Students & Families › Special Communities

Special Education

Technical Assistance Advisory SPED 2007-1:
Autism Spectrum Disorder

To: Special Education Administrators and Other Interested Parties

From: Marcia Mittnacht, State Director of Special Education

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This advisory represents "best practice" guidance from the Department of Education to address a change to the special education law enacted in the spring of 2006 that affects special education programming for students with disabilities on the autism spectrum. The purpose of this advisory is to assist school districts and other interested parties in understanding these new requirements and in implementing best practices for meeting the needs of these students as schools resume instruction for the 2006-2007 school year. My appreciation is also extended to a number of individuals working closely with students on the autism spectrum and who are engaged in providing and promoting best practices for students with autism spectrum disorders on a daily basis. Contributions from these individuals provided much of the content in this advisory.

In July 2006, Chapter 57 of the Acts of 2006, entitled An Act To Address The Special Education Needs Of Children With Autism Spectrum Disorders, took effect. This law, which amends M.G.L. c. 71B, § 3 (http://www.mass.gov/legis/laws/mgl/71b-3.htm), requires that IEP Teams consider and address in the IEP discussion certain specific needs of students with disabilities on the autism spectrum. The full text of Chapter 57 is as follows:

SECTION 1. Chapter 71B, Section 3 of the General Laws is hereby amended by inserting at the end of paragraph six the following sentence:

Whenever an evaluation indicates that a child has a disability on the autism spectrum, which includes autistic disorder [autism], Asperger's disorder, pervasive developmental disorder not otherwise specified, childhood disintegrative disorder, and Rhett's Syndrome as defined in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV, 2000), the IEP Team shall consider and shall specifically address the following: the verbal and nonverbal communication needs of the child; the need to develop social interaction skills and proficiencies; the needs resulting from the child's unusual responses to sensory experiences; the needs resulting from resistance to environmental change or change in daily routines; the needs resulting from engagement in repetitive activities and stereotyped movements; the need for any positive behavioral interventions, strategies, and supports to address any behavioral difficulties resulting from autism spectrum disorder; and other needs resulting from the child's disability that impact progress in the general curriculum, including social and emotional development.

The purpose of this advisory is to provide guidance on the ways that the Individual Education Program (IEP) Team may effectively frame complete and thorough discussions of the strengths and needs of a student with Autism Spectrum Disorder (ASD). While Chapter 57 does not increase documentation requirements, it describes specific areas of review and requires the Team to comprehensively discuss students' needs that are consistent with best practices for addressing the needs of students diagnosed with ASD. This advisory is intended to offer information and guidance to supplement the IEP process.

Both federal and state law define "autism" as a disability inclusive of each of the diagnoses on the autism spectrum, and these diagnoses are identified in Chapter 57. The IEP of an eligible student with a documented disability on the autism spectrum should identify the disability category of autism to ensure that the IEP Team considers all areas of development that are affected by ASD. However, it is also important to note that some students with an autism spectrum disorder have one or more other disabilities and may have a primary disability other than autism; these students also have the right to a full discussion of the impact of their autism spectrum disorder in the development of their IEP, therefore we recommend that if a student has an ASD, it is identified on the student’s IEP whether or not it is considered the primary disability.

The IEP Team is responsible for designing intervention, education and instruction to meet the individual needs of students with ASD. As described in Chapter 57, the IEP Team must consider and address seven specific areas of need when developing the IEP for a student with ASD. Although each focus area described in the law is addressed separately in this technical assistance advisory, the Department understands that the Team will consider the student’s needs in an interactive, comprehensive manner across areas. This guidance is intended to inform the Team's discussion of the student’s needs and to facilitate the creation of an appropriate educational program for the student.

- **The verbal and nonverbal communication needs of the student:** Impairment in communication is one of the defining characteristics of ASD; therefore communication skill development should be addressed as an essential piece of the student’s IEP. When considering the verbal and nonverbal communication needs of a student with ASD, the Team should review:
  
  - the student’s current level of communication,
  - the system of communication most effective for the student,
  - the functions for which the student uses and understands language,
  - the student's ability to use and understand non-verbal communication (e.g., eye gaze, facial expression, gesture), and
  - any emerging communication skills reported by the family or other Team members.

The IEP must include information about the student’s current strengths with communication modalities, skills that need further development and the specific supports and interventions necessary to increase the student’s ability to effectively communicate and understand others. Alternative augmentative communication (AAC) is often effective for students with ASD who are non-verbal. AAC can be used in lieu of, or in combination with, oral communication. There are many products on the market that support AAC including picture communication products, book boards, and touch devices. Assistive technology assessments are useful for determining whether a student would benefit from using an AAC system. When evaluating a student with ASD, the instrument must be appropriate to the student’s mode of communication (e.g., using non-verbal scales for students who do not use oral communication).

