books)

Idiosyncratic speech (e.g., indirect ways of saying things such as “hot rain” for “steam”)

Use of formal speech or unusual advanced vocabulary that is discrepant from same-aged peers with similar cognitive profiles

Inconsistent or incorrect pronoun use (e.g., “you want a drink” instead of “I want a drink”)

**Restricted, Repetitive or Stereotyped Patterns of Behavior:**

1. Does the student have any special hobbies or interests that are unusual in their intensity or unusual for his/her age?
   - Yes
   - No

   If yes, please DESCRIBE the interest.

   Does he/she share this interest with others?
   - Yes
   - No

   Does it seem at all compulsive or does it interfere with his/her doing things? For example, reading a book about a favorite topic when he/she needs to complete work in class.
   - Yes
   - No

2. Are there things that the student seems to have to do in a very particular way or order, that is, rituals that he/she has to do (e.g., putting things in a special place or an order)?
   - Yes
   - No

   If yes, please explain the pattern of behavior.

   Are there things that he/she insists that YOU as the teacher do in a specific way or order?
3. How does the student react if he/she is UNABLE to complete the whole sequence or is disrupted during the course of his/her actions?
   ____ Yes
   ____ No

3. Any odd ways of moving hands or fingers? If yes please describe.
   ____ Yes
   ____ No

4. Any complicated movements of his/her whole body (e.g., spinning, repeatedly bouncing, arm flapping while rocking)? If yes please describe.
   ____ Yes
   ____ No

5. Does the student ever collect or gather certain objects? If yes describe.
   ____ Yes
   ____ No

   Does he/she ever line things up or do the same thing over and over with them?
   ____ Yes
   ____ No

6. Does he/she seem particularly interested in the sight, feel, sound, taste or smell of things or people? (Check all that apply)
   ____ Sniffing objects
   ____ Feeling the texture of things
   ____ Looking at things for long periods of time
   ____ Licking or tasting objects to see how they feel or taste
   ____ Hypersensitivities to the environment/clothing
   ____ Comments on changes in the environment
   ____ Dislike of being too close to others
   ____ Frequently fidgeting
   ____ Staring

**School-Related Questions:**

1. Check all that apply regarding the student’s ability to handle TRANSITIONS throughout the school day:
2. Is the student distressed by changes during his/her school day?
   — Yes
   — No

If yes, check any of the following situations that might cause the student distress.
   — Pop quiz
   — Substitute Teacher
   — Changes in room arrangement
   — Working in new groups
   — Unpredictable change in schedule
   — Fire drills/emergencies
   — Favorite items not available

3. Please check the statements that best describe the student’s ability to follow directions.
   — Same as peers
   — Requires directions repeated
   — Requires visual demonstrations
   — Needs directions to be broken down
   — Additional processing time needed

4. Organizational Skills and Classroom Management skills:
   Is student able to complete tasks within classroom (at skill level)
   — Yes
   — No

   Is student able to complete homework assignments at a passing grade level?
   — Yes
   — No

   What differences are there between the student’s performances on
   — tests versus — on written assignments? (Indicate strength)
Is the student able to independently use and follow organizational strategies for your class? (e.g., assignment planner)

_____ Yes
_____ No

Does the student manage materials required for class?

_____ Yes
_____ No

Adapted from Lord & Rutter, Autism Diagnostic Interview – R. Third Edition-Short Form
Appendix C: Assessment Considerations - Optional Observation/Interview Protocols

Appendix C provides MDT members with suggestions for gathering data through observations and interviews. These informal methods will yield useful data for eligibility consideration as well as progress monitoring of interventions. The following suggestions are adapted from the document, *Educational Evaluation Guide for Autism*, published by the Wisconsin Department of Public Instruction, 2009.

**Observations**

A critical element to understanding a student with ASD is to observe the student in a variety of natural learning environments. These may include:

- Classrooms;
- Hallways;
- Cafeteria;
- Computer lab;
- Library;
- Art;
- Music;
- PE;
- Assemblies and field trips;
- Playground;
- School bus;
- The student’s home/community
- For early childhood students, natural learning environments may include the student’s home or child care setting.

**Interviews**

Interview questions should be tailored to the individual or situation, and focus on information related to the North Dakota eligibility criteria. The length of time may vary and interviews offer an opportunity to establish rapport and are more personal than questionnaires.

When interviewing parents, staff, and other adults, appropriate topics to discuss:

- Medical history, including current health issues and medications
- Developmental history, including-
  - Developmental rates and sequences
  - Verbal and non-verbal communication including pre-speech and receptive language;
  - Student’s social interaction with both peers and adults;
  - Play patterns and skills;
  - Areas of interest and expertise;
Guidelines for Serving Students with ASD in Educational Environments

- Adaptive skills (self-help skills and activities of daily living);
- Existence of established routines;
- Movement and motor skills including repetitive movement/behaviors;
- Student’s ability to handle change and transitions;
- Idiosyncratic or unusual behavior;
- Response to various types of sensory input;
- Cognitive and learning style, including strength’s, processing time, attention to tasks, concrete and abstract thinking and learning new tasks or skills.

- Educational progress, including adjustment to school, grades, attendance, favorite subjects or activities, relationships with peers, problems and concerns, strengths and abilities.
- Community involvement, concerns, issues.

Whenever possible, evaluators should interview the student being evaluated directly. The student can provide firsthand knowledge of peer relationships, attitudes toward school, hobbies and interests, strengths and challenges, sensory concerns, and activities outside of school.

Social Participation

Students with ASD will show differences in the development of social relation skills from their typically developing peers. While some students with ASD may show an interest in social interaction, they may not be able to initiate or maintain interactions with peers and adults in a manner expected of their age. Some students with ASD may learn rote aspects of interaction including manners, and eye contact. Caution should be used in observing these rule-based social skills as an overall indicator of a student’s social abilities.

For students with ASD, it is difficult to develop and maintain appropriate social relationships. Many students with ASD will prefer the company of, or have better success with, adults or younger children versus same age peers. Caution should again be exercised when interpreting social abilities based on successful interactions with adults, especially in structured situations.

Assessment Considerations- Observations

When evaluating social interactions, it is best to observe the student in various social situations. Look for evidence of the following:

- **Joint attention**- Is the student able to share attention with another person to a third object or event? For example, does the student point to share his/her interest in an experience, i.e. “Look, there’s an airplane! How cool!” Some students with ASD may take another person’s hand or point solely to get their wants and needs met, but this is not considered sharing and/or joint attention.
Guidelines for Serving Students with ASD in Educational Environments

- **Social orientation/social awareness**- How aware is the student to the social environment as compared to the physical environment? Is the student drawn to people versus the physical aspects of an environment?
- **Imitation**- Does the student learn from imitating what he or she sees others doing? For example, when the teacher gives group directions, does the student attend to his peers and imitate their actions?
- **Social reciprocity/turn-taking**- Does the student engage in give and take, back and forth social interaction including conversation, turn-taking in games, waiting their turn in group situations such as during classroom group discussions?
- **Social play**- What is the social quality of the student’s play? Does the student prefer to play alone? Does the student engage in parallel play? Does the student play interactively and appropriately, or does the student dominate play with peers? How does the student handle competition?
- **Group social skills**- How does the student interact in group learning activities? Does the student recognize and understand his/her role in a group, such as taking turns, waiting, following group directions, etc.?
- **Social cognition**- Does the student understand that others have thoughts, ideas, opinions and interests that are different from his/her own? Does the student understand that his/her behavior has an impact on others?

**Communication**

Students with ASD demonstrate a wide range of communication capabilities, ranging from pre-speech or nonverbal to highly verbal with excellent vocabularies. While some students with ASD may exhibit appropriate language form skills (vocabulary, articulation skills, grammatical skills, sentence length and structure) all students with ASD experience communication difficulties in language use.

- **Strong verbal skills often mask underlying deficits in comprehension of verbal and nonverbal language.** Many students with ASD, even those with strong verbal skills appear to understand and know more that they are actually able to process or perform.

**Assessment Considerations- Observations**

**Pre-/Nonverbal Students**- Observe the student. Does the student:

- Understand cause and effect?
- Exhibit communicative intent (the desire to communicate with another person)?
- Have a form of communication? For example, vocalizations, gestures, signing, pictures, Picture Exchange Communication System (PECS), etc.
• Get his/her wants and needs met? How? For example, does the student gesture or take the hand of an adult to direct the adult to a wanted item? Does the student use eye gaze to indicate wants? Does the student communicate through crying, tantrums, refusal, or other communicative behaviors?
• Repeat or echo words or phrases? (echolalia)
• Demonstrate spontaneous use of core communicative functions such as requesting, protesting or refusal, indicating cessation (“all done”), requesting help or assistance?
• Spontaneously seek out others to initiate communication without prompting?
• Understand and follow verbal and nonverbal directions?
• Exhibit auditory processing delays?

