Educating Students with Autism

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A Child’s Right to Public Education

Every child has the right to a free appropriate education. The Individuals with Disabilities Education Act (IDEA) enacted in 1975, mandates a public education for all eligible children and the school’s responsibility for providing the supports and services that will allow this to happen. IDEA was most recently revised in 2004 (and, in fact, renamed the Individuals with Disabilities Education Improvement Act, but most people still refer to it as IDEA). The law mandates that the state provide an eligible child with a free appropriate public education that meets his unique individual needs. IDEA specifies that children with various disabilities, including autism, be entitled to early intervention services and special education. The IDEA legislation has established an important team approach and a role for parents as equal partners in the planning for an individual child, and promotes an education in the least restrictive environment.

In addition to the IDEA stipulations, the Americans with Disabilities Act of 1990 (ADA) sets forth, as a civil right, protections and provisions for equal access to education for anyone with a disability. Section 504 of the Rehabilitation Act of 1973 is another civil rights law that prohibits discrimination on the basis of disability in programs and activities, public and private, that receive federal financial assistance. Generally, the individuals protected by these laws include anyone with a physical or mental impairment that substantially limits one or more life activities.

Free Appropriate Public Education (FAPE)

IDEA provides for a “free appropriate public education” for all children with disabilities. Each child is entitled to an education that is tailored to his special needs and a placement that will allow him to make reasonable educational progress, at no cost to his family.

Least Restrictive Environment (LRE)

IDEA provides that students with disabilities are entitled to experience the “least restrictive environment.” School districts are required to educate students with disabilities in regular classrooms with non-disabled peers, in the school they would attend if not disabled, to the maximum extent appropriate, supported with the aids and services required to make this possible. This does not mean that every student has to be in a general education classroom. The objective is to place students in as natural a learning environment as possible, within their home community, as much as possible. The members of the IEP team - considering a variety of issues - make this decision and the LRE for a student may change over time.

Participation of students with autism in the general education environment is often called mainstreaming or inclusion. Inclusion does not mean placing a student with autism in general education just like a typical learner; a variety of supports are provided to create a successful environment and experience for everyone involved. Careful planning and training are essential to provide the right modifications and accommodations. Supports
might include a specially trained classroom or one-on-one paraprofessional, altering testing environments or expectations, adapting curriculum, visual supports or adaptive equipment, etc. The special education department should support general education staff and others in the school community who interact with students with autism.

Philosophies about inclusion vary considerably, among school districts, staff and parents of students with and without special needs. IDEA provides for a team approach to planning and placement decisions so that the objectives of all members of the team can be considered.

Not all parents will feel that a mainstream environment will meet the needs of their student with autism, nor will all students will be ready for full inclusion, all of the time. Anxiety and sensory issues related to inclusion may mean that the student should start with small and successful increments, and build to longer periods of increasing participation in the general education environment.

The less restrictive a student's setting, the greater the opportunities for a child with autism to interact with the school population outside the special education environment – this means support staff, general education and special area teachers, office staff, custodians and most importantly, peers, who are not necessarily knowledgeable about autism. Autism Speaks has created this tool kit to provide better understanding, perspective and strategies so that every member of the school community can feel empowered and benefit.

**Special Education Services**

Special education services pick up where early intervention services for young children leave off, at age 3, and continue through age 21 for students who qualify. The school district generally provides these services through the special education department, based on an assessment and planning process that includes a team of experts and intervention providers and the child’s parents.

The document that spells out the student’s needs and how they will be met is the Individualized Education Program (IEP). The IEP describes a student’s strengths and weaknesses, sets measurable goals and objectives for the student, and provides details about the supports and accommodations that will be used to meet them.

For students who do not qualify for special education services, but still have a disability that requires support, accommodations or protections afforded under the Rehabilitation Act are developed through a school team and often compiled in a document that is referred to as a Section 504 Plan.
Instructional Methods in teaching students with autism

Educating students with autism is usually an intensive undertaking, involving a team of professionals and many hours each week of different instruction and therapies to address a student’s behavioral, developmental, social and/or academic needs. Students with autism often require explicit teaching across a variety of settings to generalize skills.

Most school classrooms incorporate elements of several established approaches. It is important for schools to evaluate prospective interventions for a student on an individualized basis, as well as keep in mind the need to use evidence-based methods and strategies. No single intervention has been proven effective for every individual with autism.

Some of the intensive interventions developed for autism and employed in home programs and special education are listed below. For more in-depth information and links related to therapeutic interventions, please consult the Resources section of this kit, Autism Speaks resources page and the National Education Association’s The Puzzle of Autism.

Applied Behavior Analysis (ABA)

ABA is the name of the systematic approach to the assessment and evaluation of behavior, and the application of interventions that alter behavior.

The principles of analyzing behavior to understand its function, controlling the environment and interactions prior to a behavior (antecedents) and adjusting responses (consequences), and using positive reinforcement (rewarding what you want to see) are all ABA techniques that are often used in shaping behavior in individuals with autism. Many programs use the principles of ABA as a primary teaching method, or as a way of promoting positive and adaptive behavior.