- **The need to develop social interaction skills and proficiencies:** In the most severe expression of qualitative impairments in this area, a student with ASD may seem distant or avoidant when it comes to social interactions, even those with immediate family members. In the least severe cases, s/he may appear to frequently misunderstand the social situation and/or be unable to maintain a conversation on a subject other than his/her high interest topics. A young student with ASD may have a lack of variation in spontaneous or social imitative play, or may have unusual play with toys (e.g. lining up video cases end to end). When examining a student with ASD’s needs in the area of social skill development, the Team should consider:
  
  - the student's ability to respond appropriately to the social approach of others,
  - the types of social interactions the student is capable of initiating,
  - the student's pragmatic language skills, and
  - anecdotal information about the student's abilities within small and large group settings and in typical activities for students of that age.

For students with ASD, social interaction skills are largely associated with the ability to communicate within a situation. The IEP Team should determine if a social impairment is the result of a language deficit.
Impairments in social interaction may be mistaken for behavior problems in students with ASD. A functional assessment is useful for identifying factors that affect the student’s social proficiencies. Where behavior plans are warranted, they should include the teaching of new social skills to prevent the occurrence of inappropriate behaviors serving a similar function.

Progress in social skill development is a likely focus within the IEP of every student with ASD. Social skills instruction should be at the student’s skill level and appropriate for his/her age (e.g., “pull out” instruction in high school may be stigmatizing to the student). Collecting and analyzing data on the student’s social proficiencies will assist in the development of his/her IEP goals.

- The needs resulting from the student’s unusual responses to sensory experiences: The IEP Team should consider whether a student with ASD exhibits under- or over-sensitivity to particular stimuli. The following questions may be helpful in addressing this area:

**Tactile:** Does the student with ASD demonstrate a lack of awareness to his/her body in space, and/or a need for a higher level of input in tactile experiences? For example, does s/he "crash" into the playground fence during a running game or regularly "bump" into peers in line? Conversely, does s/he become loud and upset when presented with playdough or a mixed-texture food item, or wear only "tagless" clothing?

**Visual:** Is the student’s eye gaze avoidant of, or fixated on, particular sights? For instance, is s/he drawn to certain objects, such as a shiny item of clothing, needing to stare at or touch it? Does s/he avoid looking at a particular sight, for instance the flickering of a video screen? Or, do certain visual stimuli excite him/her to increase their movement (e.g., jump or run) or cause a fear response?

**Sound:** How does the student with ASD respond to auditory events? Does s/he have significant responses to sound volume, pitch, tone or intensity that others may not hear (e.g., the hum of fluorescent lighting)? Does s/he appear deaf because of a lack of response to loud noises or the calling of his/her name? Do loud or quiet sounds, echoes, or a particular pitch enthrall or bother him/her?

**Smell/Taste:** Does the student with ASD respond in an atypical fashion to olfactory events or tastes? Does s/he have significant responses to environmental smells or tastes that interfere with appropriate activities and focus in the educational environment? Does s/he smell or taste objects in the environment with unusual frequency or in unusual circumstances? Do certain smells or tastes upset the student with an ASD or appear to cause him/her to act in an unusual fashion (e.g. becoming loud or upset when a teacher wears a certain perfume?)

The Team should consider all elements of the student’s environment and note any specific environmental modifications or accommodations that are necessary for participation and effective progress in the general education curriculum. Frequently family members are a valuable source of information on the student’s unusual responses to sensory experiences. Additionally, functional behavioral assessments and sensory integration assessments can be useful to the Team’s discussion.

- The needs resulting from resistance to environmental change or change in daily routines:

Students with ASD often have unusual or intense responses to a change in their environment such as moving the location of a piece of classroom furniture, or a change in daily routine even when part of a familiar schedule. Preparing for transition with visual supports, timers and verbal reminders often helps to ease the students transition and promote greater success, flexibility, and independence. Visual supports are evidence-based strategies for supporting a student with ASD in managing change and transition. Providing a preview before initiating change in an environment or schedule can support a student with ASD to be able to adjust to the change. A visual schedule can teach the student to rely on written (or pictorial or object schedule) information to manage moving between activities and it allows the student to anticipate change and rely less on a rigid memory of the order in which events occur. Even the most capable of students with ASD would benefit from using a visual schedule to manage the activities of the day, to reduce anxiety, and allow the student to better focus on the important activities within each day, rather than on their sequence.
The Team must consider the most successful modality for communicating the coming change or transition. The IEP Team is encouraged to consider the use of a schedule and other visual supports when working to address the needs resulting from a student’s resistance to environmental change or change in daily routines, as well as to consider other evidence-based methods for introducing new content to the student.