Verbal students- Observe the student. Does the student:

• Spontaneously seek out others to initiate communication without prompting?
• Demonstrate spontaneous use of core communicative functions such as requesting, protesting, refusal, indicating cessation (“all done”), requesting help or assistance?
• Have reciprocal conversations?
• Maintain a topic initiated by others?
• Attend to communicative partner, for example, call out the person’s name, establish eye contact, or demonstrate appropriate personal space?
• Observe and understand nonverbal cues exhibited by others?
• Exhibit appropriate nonverbal cues themselves, such as body language, tone of voice, vocal inflection, eye gaze, personal space, etc.?
• Show an interest/awareness in the needs and wishes of others? Can the student communicate that interest/awareness such as asking questions about the other person’s interests?
• Show an awareness and ability to repair communication breakdowns?
• Exhibit a knowledge base of his/her communicative partner? Does the student provide sufficient background or reference information to help the partner understand and participate in the conversation?
• Have the vocabulary and knowledge base to express his/her emotions/feelings in a variety of situations?
• Understand and follow verbal and nonverbal directions?
• Understand and use figurative language such as idioms or slang?
• Exhibit auditory processing delays?
• Answer questions?
• Participate appropriately in small or large group discussion?
Developmental Rates and Sequences

Children generally develop in similar stages and sequences. Developmental rates and sequences for students with ASD typically include a splintering of skills with clear strengths and weaknesses. Some students with ASD will exhibit advanced or precocious development in certain concrete, visual rote learning of skills, while exhibiting depressed rates in other skill areas. These students do not always follow a normal development pattern or progression in acquiring skills.

Information in this area is often gathered through developmental history interviews and record reviews.

Cognition

Students with ASD often process information in a concrete and literal manner with difficulties understanding abstract and symbolic information or relationships. Executive functioning skills, i.e. attending, problem solving, organizing, prioritizing, and/or generalizing are often compromised.

Older students with ASD may have academic performance difficulties despite high intellectual ability due to struggles with critical thinking skills (for example, difficulty comparing and contrasting, discerning main ideas, sequencing, organizing, etc.)

Assessment Considerations - Observations

When assessing a student’s cognitive processing, observe the student’s ability to:

- Understand abstract language concepts such as words with multiple meanings, idioms, etc.
- Understand hidden meanings of language, commands, directions, teasing, jokes, etc.
- Generate imaginative play versus rote play.
- Problem solves and makes inferences.
- Make realistic, practical predictions about situations and events.
- Organize him/herself and materials, and get started on an action or an activity.
- Generalize concepts (be aware of both over generalization and under-generalization) across people, settings, materials, etc.
- Understand the difference between reality and pretend.
- Discriminate important information and prioritize attention to salient information.
- Use written expression at the expected level for the student’s intellectual ability. Written expression is a complex task, and difficulties may arise from multiple sources.
Sensory Processing

Sensory processing involves receiving information about the world around us through our senses. The brain uses this information to form behaviors, emotions, and readiness to perform learning tasks. In students with ASD, sensory processing is considered a problem if it interferes with the student’s ability to function in an expected manner within the environment. This can take the form of behavioral challenges, emotional outbursts or unwillingness to participate.

The student with ASD may exhibit hypersensitivity (over sensitivity or sensory aversion) or hyposensitivity (under sensitivity or sensory seeking). Hypersensitivity may escalate until a student stops responding and appears lethargic. Hyposensitivity may appear as low arousal to sensory stimuli, causing the student to appear lethargic.

Everyone exhibits sensory processing differences. For students with ASD, we are concerned with sensory processing difficulties that affect or impact the student’s ability to function in the expected manner in various environments.

Assessment Considerations - Observations

In assessing a student’s sensory processing, observe for hypersensitivity or hyposensitivity in various learning environments (classroom, gym, cafeteria, hallway, bathrooms, playground, assemblies, art, music, computer labs, bus, community activities, vocational sites, etc.) in all of the following areas:
<table>
<thead>
<tr>
<th>Sensory Areas</th>
<th>Examples of Hypersensitivity</th>
<th>Examples of Hyposensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual (sight)</td>
<td>Closing eyes, squinting, avoidance of visual stimuli.</td>
<td>Throwing items, staring intensely at object, moving objects or fingers in from of eyes.</td>
</tr>
<tr>
<td>Tactile (touch)</td>
<td>Clothing/food issues, avoidance of textures, difficulty in crowds, overreaction to unexpected touch, toe walking, poor hygiene</td>
<td>Fidgeting with objects, need to touch others or objects.</td>
</tr>
<tr>
<td>Auditory (hearing)</td>
<td>Covering ears, avoiding noisy environments, overreaction to unexpected sounds, such as fire alarms or barking dogs.</td>
<td>Not responding to auditory input including sounds and voices, turning up volume loud on computers, radios, etc., seeking auditory input by creating noise.</td>
</tr>
<tr>
<td>Olfactory (smell)</td>
<td>Plugging nose, verbalizing discomfort, gagging, vomiting, ability to smell things undetectable to others, avoiding certain odorous foods, people or environments.</td>
<td>Smelling items, even those that typically do not have an odor, sniffing people.</td>
</tr>
<tr>
<td>Gustatory (taste)</td>
<td>Gagging, vomiting, extremely limited diets, refusal to try new foods, preference for certain textures, temperatures for food.</td>
<td>Mouthing and chewing objects and clothing, craving certain types or flavors of foods, eating non-food items.</td>
</tr>
<tr>
<td>Vestibular (movement)</td>
<td>Avoids playground/gym activities, avoids head movement.</td>
<td>Toe walking, spinning, swinging, running, bouncing, fidgety behavior, constant movement.</td>
</tr>
<tr>
<td>Proprioceptive (sense of body in space)</td>
<td>Avoidance of others (for example, staying on the fringes of groups, being last in line), falling off chair, excessive or weak force on objects or people, stomping feet, banging into people or objects, bouncing, jumping, preferring heavy work activities such as carrying heavy items, pushing, pulling, wrapping self up tightly in blankets, etc., frequent hugging with force.</td>
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</table>
**Behavioral Repertoire**

Students with ASD often demonstrate a need for consistency and predictability in their daily routines and learning environments. Due to their challenges in processing language, social, sensory and cognitive information, students with ASD tend to rely heavily on learned and predictable rules, routines and structures. Alterations in these routines and structures significantly impact students with ASD. Students may demonstrate rigidity and perseveration in patterns of thinking, and may exhibit preoccupation with topics, themes, objects, events or people. This preoccupation often interferes with their ability to function in an expected manner. Students may have a restricted range of interests and may resist participation in other activities or discussions about other topics unless provided with additional motivation. Students may use objects or bodies in unconventional or repetitive ways.

**Assessment Suggestions - Observations**

When assessing in this area, observe the student in various learning environments. Students may demonstrate:

- An all-consuming, high interest involving objects, topics, or themes. This can present as an obsessive-compulsive type behavior.
- A restricted or narrow range of interests including unusual interests compared to their peers.
- Ritualistic actions or behaviors.
- Rigidity in routine, difficulty with change and transitions.
- Perfectionism and fear of failure that impact willingness to engage in written language activities or complete tasks or activities perceived as difficult.
- Difficulty letting go of perseverative thoughts, activities, actions or behaviors, i.e. “getting stuck”.
- Repetitive motor or vocal patterns such as flapping, rocking, pacing, humming, picking, chewing, etc.
## Appendix D: Assessment Instruments for Students with ASD

<table>
<thead>
<tr>
<th>Assessment Measures Specific to Autism Spectrum Disorders</th>
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<tbody>
<tr>
<td><strong>Title</strong></td>
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</tbody>
</table>
| Autism Diagnostic Observation Schedule, Second Ed. (ADOS-2) | Western Psychological Services (WPS) [http://www.wpspublish.com](http://www.wpspublish.com) | 12 months through adult | - Accurately assess and diagnose autism spectrum disorders across ages, developmental level, and language skills.  
- Standard behavior observation and coding format.  
- 40-60 minutes to administer. |
| Autism Diagnostic Interview, Revised (ADI-R) | Western Psychological Services (WPS) [http://www.wpspublish.com](http://www.wpspublish.com) | Children and adults with a mental age above 2.0 years | - Useful for diagnosing autism, planning treatment, and distinguishing autism from other developmental disorders.  
- Standardized interview and response coding.  
- Provides categorical results for three domains: Language/Communication, Reciprocal Social Interactions, and Repetitive Behaviors and Interests.  
- 90-150 minutes, including scoring. |
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<tr>
<th>Title</th>
<th>Publisher</th>
<th>Ages</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Autism Screening Instrument for Educational Planning, Third Ed. (ASIEP-3)</td>
<td>Pro-Ed <a href="http://www.proedinc.com">http://www.proedinc.com</a></td>
<td>2.0 years through 13 years, 11 months</td>
<td>• Identifies individuals with autism and assists in planning appropriate programs.   &lt;br&gt; • Monitors performance and progress.   &lt;br&gt; • Data collected from five main standardized components: Autism Behavior Checklist, Samples of Vocal Behavior, Interaction Assessment, Educational Assessment, and Prognosis of Learning Rate.   &lt;br&gt; • Administration time varies.</td>
</tr>
<tr>
<td>Autism Spectrum Rating Scales (ASRS)</td>
<td>Multi-Health Systems, Inc. (MHS) <a href="http://www.mhs.com/ASRS">http://www.mhs.com/ASRS</a></td>
<td>2 through 18</td>
<td>• Identifies symptoms, behaviors, and associated features of ASD.   &lt;br&gt; • Assists with diagnosis, treatment planning, and ongoing monitoring of interventions.   &lt;br&gt; • 20 minutes to administer.</td>
</tr>
<tr>
<td>*The Childhood Autism Spectrum Test (CAST)</td>
<td><a href="http://www.autismresearchcentre.com/arc_tests">http://www.autismresearchcentre.com/arc_tests</a></td>
<td>Ages 4-11</td>
<td>• Parent report- 39 questions   &lt;br&gt; • Free /electronic copy can be emailed.   &lt;br&gt; • High false positives</td>
</tr>
</tbody>
</table>
### Assessment Measures Specific to Autism Spectrum Disorders