Additional teaching methods often used with students with autism?

Discrete Trial Teaching (DTT) or the Lovaas Model:

Named for its pioneer (ABA-based) Teacher-directed DTT targets skills and behaviors based on an established curriculum. Each skill is broken down into small steps, and taught using prompts, which are gradually eliminated as the steps are mastered. The child is given repeated opportunities to learn and practice each step in a variety of settings. Each time the child achieves the desired result, he receives positive reinforcement, such as verbal praise or something that he finds to be highly motivating.
Floortime, or Difference Relationship Model (DIR):

The premise of Floortime is that an adult can help a child expand his circles of communication by meeting him at his developmental level and building on his strengths. Therapy is often incorporated into play activities – on the floor – and focuses on developing interest in the world, communication and emotional thinking by following the child’s lead.

Picture Exchange Communication System (PECS):

The PECS system allows children with little or no verbal ability to communicate using pictures. An adult helps the child build a vocabulary and articulate desires, observations or feelings by using pictures consistently. It starts with teaching the child to exchange a picture for an object. Eventually, the individual learns to distinguish between pictures and symbols and use these to form sentences. Although PECS is based on visual tools, verbal reinforcement is a major component and verbal communication is encouraged.

Pivotal Response Treatment (PRT)

(ABA-based) PRT is a child-directed intervention that focuses on critical, or “pivotal,” behaviors that affect a wide range of behaviors. The primary pivotal behaviors are motivation and child’s initiations of communications with others. The goal of PRT is to produce positive changes in the pivotal behaviors, leading to improvement in communication, play and social behaviors and the child’s ability to monitor his own behavior. Child-directed intervention

Relationship Development Intervention (RDI)

RDI seeks to improve the individual’s long-term quality of life by helping him improve social skills, adaptability and self-awareness through a systematic approach to building emotional, social and relational skills.

Social Communication/Emotional Regulation/Transactional Support (SCERTS)

SCERTS uses practices from other approaches (PRT, TEACCH, Floortime and RDI), and promotes child-initiated communication in everyday activities and the ability to learn and spontaneously apply functional and relevant skills in a variety of settings and with a variety of partners. The SCERTS model favors having children learn with and from peers who provide good social and language models in inclusive settings as much as possible.

Training and Education of Autistic and Related Communication Handicapped Children (TEACCH)

TEACCH is a special education program using Structured Teaching, a process designed to capitalize on the relative strength and preference for processing information visually in individuals with autism, while taking into account the recognized difficulties. Individualized assessment and planning is used to create a highly structured environment (organized with visual supports) to help the individual map out activities and work independently.

Verbal Behavior (VB)

(ABA-based) VB employs specific behavioral research on the development of language and is designed to motivate a child to learn language by developing a connection between a word and its value.
Therapies Used For Students with Autism

Many students will be eligible the following services, usually termed Related Services on the IEP. Since difficulties in these areas affect so much of a student’s life and function, coordination with these service providers and the rest of the team is critical to build and generalize targeted skills across settings. While these services are often provided as pull-out therapies, they may be more effective provided in more natural settings as both therapy for the student with autism and training opportunities for the school community (e.g. conversational speech goals might be targeted during a student’s lunch period, when daily support staff and peers could be trained in techniques to be used on a daily basis to achieve objectives much faster and more naturally.)

Students with autism often require supports in the home and community, so coordination of care and comprehensive wrap around services are often needed.

**Occupational Therapy (OT)**

A Certified Occupational Therapist, (OT) brings together cognitive, physical and motor skills to enable the individual to gain independence and participate more fully in life. For a student with autism, the focus may be on appropriate play, fine motor and basic social and life skills such as handwriting, independent dressing, feeding, grooming and use of the toilet. The OT can recommend strategies for learning key tasks to practice in various settings.

**Physical Therapy (PT)**

A Certified Physical Therapist (PT), focuses on problems with movement that cause functional limitations. Students with autism frequently have challenges with motor skills such as sitting, walking, running and jumping, and PT can also address poor muscle tone, balance and coordination. An evaluation establishes the abilities and developmental level of the child, and activities or supports are designed to target areas of need.

**Sensory Integration Therapy (SI)**

(SI) therapy addresses disruptions in the way an individual’s brain processes sensory input, developing strategies to help process these senses in a more productive way. A sensory integration-trained OT or PT begins with an evaluation, and then uses research-based strategies to plan an individualized program for the child, matching sensory stimulation with physical movement to improve how the brain processes and organizes sensory information.

**Speech-Language Therapy (SLT)**

Certified Speech-Language Pathologists (SLP) use a variety of techniques to address a range of challenges for children with autism. SLT is designed to address the mechanics of speech and the meaning and social value of language. For students unable to speak, SLT includes training in other forms of communication, or oral exercises to promote better control of the mouth. For those who seem to talk incessantly about a certain topic, SLT might work on expanding the conversational repertoire, or reading social cues and adjusting conversation to the needs of the listener. An SLT program begins with an evaluation by an SLP and therapy may be conducted one-on-one, in a small group or in classroom/natural settings.
**Assistive Technologies Used For Students with Autism**

Assistive Technology (AT) is any item, piece of equipment, or product system that is used by a person with a disability to perform specific tasks, improve functional capabilities and become more independent. Assistive technology for students with autism is constantly evolving and can redefine what is possible for students with a wide range of cognitive, physical or sensory disabilities.