- **The needs resulting from engagement in repetitive activities and stereotyped movements:**
  Students with ASD may exhibit ritualistic behaviors or repetitive phrases in physical activities and in verbal exchanges. For instance:
  
  - Preoccupation with one or more restricted and stereotyped patterns of interest that is atypical either in intensity or focus (e.g., knowing and reviewing the schedule of nationwide trains).
  - Inflexible adherence to specific nonfunctional routines or rituals (e.g., repeating all answers 3 times) or a need to follow the same routine or sequence when completing tasks (e.g., tapping a spoon on the table between each mouth full of yogurt).
  - Stereotyped/repetitive motor mannerisms (e.g., hand flapping) or a persistent preoccupation with parts of objects (e.g., fixating on the wheels of toy car).

The Team should consider their function and the extent to which these activities interfere with engagement in other, more appropriate, activities such as socialization or academic lessons. Informal observation and/or formal daily data collection (for more significant behaviors) may be used. This information will assist the Team in determining how and when to allow and/or modify the behavior within a student’s day. As appropriate, Teams should consider using positive behavior supports to encourage participation in learning and other activities. Depending on the nature of the behavior, practices for addressing engagement in repetitive activities and stereotyped movements may include:

  - Modifying an interfering behavior to be more socially acceptable (such as modifying a behavior of constantly shaking hands to occur only when introduced to a person).
  - Teaching the student appropriate "replacement behaviors" that will lead to more interest or "on task" behavior in academic learning.
  - Teaching the student appropriate "replacement behaviors" that will enhance increased and appropriate participation in social activities with peers.
  - Providing the student with frequent breaks in the form of motivating and pleasant sensory activities.
  - Having sensory therapies take place in the classroom when it is compatible with the learning activity and does not take away the student's focus from learning, in order to decrease frequency in high rates of repetitive movement.
  - Using special equipment to reduce frequency of movement such as a cushion for the student to sit on during group reading time in order to decrease rocking behavior.
  - Developing curriculum activities around the student's topic of interest and slowly expanding the student's interest to involve other topics.

Reinforcement strategies should also be considered in order to reduce frequency of activities or movements and as an accompaniment to replacement behaviors. Data should be used to determine the reinforcement rate and monitor effectiveness of the intervention strategy. The plan to address concerns in this area should be described within the student's IEP.

- **The need for any positive behavioral interventions, strategies, and supports to address any behavioral difficulties resulting from autism spectrum disorder:** Because of the complex developmental, learning and adaptive needs of students on the autism spectrum, they often exhibit behaviors that are challenging in their intensity, frequency, or interference with engagement in appropriate activities. The IEP Team should consider and discuss the need for a functional behavioral assessment (FBA) of the student's behavior(s). The intensity level of the FBA should match that of the presenting problem behavior. For a behavior that has a relatively clear pattern, an FBA can be completed by obtaining
some simple frequency data and antecedent-behavior-consequence information. Significant repetitive behaviors (such as hand flapping or rocking) or self-injurious behaviors warrant a full functional behavioral assessment to determine the reason for, and function of, the behavior and possible alternatives to it. It is important to use the assessment data to determine why the behavior is occurring. Knowing the function that the behavior serves will help the Team determine whether positive behavior interventions, strategies and supports are necessary, and which replacement behaviors are appropriate for reducing or eliminating the interfering problem behavior. The Team should select the least amount of intervention that is likely to be effective, efficient, and produce the minimum unwanted effects. (e.g., ignore a behavior rather than issue a "time out"). Given the characteristic combination of social, communication and behavior challenges exhibited by students with ASD, a well-written and appropriately implemented behavior intervention plan is an essential piece of many IEPs.

- **Other needs resulting from the student's disability that impact progress in the general curriculum, including social and emotional development:** A student with ASD often exhibits deficits in executive function, the ability to organize and the ability to generalize learned skills into other environments/activities or functional routines. The student may have a tendency to perseverate or over-focus on unimportant features, which may distract him or her from the learning of the "whole". The IEP Team should consider whether there is a need to provide structure in the student's classroom environment and learning activities, including but not limited to:
  
  - intervention strategies for social skill development (self-advocacy, peer interaction);
  - reviewing classroom and individual expectations;
  - organizational supports (including visual organizers such as color coded folders and organized environments so that the environment has limited distraction factors);
  - previewing information;
  - direct instruction in order to learn new skills or to generalize learned skills; and
  - repeated instruction and practice in multiple environments with a variety of materials and people, in order to master a single skill.

Quite often a student with ASD has a visual learning style that can be used to help accomplish new tasks and learn new skills. Schools can also use this strength to assist students with ASD to move toward independent individual success.

The Department acknowledges the challenges faced by schools and families when seeking to provide appropriate educational experiences for students with ASD. The Department recommends pre-service as well as ongoing in-service training for all teachers and school staff who are working with students who have a disability on the autism spectrum. Partnership and sharing of training information with families are best practices for supporting these students in making effective progress. It is our belief that well-framed discussions on the topics addressed in Chapter 57 and in this technical assistance advisory will support positive relationships between schools and families and ensure positive outcomes for students with ASD.

Thank you for your attention to this advisory and for your work on behalf of students with disabilities in the Commonwealth.

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*Massachusetts Department of Education*