<table>
<thead>
<tr>
<th>Measure Name</th>
<th>Publisher</th>
<th>Age Range</th>
<th>Features</th>
</tr>
</thead>
</table>
| **Childhood Autism Rating Scale, Second Ed. (CARS-2)** | Western Psychological Services (WPS) [http://www.wpspublish.com](http://www.wpspublish.com) | 2 years and up     | • Helps with identifying children with autism and determine symptom severity through quantifiable ratings based on direct observation.  
  • Two 15 item rating scales completed by the clinician and an unscored Parent/Caregiver Questionnaire.  
  • 5-10 minutes to complete following collection of information needed to make ratings. |
| **Gilliam Autism Rating Scale, Third Ed. (GARS-3)** | Mayer-Johnson (MJ) [http://www.mayer-johnson.com](http://www.mayer-johnson.com) | 3 years through 22 | • Assists in identifying autism and estimating level of severity.  
  • Based on DSM V criteria.  
  • Grouped into six subscales; Restrictive/Repetitive Behaviors, Social Interaction, Social Communication, Emotional Responses, Cognitive Style, and Maladaptive Speech.  
  • 5 to 10 minutes to administer. Parent and teacher forms completed independently. Rater must know individual well at least 2 weeks. |
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<th>Title</th>
<th>Publisher</th>
<th>Ages</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>*Social Communication Questionnaire (SCQ)</td>
<td>PAR, Inc.</td>
<td>4 years through 40</td>
<td>• Evaluates communication skills and social functioning of individuals who may have ASD.</td>
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<td></td>
<td><a href="http://www.parinc.com">http://www.parinc.com</a></td>
<td></td>
<td>• Scores provide an index of severity in reciprocal social interaction, communication, and restricted/repetitive behavior domains.</td>
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<td>• Individual or group administration, 10 minutes or less.</td>
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<td>• Draw parents attention to time frame of form and specific questions</td>
</tr>
<tr>
<td>**Social Responsiveness Scale, Second Ed. (SRS-2)</td>
<td>Western Psychological Services (WPS)</td>
<td>2.5 years through adulthood</td>
<td>• Identifies social impairment associated with ASD and quantifies severity.</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.wpspublish.com">http://www.wpspublish.com</a></td>
<td></td>
<td>• Assesses social impairment in natural settings, two subscales DSM V compatible.</td>
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<td>• 15 to 20 minutes to administer.</td>
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<td>• Parent form and Teacher form- <strong>MUST</strong> complete <strong>ALL</strong> items</td>
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<tr>
<td>Assessment Measures Specific to Autism Spectrum Disorders</td>
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| **The Assessment of Basic Language and Learning Skills-Revised (ABLLS-R)** | Partington Behavior Analysts | School aged children | - Assessment tool, curriculum guide and skills-tracking system to guide language and critical learner skills for children with ASD.  
- Reviews skills from 25 areas, including language, social interaction, self-help, academic and motor skills.  
- Pinpoints obstacles to skill acquisition and assists with the development of IEP goals with clearly defined targets. |
| **The Verbal Behavior Milestones Assessment and Placement Program (VB-MAPP)** | AVB Press- Advancements in Verbal Behavior | Any age child whose skills are not commensurate with those of a 4 year old, typically developing child. | - A criterion-referenced assessment tool, curriculum guide and skill tracking system.  
- 5 components, including Milestones Assessment, Barriers Assessment, Transition Assessment, Task Analysis and Skills Tracking, and Placement and IEP Goals.  
- Serves as a guide for development of an individualized language, social skills and learning curriculum. |

Published- 2006  
Published- 2008
### Cognitive Measures

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<tr>
<th>Title</th>
<th>Publisher</th>
<th>Ages</th>
<th>Comments</th>
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• 10-15 minutes; questionnaires. |
| Das Naglieri Cognitive Assessment System (CAS) | Riverside Publishing [http://www.riverpub.com](http://www.riverpub.com) Published- 1997 | 5 years to 17.11 | • Assessment of cognitive processing.  
• Measures planning, attention, simultaneous and successive processing.  
• Ideal for culturally diverse groups.  
• 40 minutes to administer (basic); 60 minutes (standard). |
| Differential Ability Scales, Second Ed. (DAS-II) | Pearson Assessments [http://www.pearsonclinical.com](http://www.pearsonclinical.com) | 2.6 years to 17.11 | • Measures a variety of cognitive abilities including verbal and visual working memory, immediate and delayed recall, visual recognition and matching, processing and naming speed, phonological processing, and basic number concepts.  
• Identifies strengths and weaknesses for IEP goal development. |
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<thead>
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<th>Title</th>
<th>Publisher</th>
<th>Ages</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaufmann Assessment Battery for Children, Second Ed. (KABC-2)</td>
<td>Pearson Assessments</td>
<td>3 years to 18</td>
<td>• Individually administered, culturally fair measure of cognitive ability.</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.pearsonclinical.com">http://www.pearsonclinical.com</a></td>
<td></td>
<td>• Subtests include simultaneous, sequential, planning, learning and knowledge.</td>
</tr>
<tr>
<td></td>
<td>Published- 2004</td>
<td></td>
<td>• 25 to 70 minutes to administer, depending on choice of core batteries.</td>
</tr>
<tr>
<td>Kaufmann Brief Intelligence Test, Second Ed. (KBIT-2)</td>
<td>Pearson Assessments</td>
<td>4 years to 90</td>
<td>• Measures verbal and nonverbal intelligence.</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.pearsonclinical.com">http://www.pearsonclinical.com</a></td>
<td></td>
<td>• Quick estimate of intellectual ability.</td>
</tr>
<tr>
<td></td>
<td>Published- 2004</td>
<td></td>
<td>• Approximately 20 minutes to administer.</td>
</tr>
<tr>
<td>Title</td>
<td>Publisher</td>
<td>Ages</td>
<td>Comments</td>
</tr>
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</tr>
<tr>
<td>Leiter International Performance Scale, Revised (Leiter-R)</td>
<td>Stoelting Company</td>
<td>2 years to 21</td>
<td>• Completely nonverbal measure of intellectual ability.</td>
</tr>
<tr>
<td></td>
<td><a href="http://stoelting.com">http://stoelting.com</a></td>
<td></td>
<td>• Game-like administration.</td>
</tr>
<tr>
<td></td>
<td>Published- 1997</td>
<td></td>
<td>• Emphasizes fluid intelligence with no cultural bias.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Revisions include memory and attention domains.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 25-40 minutes to administer.</td>
</tr>
<tr>
<td>Stanford-Binet Intelligence Scale, 5th Edition (SB 5)</td>
<td>Riverside Publishing</td>
<td>2 to 85 years</td>
<td>• Measures fluid reasoning, knowledge, quantitative reasoning, visual-spatial processing and working memory.</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.riverpub.com">http://www.riverpub.com</a></td>
<td></td>
<td>• Enhanced nonverbal/low verbal content requiring minimal or no verbal responses.</td>
</tr>
<tr>
<td></td>
<td>Published- 2003</td>
<td></td>
<td>• Approximately 5 minutes per subtest.</td>
</tr>
<tr>
<td>Title</td>
<td>Publisher</td>
<td>Ages</td>
<td>Comments</td>
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</tbody>
</table>
| Test of Nonverbal Intelligence, 4th Ed. (TONI-4)| Pro-Ed http://www.proedinc.com   | 6.0 through 89.11 years | • Assessment of intelligence, aptitude, abstract reasoning and problem solving.  
• Simple oral instructions with responses that may include gesturing such as pointing, nodding and blinking.  
• Ideal for language, hearing or motor impairments; culturally unbiased.  
• 15-20 minutes to administer. |
| Universal Nonverbal Intelligence Test (UNIT)    | Riverside Publishing http://www.riverpub.com | 5.0 to 7.11 years | • Completely nonverbal administration.  
• Culturally and ethnically sensitive.  
• Measures complex memory and reasoning abilities, including both verbal (symbolic) and nonverbal mediation.  
• 10-15 minutes to administer the Abbreviated Battery, 30 minutes for the Standard Battery, 45 minutes for the Extended Battery. |
### Cognitive Measures