Smart phones and Apple iDevices (iPad, iTouch, iPhone) have become increasingly popular because of the wide variety of applications (‘apps’) available to support a wide variety of needs. It is important to look carefully at the student’s needs in advance of putting devices and apps in use. Different apps will be used for different purposes, including communication, literacy, development, modeling and motivation and organization.

According to Vicki Clark MS, CCC-SLP, many students with autism will use an Apple iDevice to “find something they can control on which to focus their attention and drown out all of the confusing input around them.”

“Beyond simply a distraction or calming device, the iPad has application in teaching skills, just like the computer has in the past. There are apps for teaching reading, apps for teaching social skills, apps for teaching vocabulary and apps for communication. Careful selection can give children a doorway to improved comprehension, expression and skill-development.”

For students with severe communication difficulties, a specialized speech generating device or a device with a speech-generating app may be highly effective.

According to Clark, “Specific needs of the child need to be the main deciding factor on purchasing any technology. When deciding on technology options, teams must consider the individual needs of the child (including sensory, physical, social and communicative issues) partner characteristics and needs, and the environmental demands.”

The Autism Speaks Autism Apps Library (http://www.autismspeaks.org/autism-apps) provides a list of recommended apps to consider for teaching communication, language, reading, math, functional skills, behavioral intervention, organization, and social skills.
The Team Approach to Educating Students with Autism

Each member of the team brings a unique perspective and set of observations and skills, all of which are helpful in assisting a student with complex and variable needs. It is important to employ the knowledge and perspective of the family, since they offer another valuable and longitudinal view. Just as the symptoms of autism vary across children, so will the knowledge bases and coping skills of the parents and siblings. Parents can contribute information and a history of successful (and unsuccessful) strategies, and may also benefit from information on strategies and successes at school that can help to extend learning into the home setting. A positive and collaborative relationship with the family is beneficial to everyone.

Supports that work in a specific classroom can be shared with other teachers or support staff, to promote the behavioral, communication and social growth being targeted. Community based personnel, such as a private psychologist, vocational-rehabilitation counselor or wraparound service coordinator, can offer information, resource options and perspective to support the team’s efforts.

Share what works and problem-solve what does not with the entire team. Repetition and reinforcement across settings help to generalize skills and build competence faster, resulting in success for the staff as well as the student. Reassess the effectiveness of interventions, collecting and analyzing data. See Data Collection.

Thinking of each student as an individual is critical in providing appropriate support and growth. For example, while compassionate peers who want to help develop his speaking ability may support a young child with autism, peers or educators who are not familiar with his specific challenges may not provide a high-functioning, verbally proficient adolescent the same compassionate allowances. What represents perfect support for a first grader is likely to be grossly out of place for a high school student, so it is important to support the development of age appropriate interests and raise expectations towards independence and peer-level behavior as much as possible.

Establish appropriate expectations for growth and competence. Support the student in his learning and help him build skills and independence. It is often the well-meaning tendency for support staff to take on the everyday tasks for a student with autism - to speak for the student, tie his shoes, walk him to class, turn in his paper. While this might keep the student on pace with the activities of the surrounding class and seem supportive at the time, in the long run the student has not learned to perform the activities of daily life for himself. Building competencies requires patience, setting priorities and establishing small goals to reach the desired outcome. Ensure that the mindset of the team is committed to teaching, as opposed to care giving, and expect to be surprised, impressed and rewarded by all that a student can do.

Meet the student where he is. For each of the skill areas that need to be addressed with a student with autism, develop an understanding of the individual’s current ability, and build from that level. This approach applies to social and communication issues as well as academics. Understand where a student is and problem solve what is impeding progress from that point, then develop the teachable, scaffolding steps that will help him move forward.
Motivation is critical to attention and learning. Know what motivates a particular student, being aware that this may be very different from what motivates a typical child. Use his interests to focus attention to a less interesting or non-preferred activity (e.g. for a student who dislikes word problems but loves dinosaurs, create word problems that add triceratops or multiply the food requirements of a brachiosaurus) and embed preferred activities as naturally as possible. As a student becomes familiar and more competent with new skills, confidence, interest and motivation increase.

As a student with autism works to change behaviors or learn difficult skills, it is essential that the reward for this effort be substantial enough for him to extend this effort. In many instances, even if there is something inherently motivating about a task or activity, it is necessary to shape behavior by making small changes at a time and utilizing reinforcement strategies - social reinforcement (such as praise or a high five), as well as concrete reinforcement (such as a favorite activity, toy or food item). The reward for learning a new skill or decreasing a maladaptive behavior needs to have more value than the reinforcement for not developing the replacement behavior. Token economy systems can be extremely effective and reinforcement can be faded over time to decreasing frequency or more naturalistic social rewards. See Positive Behavior Support and Reinforcement Strategies.