<table>
<thead>
<tr>
<th>Title</th>
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<th>Comments</th>
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</thead>
</table>
| Wechsler Adult Intelligence Scale- 4th Edition (WAIS-4)              | Psychological Corporation                      | 16 to 90 years | • Older adolescent and adult measure of intelligence.  
• 60 to 90 minutes to administer.                                                                                                                                |
| Wechsler Intelligence Scale for Children, 4th Ed. (WISC-IV)         | Psychological Corporation                      | 6.0 to 16.11 years | • FSIQ, Index and Scaled Subtest scores.  
• Improved assessment of fluid reasoning, working memory and processing speed.  
• 60 to 90 minutes to administer.                                                                                                                                |
| Wechsler Preschool and Primary Scale of Intelligence-4th Ed. (WPPSI-4) | Psychological Corporation                      | 2.6 to 7.7 years | • Cognitive development in preschoolers.  
• Primary index includes verbal comprehension, visual spatial, working memory, fluid reasoning, and processing speed.  
• Ancillary index- vocabulary acquisition, nonverbal, general ability, and cognitive proficiency.  
• 30 to 60 minutes to administer.                                                                                                                                |
<table>
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<tr>
<th>Title</th>
<th>Publisher</th>
<th>Ages</th>
<th>Comments</th>
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</table>
| Woodcock-Johnson Tests of Cognitive Abilities (WJ III NU) | Riverside Publishing [http://www.riverpub.com](http://www.riverpub.com) | 2.0 years to graduate school | • Measure of cognitive ability.  
• Subtests grouped into three categories of ability; Verbal, Thinking, and Cognitive Efficiency.  
• 5 minutes per subtest administration time. |
### Measures of Adaptive Behavior

<table>
<thead>
<tr>
<th>Title</th>
<th>Publisher</th>
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<th>Comments</th>
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</thead>
</table>
| Adaptive Behavior Assessment System- 2nd Ed. (ABAS-2)         | Pearson Assessments               | Birth through 89 years      | • Evaluates three general areas of adaptive behavior; Conceptual, Social, and Practical.  
• 10 specific adaptive skills correspond to DSM.  
• Linked to Wechsler Scales.  
• 15 minutes per form completion time.                           |
|                                                              | [http://www.pearsonclinical.com](http://www.pearsonclinical.com) |                |                                                                                                                                         |
|                                                              | Published- 2003                   |                |                                                                                                                                         |
| Vineland-II Adaptive Behavior Scales, 2nd Ed.                 | Pearson Assessments               | Birth through 90 years      | • Measure of personal and social skills.  
• 5 domains; Communication, Daily Living Skills, Socialization, Motor, Maladaptive behaviors.  
• Survey interview- 20 to 90 minutes.                            |
|                                                              | [http://www.pearsonclinical.com](http://www.pearsonclinical.com) |                |                                                                                                                                         |
|                                                              | Published- 2005                   |                |                                                                                                                                         |
### Developmental Assessments

<table>
<thead>
<tr>
<th>Title</th>
<th>Publisher</th>
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<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>Batelle Developmental Inventory, 2nd Ed. (BDI-2)</td>
<td>Riverside Publishing <a href="http://www.riverpub.com">http://www.riverpub.com</a></td>
<td>Birth through 8 years</td>
<td>• Developmental assessment for early childhood.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Addresses all 5 areas under IDEA: Motor, Adaptive, Cognitive, Personal Social, and Communication.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Useful for instruction and intervention.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Administration time- 60-90 minutes.</td>
</tr>
<tr>
<td>Bayley Scales of Infant and Toddler Development, 3rd Ed. (Bayley-III)</td>
<td>Pearson Assessments <a href="http://www.pearsonclinical.com">http://www.pearsonclinical.com</a></td>
<td>1 through 42 months</td>
<td>• Measures adaptive behavior, cognitive, language, motor, and social emotional.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 3 scales administered with child; 2 scales as parent questionnaire.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 30 to 90 minutes to administer, depending on the age of the child.</td>
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<tr>
<td>Title</td>
<td>Publisher</td>
<td>Ages</td>
<td>Comments</td>
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</tr>
<tr>
<td>Brigance Inventory of Early Development III (IED III)</td>
<td>Curriculum Associates, Inc.</td>
<td>Birth through 7 years</td>
<td>• Assists in planning developmentally appropriate instruction.</td>
</tr>
<tr>
<td></td>
<td>Published-2013</td>
<td></td>
<td>• 30-60 minutes to administer.</td>
</tr>
<tr>
<td>Child Development Inventory (CDI)</td>
<td>Pearson Assessments</td>
<td>15 months through 6 years</td>
<td>• Parent questionnaire format.</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.pearsonclinical.com">http://www.pearsonclinical.com</a></td>
<td></td>
<td>• Scales measure social, self-help, gross motor, fine motor, expressive language, language comprehension, letters, numbers, and general development.</td>
</tr>
<tr>
<td></td>
<td>Published-1992</td>
<td></td>
<td>• 30-50 minute completion time.</td>
</tr>
<tr>
<td>Mullen Scales of Early Learning (MSEL)</td>
<td>Pearson Assessments</td>
<td>Birth to 68 months</td>
<td>• Focus on cognitive and motor ability</td>
</tr>
<tr>
<td></td>
<td>Published-1995</td>
<td></td>
<td>30-60 minutes administration time.</td>
</tr>
<tr>
<td>Title</td>
<td>Publisher</td>
<td>Ages</td>
<td>Comments</td>
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<tr>
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</tbody>
</table>
| Bracken Basic Concept Scale, 3rd Ed. | Pearson Assessments [http://www.pearsonclinical.com](http://www.pearsonclinical.com) | 3.0 to 6.11 years | - Separate scales for Receptive and Expressive.  
- Assesses a child’s language skills, cognitive development and school readiness.  
- The receptive scale is a nonverbal task.  
- 30-40 minutes to administer. |
| Comprehensive Assessment of Spoken Language (CASL) | Pearson Assessments [http://www.pearsonclinical.com](http://www.pearsonclinical.com) | 3.0 to 21.11 years | - Measure of language processing skills (comprehension, expression and retrieval).  
- Includes 4 language categories: Lexical/Semantic, Syntactic, Supralinguistic, and Pragmatic.  
- 30- 45 minutes to administer. |
- Includes a pre-literacy scale as well as a pragmatic profile.  
- Assists in intervention planning.  
- Administration time varies. |
<table>
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<tr>
<th>Title</th>
<th>Publisher</th>
<th>Ages</th>
<th>Comments</th>
</tr>
</thead>
</table>
• Includes Pragmatic Activities Checklist.  
• 30-45 minutes to administer. |
• Rates aspects of communication such as speech, vocabulary, sentence structure, and social language skills.  
• Completion time- 10-15 minutes. |
<table>
<thead>
<tr>
<th>Title</th>
<th>Publisher</th>
<th>Ages</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expressive Vocabulary Test, 2\textsuperscript{nd} Ed. (EVT-2)</strong>&lt;br&gt;&lt;br&gt;<a href="http://www.pearsonclinical.com">http://www.pearsonclinical.com</a>&lt;br&gt;Published- 2007</td>
<td>Pearson Assessments</td>
<td>2.6 through 90+ years</td>
<td>• Measure of expressive vocabulary and word retrieval.&lt;br&gt;• Comparisons with receptive vocabulary to pinpoint strengths and weaknesses.&lt;br&gt;• Evidence-based interventions linked.&lt;br&gt;• 10-20 minutes to complete.</td>
</tr>
<tr>
<td><strong>Peabody Picture Vocabulary Test, 4\textsuperscript{th} Ed. (PPVT-4)</strong>&lt;br&gt;&lt;br&gt;<a href="http://www.pearsonclinical.com">http://www.pearsonclinical.com</a>&lt;br&gt;Published-2007</td>
<td>Pearson Assessments</td>
<td>2.6 through 90+ years</td>
<td>• Evaluates receptive vocabulary.&lt;br&gt;• Links with EVT-2 to compare expressive with receptive scores.&lt;br&gt;• Evidence-based interventions linked.&lt;br&gt;• 10 to 15 minutes to complete.</td>
</tr>
<tr>
<td><strong>Preschool Language Scale, 5\textsuperscript{th} Ed. (PLS-5)</strong>&lt;br&gt;&lt;br&gt;<a href="http://www.pearsonclinical.com">http://www.pearsonclinical.com</a>&lt;br&gt;Published- 2011</td>
<td>Pearson Assessments</td>
<td>Birth through 7.11 years</td>
<td>• Interactive assessment of developmental language skills.&lt;br&gt;• Total language, auditory comprehension and expressive communication scores.&lt;br&gt;• 45-60 minutes to administer.</td>
</tr>
<tr>
<td>Title</td>
<td>Publisher</td>
<td>Ages</td>
<td>Comments</td>
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</tr>
<tr>
<td>Test of Language Development-Primary, 4th Ed. (TOLD-P4)</td>
<td>Pro-Ed <a href="http://www.proedinc.com">http://www.proedinc.com</a></td>
<td>4 through 8.11 years</td>
<td>• Assessment of oral language skills.</td>
</tr>
<tr>
<td></td>
<td>Published- 2008</td>
<td></td>
<td>• Composite scores in semantics and grammar, listening, organizing, and speaking.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 30 minutes to 1 hour administration time.</td>
</tr>
<tr>
<td>Test of Language Development-Intermediate, 4th Ed. (TOLD-I4)</td>
<td>Pro-Ed <a href="http://www.proedinc.com">http://www.proedinc.com</a></td>
<td>8.0 through 17.11 years</td>
<td>• Assessment of oral language skills.</td>
</tr>
<tr>
<td></td>
<td>Published- 2008</td>
<td></td>
<td>• Subtests measures listening, organizing and speaking abilities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 30-60 minutes to administer.</td>
</tr>
<tr>
<td>Test of Problem Solving, 3rd Ed. Elementary (TOPS 3)</td>
<td>Lingui-Systems <a href="http://linguisystems.com">http://linguisystems.com</a></td>
<td>6 through 12 years</td>
<td>• Assesses ability to integrate semantic and linguistic knowledge with reasoning.</td>
</tr>
<tr>
<td></td>
<td>Published- 2005</td>
<td></td>
<td>• Picture stimuli; verbal responses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 35 minutes to administer.</td>
</tr>
<tr>
<td>Test of Problem Solving, 2nd Ed. Adolescent (TOPS-2)</td>
<td>Lingui-Systems <a href="http://linguisystems.com">http://linguisystems.com</a></td>
<td>12 through 17 years</td>
<td>• Assesses critical thinking skills based on language strategies, logic, experience.</td>
</tr>
<tr>
<td></td>
<td>Published- 2007</td>
<td></td>
<td>• Natural context of problem solving situations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 40 minutes to administer.</td>
</tr>
<tr>
<td>Title</td>
<td>Publisher</td>
<td>Ages</td>
<td>Comments</td>
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</tr>
<tr>
<td>Test of Pragmatic Language, 2nd Ed. (TOPL-2)</td>
<td>Pro-Ed</td>
<td>6 through 18.11 years</td>
<td>• Comprehensive analysis of social communication in context.</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.proedinc.com">http://www.proedinc.com</a></td>
<td></td>
<td>• Focuses on a student’s ability to appraise the effectiveness of a response to social problem situations.</td>
</tr>
<tr>
<td></td>
<td>Published- 2007</td>
<td></td>
<td>• Informs social skills and conflict resolution.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 45-50 minutes to administer.</td>
</tr>
<tr>
<td>Academic Assessments</td>
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<tr>
<td><strong>Title</strong></td>
<td><strong>Publisher</strong></td>
<td><strong>Ages</strong></td>
<td><strong>Comments</strong></td>
</tr>
</tbody>
</table>
- Assists with the development of IEP goals and objectives; online tracking available.  
- Reading and math inventories.  
- Administration time varies. |
|                          | Published- 2010                                    |                                     |                                                                             |
- Error analysis procedures.  
- Completion time- 30-80 minutes, by age. |
|                          | Published- 2004                                    |                                     |                                                                             |
| Peabody Individual Achievement Test-Normative Update (PIAT-R/NU) | Pearson Assessments [http://www.pearsonclinical.com](http://www.pearsonclinical.com) | 5.0 through 22.11 years (K-12)       | - Measure of academic achievement in reading, math, and spelling.  
- Most responses require only pointing for low students with limited expressive ability.  
- 60 minutes to administer. |
|                          | Published- 1997 (norm update)                       |                                     |                                                                             |
Guidelines for Serving Students with ASD in Educational Environments

<table>
<thead>
<tr>
<th>Test of Written Language, 4th Ed. (TOWL-4)</th>
<th>Pro-Ed</th>
<th>9 through 17.11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="http://www.proedinc.com">http://www.proedinc.com</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Published- 2009</td>
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</table>

- Comprehensive diagnostic assessment of written expression.
- 7 subtests represent conventional, linguistic and conceptual aspects of writing.
- 60 - 90 minutes to administer.

### Academic Assessments, (cont.)

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<tr>
<th>Title</th>
<th>Publisher</th>
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<th>Comments</th>
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</table>
| Wechsler Individual Achievement Test, 3rd Ed. (WIAT-III) | Pearson Assessments | 4 through 50.11 | • Identifies academic strengths and weaknesses.  
• New subtests include Oral Reading, Math Fluency and Early Reading Skills.  
• Measures all areas as specified in IDEA for LD.  
• Completion time varies by grade level. |
| Wide Range Achievement Test- 4th Ed. (WRAT-4) | PAR, Inc. | 5 through 94 years | • Measures basic academic skills of reading, spelling and math.  
• New measure of reading achievement-Sentence Comprehension added.  
• 20-50 minutes to administer; varies by age. |
<p>|                                             | <a href="http://www.parinc.com">http://www.parinc.com</a> |  |
|                                             | Published-2006 |  |</p>
<table>
<thead>
<tr>
<th>Title</th>
<th>Publisher</th>
<th>Ages</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodcock-Johnson III-Normative Update-Tests of Achievement (W-J III/NU)</td>
<td>Riverside Publishing</td>
<td>2 through 90 years</td>
<td>• Measure of academic achievement.</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.riverpub.com">http://www.riverpub.com</a></td>
<td></td>
<td>• Expanded achievement cluster includes basic skills, fluency and application.</td>
</tr>
<tr>
<td></td>
<td>Published- 2007</td>
<td></td>
<td>• Two forms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Matches all 8 areas of IDEA for LD.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Administration time varies; 5 minutes per subtest.</td>
</tr>
<tr>
<td>Achenbach Child Behavior Checklist (CBCL/6-18)</td>
<td>ASEBA</td>
<td>6 to 18 years</td>
<td>• Questionnaire format for parents, teachers and self-report for students.</td>
</tr>
<tr>
<td></td>
<td><a href="http://aseba.org">http://aseba.org</a></td>
<td></td>
<td>• Evaluates behavioral and emotional functioning; social problems and competencies.</td>
</tr>
<tr>
<td></td>
<td>Published- 2007 norms</td>
<td></td>
<td>• 15 minutes to complete.</td>
</tr>
<tr>
<td>Behavior Assessment System for Children, 2nd Ed. (BASC-2)</td>
<td>Pearson Assessments</td>
<td>2 through 21 years</td>
<td>• Comprehensive rating system includes scales for teacher, parent, self-report, student observation system and a structured developmental history.</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.pearsonclinical.com">http://www.pearsonclinical.com</a></td>
<td></td>
<td>• 15- 20 minutes to complete.</td>
</tr>
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</table>
## Behavioral Assessments, (cont.)

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<th>Publisher</th>
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<th>Comments</th>
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</table>
| Conners Comprehensive Behavior Rating Scales (CBRS)     | Pearson Assessments                            | 6 through 18, 8-18 (self-report) | • Assess a wide range of emotional, behavioral, social and academic issues in school-aged youth.  
  • Parents, teachers and youth (self-report).  
  • Aligned with DSM.  
  • 20 minutes to complete. |
|                                                         | http://www.pearsonclinical.com                 |                       |                                                                           |
| Motivation Assessment Scale (MAS)                       | V. Mark Durand                                  | All ages              | • Questionnaire format.  
  • Assists in determination of what motivators is reinforcing a behavior.  
  • Tool for conducting FBA.  
  • Short completion time. |
|                                                         | (available online for free)                    |                       |                                                                           |
| Functional Analysis Screening Tool (FAST)               | Florida Center on Self Injury                   | All ages              | • Initial screening and as part of an FBA.  
  • Completed by multiple informants.  
  • Short completion time. |
|                                                         | (available on line for free)                   |                       |                                                                           |
| Problem Behavior Questionnaire/Profile                  | Lewis, T, Scott, T. & Sugai, G. (1994)          | All ages              | • Questionnaire to aid in determination of function of behavior.  
  • Useful for conducting FBA. |
  • Determines function of behavior for FBA. |
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<tr>
<th>Title</th>
<th>Publisher</th>
<th>Ages</th>
<th>Comments</th>
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</table>
| Sensory Processing Measure (SPM/SPM-P)- home and school forms | Western Psychological Services [http://www.wpspublish.com](http://www.wpspublish.com) | Ages 2-5 SPM-P, Ages 5-12 SPM | • Provides complete picture of child’s sensory processing difficulties both at home and school.  
• SPM-P makes early intervention possible. |

* Screening tool recommended by the National Professional Development Center for ASD for students who may need further screening and evaluation for ASD (level 1 screening tool)

** Screening tool recommended by the National Professional Development Center for ASD when concerns/red flags have already been seen/ or child failed level 1 screening tool. Provide better specificity and lower false positives than level 1 screening tool. Tool can be used to aid diagnosis; **BUT should not be used by themselves for diagnosis.**

Parent report: Give to parent or caregiver who is most familiar with the developmental history and current behavior of the individual.

Teacher report: Give to primary teacher who views child in multiple settings OR give one protocol to group of teachers/professionals who view child in various settings and can collaboratively report on different domains (day care workers, therapists, paraprofessionals, teachers of various subjects).
**Appendix –E**

**Optional Worksheet for Determination of Eligibility for Special Education (Adapted from the Wisconsin Department of Public Instruction, Eligibility Checklist- Autism, 2009)**

**Eligibility Criteria:** The committee discussion of eligibility for special Education services should include a discussion of the following areas to determine the level of severity and the need for specialized instruction. The child needs to exhibit at least one of the criteria in each area: Verbal Social Communication, Nonverbal Social Communication and Social interaction.

**Does the child demonstrate difficulties with Verbal Social Interaction?**

<table>
<thead>
<tr>
<th>Verbal Social Communication</th>
<th>Requires support</th>
<th>Requires substantial support</th>
<th>Requires very substantial support</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ The child exhibits: a lack of social-emotional reciprocity (back-and-forth conversation) a reduced sharing of interests, emotions, or affect; a failure to initiate or respond to social interactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ The child exhibits difficulties with: developing, maintaining and/or understanding relationships (adjusting behavior to suit social contexts), sharing, imaginative play, making friends; or interacting with peers.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Does the child exhibit difficulties in Non-Verbal Social Communication skills?

<table>
<thead>
<tr>
<th>Non-Verbal Social Communication</th>
<th>Requires support</th>
<th>Requires substantial support</th>
<th>Requires very substantial support</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ The child exhibits problems with: poor integration of verbal and nonverbal communication behaviors/skills, poor eye contact; understanding body language, understanding and using gestures; exhibiting appropriate or any facial expression(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ The child exhibits hyper sensitivity or hyposensitivity to sensory input: or, an unusual interest in sensory aspects of the environment (e.g. indifference to pain/temperature, strong reaction to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching objects, visual fascination with lights or movement)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Does the student demonstrate restricted, repetitive behaviors?**

<table>
<thead>
<tr>
<th>Behavior- Restrictive, repetitive patterns</th>
<th>Requires support</th>
<th>Requires substantial support</th>
<th>Requires very substantial support</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ The child exhibits: stereotyped or repetitive motor movements, use of objects or speech.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ The child exhibits: resistance to change, insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ The child exhibits intense, very restricted, fixated interests that are abnormal in intensity or focus.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part 2 - Evidence of Adverse Effects/Need for Special Education and Related Services**

*(If “yes”, list the needs below; if “no”, there is no need for special education.)*

1. Are there accommodations that can be made in the regular education program to allow the student access to the general education curriculum and to meet the educational standards that apply to all students? Yes No

*(Consider adaptations of content, methodology and/or delivery of instruction.)*

List adaptations that do not require special education.
Students who meet the criteria for an educational diagnosis of ASD and whose disability has a mild impact on their communication and social interaction skills, but, will need some accommodations may be eligible for a 504 plan.

2. Does the student have needs that cannot be met in regular education as structured? Yes No

List adaptations that require special education.

The student meets the criteria for the educational disability of Autism Spectrum Disorders (Part 1), and demonstrates the need for special education and related services (Part 2).

☐ Yes
☐ No, the student doesn’t meet criteria and/or demonstrate the need for special education.

If no, what are the recommendations of the team for supports?
Appendix F: Instructional Focus Areas for IEP Goals

Executive Functioning

- Goal setting
- Planning
- Task completion
- Sequencing steps
- Organizational skills
- Initiation
- Inhibition
- Pacing
- Self-monitoring
- Emotional regulation

Attention

- Sustained attention
- Saliency (determining what is important)
- Shifting of attention

Academic Performance

- Reading
- Math
- Science
- Social Studies

Communication

- Motivation to communicate
- Function of communication
- Means of communication
- Ability to understand and use nonverbal communication, such as gestures or other subtleties of communication like, personal space
- Conversational skills
- Voice quality
- Pragmatic skills

Physical

Sensory Processing

- Coping skills
- Desensitization
- Self-management
- Self-advocacy in communicating sensory needs
- Ability to proactively or appropriately seek the means to receive desired sensory experiences
Social Emotional

Social Development and Peer Interaction

- Joint attention
- Nonverbal interaction
- Imitation
- Peer interaction
- Turn-taking
- Sharing
- Social reciprocity
- Emotional reciprocity
- Self-regulation
- Group interaction/participation
- Self-awareness
- Perspective taking
- Social rules
- Social hierarchy

Play and Leisure

- Concrete play
- Parallel play
- Time on-task
- Dramatic play
- Social play
- Games
- Rule-following
- Using strategy

Restricted and Repetitive Patterns of Behavior

- Communication skills
- Social skills
- Play skills
- Coping skills
- Self-management
- Safety awareness

Interfering Behavior

- Communication skills
- Social skills
- Play skills
- Coping skills
- Self-management
GUIDELINES FOR SERVING STUDENTS WITH ASD IN EDUCATIONAL ENVIRONMENTS

- Safety awareness

**Adaptive**

**Activities of Daily Living**

- Toileting
- Personal hygiene
- Dressing
- Eating
- Schedules
- Routines
- Material preparation
- Organization
- Task completion
- Cleaning up
- School independence
- Home independence
- Safety
- Health care
- Community independence
- Transportation
- Driving

**Sexuality**

- Understanding one’s own body
- Appropriate care
- Rules for sexual expression
- Privacy
- Social contact

**Self-Advocacy**

- Making choices
- Accessing resources
- Communicating preferences
- Making decisions
- Setting attainable goals
- Time management
- Identifying problems and solutions
- Advocating for accommodations
- Self-awareness
- Developing greater awareness of individual needs
Appendix G: The 27 Evidence Based Practices for Children and Youth with ASD (National Professional Development Center on Autism Spectrum Disorders, 2014)

Additional information on evidence-based practices may be found at:

The IRIS Training Center, Peabody College of Vanderbilt University; http://iris.peabody.vanderbilt.edu/

The Ohio Center for Autism and Low Incidence (OCALI), Columbus, OH; http://www.ocali.org/center/autism

(The North Dakota Department of Public Instruction does not endorse the use of specific practices, but rather includes information in these guidelines for the consideration of IEP teams across the state.)

<table>
<thead>
<tr>
<th>Evidence-Based Practice</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antecedent-based intervention (ABI)</td>
<td>Arrangement of events or circumstances that precede the occurrence of an interfering behavior and designed to lead to the reduction of behavior.</td>
</tr>
<tr>
<td>Cognitive behavioral intervention (CBI)</td>
<td>Instruction on management of control of cognitive processes that lead to changes in overt behavior.</td>
</tr>
<tr>
<td>Differential reinforcement of Alternative, Incompatible, or Other Behavior (DRA/I/O)</td>
<td>Provision of positive/desirable consequences for behaviors or their absence that reduce the occurrence of an undesirable behavior. Reinforcement provided: a) when the learner is engaging in a specific, desired behavior other than the inappropriate behavior (DRA), b) when the learner is engaging in a behavior that is physically impossible to do while exhibiting the inappropriate behavior (DRI), or c) when the learner is not engaging in the interfering behavior (DRO).</td>
</tr>
<tr>
<td>Discrete trial teaching (DTT)</td>
<td>Instructional process usually involving one teacher/service provider and one student/client and designed to teach appropriate behavior or skills. Instruction usually involves massed trials. Each trial consists of the teacher’s instruction/presentation, the child’s response, a carefully planned consequence, and a pause prior to presenting the next instruction.</td>
</tr>
<tr>
<td>Evidence-Based Practice</td>
<td>Brief Description</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Exercise (ECE)</td>
<td>Increase in physical exertion as a means of reducing problem behaviors or increasing appropriate behavior.</td>
</tr>
<tr>
<td>Extinction (EXT)</td>
<td>Withdrawal or removal of reinforcers of interfering behavior in order to reduce the occurrence of that behavior. Although sometimes used as a single intervention practice, extinction often occurs in combination with functional behavior assessment, functional communication training, and differential reinforcement.</td>
</tr>
<tr>
<td>Functional behavior assessment (FBA)</td>
<td>Systematic collection of information about an interfering behavior designed to identify functional contingencies that support the behavior. FBA consists of describing interfering or problem behavior, identifying antecedent or consequent events that control the behavior, developing a hypothesis of the function of the behavior, and/or testing the hypothesis.</td>
</tr>
<tr>
<td>Functional communication training (FCT)</td>
<td>Replacement of interfering behavior that has a communication function with more appropriate communication that accomplishes the same function. FCT usually includes FBA, DRA, and/or EX.</td>
</tr>
<tr>
<td>Modeling (MD)</td>
<td>Demonstration of a desired target behavior that results in imitation of the behavior by the learner and that leads to acquisition of the imitated behavior. This EBP is often combined with other strategies such as prompting and reinforcement.</td>
</tr>
<tr>
<td>Naturalistic Intervention (NI)</td>
<td>Intervention strategies that occur within the typical setting/activities/routines in which the learner participates. Teachers/service providers establish the learner’s interest in a learning event through arrangement of the setting/activity/routine, provide necessary support for the learner to engage in the targeted behavior, elaborate on the behavior when it occurs, and/or arrange natural consequences for the targeted behavior or skills.</td>
</tr>
<tr>
<td>Parent-implemented intervention (PNI)</td>
<td>Parents provide individualized intervention to their child to improve/increase a wide variety of skills and/or reduce interfering behaviors. Parents learn to deliver interventions in their home and/or community through a structured parent training program.</td>
</tr>
<tr>
<td>Peer-mediated instruction and</td>
<td>Typically developing peers interact with and/or help children and youth with ASD to acquire new behavior, communication, and social skills by increasing social and learning opportunities within</td>
</tr>
</tbody>
</table>

Guidelines for Serving Students with ASD in Educational Environments
<table>
<thead>
<tr>
<th>Evidence-Based Practice</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>intervention (PMII)</td>
<td>natural environments. Teachers/service providers systematically teach peers strategies for engaging children and youth with ASD in positive and extended social interactions in both teacher-directed and learner-initiated activities.</td>
</tr>
<tr>
<td>Picture Exchange Communication System (PECS)</td>
<td>Learners are taught to give a picture of a desired item to communicative partner in exchange for the desired items. PECS consists of six phases which are: 1) “how” to communicate, 2) distance and persistence, 3) picture discrimination, 4) sentence structure, 5) responsive requesting, and 6) commenting.</td>
</tr>
<tr>
<td>Pivotal Response Training (PRT)</td>
<td>Pivotal learning variables (i.e., motivation, responding to multiple cues, self-management, and self-initiations) guide intervention practices that are implemented in settings that build on learner interests and initiative.</td>
</tr>
<tr>
<td>Prompting (PP)</td>
<td>Verbal, gestural, or physical assistance given to learners to assist them in acquiring or engaging in a targeted behavior or skill. Prompts are generally given by an adult or peer before or as a learner attempts to use a skill.</td>
</tr>
<tr>
<td>Reinforcement (R+)</td>
<td>An event, activity, or other circumstance occurring after a learner engages in a desired behavior that leads to the increased occurrence of the behavior in the future.</td>
</tr>
<tr>
<td>Response interruption/redirection (RIR)</td>
<td>Introduction of a prompt, comment, or other distracters when an interfering behavior is occurring that is designed to divert the learner’s attention away from the interfering behavior and results in its reduction.</td>
</tr>
<tr>
<td>Scripting (SC)</td>
<td>A verbal and/or written description about a specific skill or situation that serves as a model for the learner. Scripts are usually practiced repeatedly before the skill is used in the actual situation.</td>
</tr>
<tr>
<td>Self-management (SM)</td>
<td>Instruction focusing on learners discriminating between appropriate and inappropriate behaviors, accurately monitoring and recording their own behaviors, and rewarding themselves for behaving appropriately.</td>
</tr>
<tr>
<td>Social narratives (SN)</td>
<td>Narratives that describe social situations in some detail by highlighting relevant cues and offering examples of appropriate behaviors.</td>
</tr>
<tr>
<td>Evidence-Based Practice</td>
<td>Brief Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>Social skills training</strong> (SST)</td>
<td>Group or individual instruction designed to teach learners with ASD ways to appropriately interact with peers, adults, and other individuals. Most social skill meetings include instruction on basic concepts, role-playing, or social skills to promote positive interactions.</td>
</tr>
<tr>
<td><strong>Structured play group</strong> (SPG)</td>
<td>Small group activities characterized their occurrences in a defined area and with a defined activity, the specific selection of typically developing peers to be in the group, a clear delineation of theme and roles by adult leading, prompting, or scaffolding as needed to support students’ performance related to the goals of the activity.</td>
</tr>
<tr>
<td><strong>Task Analysis</strong> (TA)</td>
<td>A process in which an activity or behavior is divided into small, manageable steps in order to assess and teach the skill. Other practices, such as reinforcement, video modeling, or time delay, are often used to facilitate acquisition of the smaller steps.</td>
</tr>
<tr>
<td><strong>Technology-aided instruction and intervention</strong> (TAII)</td>
<td>Instruction or interventions in which technology is the central feature supporting the acquisition of a goal for the learner. Technology is defined as “any electronic item/equipment/application/or virtual network that is used intentionally to increase/maintain, and/or improve daily living, work/productivity, and recreation/leisure capabilities of adolescents with ASD” (Odom, Thompson, et al., 2103)</td>
</tr>
<tr>
<td><strong>Time delay</strong> (TD)</td>
<td>In a setting or activity in which a learner should engage in a behavior or skill, a brief delay occurs between the opportunity to use the skill and any additional instructions or prompts. The purpose of the time delay is to allow the learner to respond without having to receive a prompt and thus focuses on fading the use of prompts during instructional activities.</td>
</tr>
<tr>
<td><strong>Video modeling</strong> (VM)</td>
<td>A visual model of the targeted behavior or skill (typically in the behavior, communication, play or social domains), provided via video recording and display equipment to assist in learning in or engaging in a desired behavior or skill.</td>
</tr>
</tbody>
</table>
Visual support (VS)

Any visual display that supports the learner engaging in a desired behavior or skill independent of prompts. Examples of visual supports include pictures, written words, objects within the environment, arrangement of the environment or visual boundaries, schedules, maps, labels, organization systems and timelines.

For additional information on each evidence-based practice, visit the NPDC/ASD at: http://autismpdc.fpg.unc.edu/. Here you will find fact sheets on each of the practices listed in the table, as well as research supporting it as an evidence-based practice.
Appendix H: Classroom Accommodations for Students with ASD

Classroom Accommodations and Modifications for Students with ASD (VA DOE, 2011)

Pacing of Instruction:

- Allow short breaks between activities
- Modify workload or length of assignments
- Allow additional time for assignments
- Assign specific tasks with specific time period
- Vary activities
- Provide home set of text/material for preview/review
- Pre-teach material
- Avoid timed activities
- Break material into small parts (chunk information)

Environment:

- Provide preferential seating (classroom, lunchroom, bus, resources, auditorium, etc.)
- Provide specialized seating
- Alter room arrangement
- Define areas concretely (work, personal, materials, etc.)
- Reduce/minimize distractions: visual, auditory, spatial, movement
- Use study carrels or room dividers
- Use headsets or earphones
- Provide quiet corner/room
- Modify equipment
- Provide space for movements or breaks

Motivation and Reinforcement

- Provide verbal and nonverbal social reinforcement
- Provide tangible (item or activity) positive reinforcement
- Use token board
- Plan motivating sequences of events
- Offer choices
- Use varied reinforcement systems
- Provide noncontingent reinforcement
- Create a valued job/task

Socialization

- Train and use peer tutors
- Structure activities to create opportunities for social interactions
Guidelines for Serving Students with ASD in Educational Environments

- Use cooperative learning groups
- Alternate quiet and active time
- Provide circle of friends
- Provide peer buddies
- Provide counseling or social skills groups
- Teach about differences/disabilities
- Allow opportunities to help other students

**Behavior**

- Make expectations concrete and visual
- Use rule cards (picture or text)
- Provide visual cues for appropriate behavior
- Provide reinforcement
- Offer choices
- Provide breaks
- Use schedules
- Use timer
- Use behavior chart
- Use token board
- Use emotion/personal state indicator (e.g., thermometer, scale)

**Transition**

- Give notice, warning before change in activities
- Provide verbal and visual cues regarding transitions
- Use time or other indicator of termination of activity
- Use daily and mini schedules
- Utilize specific routine sequences
- Use rule cards (picture or text)
- Utilize transition item (e.g., small toy, gel ball)

**Materials**

- Rearrange material on a page
- Use taped texts and/or other class materials
- Highlight texts/study guides
- Color code materials
- Provide supplementary materials (e.g., additional book, pictures)
- Use large print
- Use assistive technology (AT) including special equipment, calculators, electronics, video recorders, software, web sites
- Use augmentative and alternative communication
Guidelines for Serving Students with ASD in Educational Environments

- Use manipulatives
- Use pictures

Testing

- Allow tests/projects to be taken orally
- Add pictures/visuals to test
- Read test to student
- Give applications in real setting
- Modify format (multiple choice, essay, true/false)
- Shorten length of test
- Extend time frame; allow untimed testing
- Modify grading
- Allow for oral responses
- Allow frequent breaks
- Allow open book or open notes tests
- Provide study guide prior to test
- Highlight key directions
- Give test in alternative site
- Allow calculator, word processor

Assignments

- Give directions in small, discrete steps
- Give directions in alternate formats (written, taped, pictures)
- Allow student to record or type assignments
- Adapt writing utensils
- Use wedges or clip boards
- Shorten length of assignment
- Reduce paper and pencil tasks
- Adapt worksheets/packets
- Change difficulty level of assignments
- Highlight response locations or directions on assignment
- Adapt assignment to accommodate use of large print
- Break assignment into smaller chunks
- Allow sensory breaks or provide sensory input
- Complete assignment in quiet location

Self- and Time Management

- Use visual daily and mini schedules
- Use calendars
- Provide agenda book
Guidelines for Serving Students with ASD in Educational Environments

- Provide checklists
- Use PDAs or smart phones for monitoring
- Provide visual cues for appropriate on-task behavior
- Use timer
- Break task or assignment into smaller parts
- Allow activity breaks
- Use long-term assignment timelines
- Follow routines or schedules
- Provide daily check-in with case manager, mentor, or special educator
- Use self-monitoring and self-management
- Use reinforcement
- Plan a motivating sequence of events

Presentation of Subject Matter

- Teach to student’s learning style: linguistic, logical/mathematics, musical, spatial, bodily/kinesthetic
- Tape lectures/discussion for replay
- Provide note-taking support
- Provide copy of lecture notes (peer or adult provide)
- Utilize manipulatives
- Highlight/underline critical information
- Pre-teach content
- Make/use vocabulary files
- Reduce language levels or reading levels of assignments
- Use visual sequences
- Use assistive technology (AT) including special equipment, calculators, electronics, video recorders, software, web sites
- Use augmentative and alternative communication
- Use cooperative learning groups
- Provide peer tutoring
- Utilize resource staff

Home Support/Homework

- Provide a second set of materials for home
- Provide parent training
- Use a home-school communication log
- Have parents preview or review materials
- Provide homework description
Appendix I: Optional Autism Emergency Contact Form

### Autism Emergency Contact Form

<table>
<thead>
<tr>
<th>Name of Child/Adult with Autism</th>
<th>Nickname (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Birth</td>
<td>Height</td>
</tr>
<tr>
<td></td>
<td>Weight</td>
</tr>
<tr>
<td></td>
<td>Eye Color</td>
</tr>
<tr>
<td></td>
<td>Hair Color</td>
</tr>
<tr>
<td></td>
<td>Scars or Identifying Marks</td>
</tr>
<tr>
<td></td>
<td>Address</td>
</tr>
<tr>
<td></td>
<td>City, State, Zip</td>
</tr>
<tr>
<td></td>
<td>Home Phone</td>
</tr>
<tr>
<td></td>
<td>Other Phone</td>
</tr>
</tbody>
</table>

**Medical Conditions**

**Method of Communication, if non-verbal: sign language, picture boards, written word, etc.**

**Identification Worm: (ex. Jewelry/Medic Alert®, clothing tags, ID card, tracking monitor, etc.)**

**Current Prescriptions (include dosage):**

<table>
<thead>
<tr>
<th>Sensory/Medical/Dietary issues and requirements, if any:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclination for wandering behaviors or characteristics that may attract attention:</td>
</tr>
<tr>
<td>Favorite attractions or locations where person may be found, if missing:</td>
</tr>
<tr>
<td>Likes/Dislikes (Include approach and de-escalation techniques):</td>
</tr>
</tbody>
</table>

**Medical Care Providers**

Name/Phone: ____________________
Name/Phone: ____________________
Name/Phone: ____________________

**Parent/Caregiver Info**

Name: ____________________
Address: ____________________
Home/Other Phone: ____________________
Other Contact Info: ____________________

**Emergency Contact Info**

Name: ____________________
Address: ____________________
Home/Other Phone: ____________________

**Please attach any additional information. Use extra paper if necessary.**

For additional information & tips, please go to www.AutismRiskManagement.com
Appendix J: Least Restrictive Environment & Placement Considerations

- LRE Flow Chart – Critical Factors to Consider
  - Placement in the LRE
  - Continuum of Alternative Placement
  - The Decision
Least Restrictive Environment
Critical factors to consider when determining LRE

Environment
- General Education
- Special Education
- Special Schools
- Home Education
- Hospital/Institution

Placement

Services
- Access to nondisabled peers
- Access to extra-curricular activities
- Related Services
- Assistive Technology
- Supplementary Aids & Services
- Accommodations & Modifications

Program
- Academic Skills
- Developmental Skills
- Functional Skills
- Job Skills
- Social Skills
- Life Skills
- On-going Assessment
- Leisure/Recreation
- Communication
- Employment

Combination of environments based on developmental and/or functional needs of

Consider potential harmful effects

Least Restrictive Environment
Placement in the Least Restrictive Environment (LRE)
Understanding and Making the Placement Decision

What is Placement?
It is the set of services and the type of environment, or the spot on the continuum of services, in which those services are delivered.

Who Makes the Placement Decision?
The student’s IEP team is the group who makes the decision. This requires an individualized inquiry into the student’s unique educational and related services needs.

When is the Placement Decision Made?
It is the last of a series of decisions made at the IEP meeting. It is made after goals, objectives/benchmarks, and instructional modifications are developed. The decision is based on those IEP elements.

What is the LRE Mandate in the IDEA with Respect to Making Placement Decisions?

- To the maximum extent possible, students with exceptionalities must be education in the regular classroom.
- Special classes, separate schooling, or other removal from the regular classroom occurs only when the nature or the severity of the educational exceptionality is such that education in the regular class cannot be satisfactorily achieved with appropriate aids and supports.
- Unless the student’s IEP requires some other kids of arrangement, the student attends the same school he or she would attend if not eligible for special educations services.
- Students with exceptionalities must be afforded the opportunity to participate in nonacademic and extracurricular services and activities along with their peers in regular education.
- Less restrictive placements must always be considered. However, where there is a reasonable likelihood that a student with an exceptionality can be educated in the regular classroom with the use of supplementary aids and supports, then that placement should be tried.
The Continuum of Alternative Placements

The continuum is a spectrum of placements where an IEP can be implemented. It ranges from less restrictive (from all regular education with monitoring services) to more restrictive (homebound), as well as placements between those two points as shown in the example below.

Example of a Continuum of Alternative Placements

Least Restrictive
- Regular education with weekly monitoring from a special education provider
- Regular education with daily consultation from a special education provider
- Regular education with special education services and supports included in that setting which are aligned with the general curriculum (utilizing such strategies as flexible groupings, universally-designed curriculum, overlapping curriculum, cooperative learning, peer tutoring, parallel or alternative instruction, team teaching)
- Regular education with special education services provided for part of the day in a resource room or a special education classroom
- Self-contained special education classroom
- Special day school (outside the school environment)
- Residential treatment facility
- Hospital
- Detention facility
- Homebound

Most Restrictive
The Decision . . .

When making the placement decision as an individualized inquiry, the IEP team should follow these steps.

- First, determine through the IEP process the student's educational needs. Determine what constitutes an appropriate program for the student, not where it will be provided or what pre-existing “program” fits best.

- Next, review the continuum of placement options on page 2 in sequence from least restrictive to most restrictive. Look at how each option currently exists, as well as how it might also be modified.

- Now start the decision-making process by examining regular classroom placement as the first option. Have a serious and thoughtful discussion about the three factors below.

1. Consider whether the student can be educated satisfactorily in the regular classroom with one or more of the following:
   - supplementary aids and supports
   - program and/or curriculum modifications
   - provision of an itinerant special education provider
   - assistance from a paraeducator
   - special education training for the regular education teacher
   - the use of assistive technology
   - the development and implementation of FBAs and BIPs designed to identify and meet the daily behavioral challenges presented by the student in the regular education classroom

2. Compare the benefits provided in the regular education classroom and those provided in a special education classroom or segregated setting.
   - Compare social and communication skills, as well as academic benefits.
   - Compare the relative benefits to the student.
   - Keep in mind that regular education classroom placement is not dependent on the student’s ability to learn the same things in the same way.
Appendix K: Listing of Resources and Links on Educating Students with ASD

North Dakota

North Dakota Autism Connection

http://www.ndautismconnection.org/

A Bismarck-based non-profit dedicated to providing a supportive network to unite families through education and awareness.

North Dakota Autism Center

http://ndautismcenter.org/

The mission of the North Dakota Autism Center is to help children affected by autism spectrum disorders (ASD) to reach their full potential through excellence in care, instruction and support.

North Dakota Department of Health and Human Services, Autism Services Unit

http://www.nd.gov/dhs/autism/

Provides information to parents and professionals on the state of service delivery and supports for those with ASD and their families.
National Association for Science in Autism Treatment – http://www.asatonline.org/. ASAT’s mission is to share accurate, scientifically sound information about autism and treatments for autism.

Autism Society of America - http://www.autism-society.org/. This is a grassroots autism organization, existing to improve the lives of all affected by autism. They try to do this by increasing public awareness about the day-to-day issues faced by people on the spectrum, advocating for appropriate services for individuals across the lifespan, and providing the latest information regarding treatment, education, research and advocacy.

Autism Speaks - http://www.autismspeaks.org/. An autism science and advocacy organization, it is dedicated to funding research into the causes, prevention, treatments and a cure for autism; increasing awareness of autism spectrum disorders; and advocating for the needs of individuals with autism and their families.


Division TEACCH - http://www.teacch.com/. Located at the University of North Carolina, Chapel Hill, the TEACCH Autism Program creates and cultivates the development of exemplary community-based services, training programs, and research to enhance the quality of life for individuals with ASD.

IDEAS that Work! - http://www.osepideasthatwork.org/. This web site is designed to provide easy access to information from research to practice initiatives funded by OSEP that address the provisions of IDEA and NCLB. This web site will include resources, links, and other important information that supports OSEP’s research to practice efforts. This site was created to provide a "one-stop shop" for resources related to IDEA and its implementing regulations, released on August 3, 2006. It is a "living" website and will change and grow as resources and information become available.

National Autism Center - http://www.nationalautismcenter.org/. A non-profit organization dedicated to serving children and youth with ASD by providing reliable information, promoting best practices, and offering comprehensive resources for families, practitioners, and communities.

National Dissemination Center for Children with Disabilities (NICHCY) - http://nichcy.org/. This organization serves the nation as a central source of information on: disabilities in infants, toddlers, children, and youth; IDEA, which is the law authorizing special education; No Child Left Behind (as it relates to children with disabilities); and research-based information on effective educational practices.

National Professional Development Center on Autism Spectrum Disorders (NPDC on ASD) - [http://autismpdc.fpg.unc.edu/](http://autismpdc.fpg.unc.edu/). This is a multi-university center to promote the use of evidence-based practice for children and adolescents with autism spectrum disorders.

Pathfinders for Autism- [http://www.pathfindersforautism.org/](http://www.pathfindersforautism.org/). A non-profit founded by parents of children with autism, dedicated to helping parents and professionals find resources, supports and training while working to increase awareness of ASD and advocating for individuals and families.

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References


End Notes

1 Adapted from Technical Assistance Advisory, SPED 2007-1: ASD, Massachusetts Department of Elementary and Secondary Education, 2006.
1 The Puzzle of Autism, NEA, 2006.
1 Adapted from Models of Best Practice in the Education of Students with Autism Spectrum Disorders, Virginia Department of Education, Office of Special Education and Student Services, 2011.
1 Ibid.