West Virginia **Department of** EDUCATION

# Autism Spectrum Disorders:
## Services in WV Schools

Office of Special Programs

West Virginia Department of Education

# Autism Spectrum Disorders: Services in West Virginia Schools

## *Guidelines for Best Practices*

WEST VIRGINIA DEPARTMENT OF EDUCATION
Office of Special Programs

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## *FOREWORD*

Students in West Virginia deserve an education to meet their unique needs in a school with great teachers and staff. Students who are on the Autism Spectrum are no different. However, students with Autism Spectrum Disorders bring with them many challenges and issues that need addressed while they are in school.

This guidance document provides a resource for parents and staff who work with students on the Autism Spectrum, incorporating both state and federal regulations and best practices in the field of Autism. The information in this document will assist parents, special education directors, administrators and teachers as they facilitate services in their schools to meet the needs of students and to prepare students as 21st century learners.

I want for all West Virginia students the same things I wanted for my own now grown children. This includes developing students who are healthy, responsible and self-directed and who have the knowledge and Global21 skills that will bring them satisfying and productive lives. All actions must foster "Good Kids Doing Great Work." Those are the expectations I hope all West Virginians have for all of the students in our schools. It is my hope that this manual will provide some needed guidance in educating students on the Autism Spectrum.

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State Superintendent of Schools

# AUTISM SPECTRUM DISORDERS:  SERVICES IN WEST VIRGINIA SCHOOLS

*Guidelines for Best Practices*

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# AUTISM SPECTRUM DISORDERS:  SERVICES IN WEST VIRGINIA SCHOOLS

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## INTRODUCTION

We know more today than ever before about autism spectrum disorders. Research continues to uncover more and more information about autism, including possible causes. (Center for Disease Control and Prevention, 2011). As a result, greater attention is being devoted to early diagnosis, early intervention and the development of educational strategies for the many learning differences of children with autism spectrum disorders.

Researchers and other professionals are now able to provide more information about the characteristics and diagnostic criteria of autism spectrum disorders and are better able to provide researched-based recommendations to those who work with children and youth with autism spectrum disorders. Nonetheless, determining effective educational interventions remains multifaceted and complex to many involved on a day-to-day basis with children and youth on the autism spectrum.

Parents, teachers, speech-language pathologists, school psychologists and other specialists involved in the educational aspects of autism spectrum disorders, want and need to know how best to enable individuals with autism to reach their potential. This requires that each learn how to utilize existing "best practices" information to meet potential overlapping needs of this group as a whole, but not at the expense of addressing the very individual needs of each student with an autism spectrum diagnosis. Indeed it is critical to understand that while there may be similarities, **no two children have identical needs.**

**References:**

Center for Disease Control and Prevention. (March 25, 2011). Autism Information Center.  Department of Health and Human Services. Accessed April 5, 2011 from website. http://www.cdc.gov/ncbddd/autism/index.html

# AUTISM SPECTRUM DISORDERS: SERVICES IN WEST VIRGINIA SCHOOLS

*Getting Started: Strategies for Parents*

## *Purpose*

The purpose of this guidance document is to: 1) provide education related information about autism spectrum disorders; and 2) assist Individualized Education Program (IEP) Teams, including parents, develop researched-based educational programs for children and youth who qualify for special education services under the autism disability category.

This guidance document will address the following questions:

- What steps should parents take first when their child is diagnosed with an autism spectrum disorder?

- What are autism spectrum disorders (ASD)?

- What are the indicators of an appropriate educational program for a student with ASD?

- What are the various methodologies or intervention strategies available to parents and educators working with a student with ASD?

- Where can parents and educators find additional information on autism spectrum disorders?

Please note, this guidance document is not designed to answer every question about ASD. Instead its purpose is to provide a variety of practical education related information, from a range of sources, to families and educators about autism spectrum disorders. Like any child receiving special education services, keys to determining appropriate educational services for the student with an ASD are ongoing identification of the student's needs and provision of an individualized educational program designed specifically to meet those needs.

***Regardless of shared diagnosis, no two children have identical needs.***

**References:**

Center for Disease Control and Prevention. (March 25, 2011). Autism Information Center. Department of Health and Human Services. Accessed April 5, 2011 from website. http://www.cdc.gov/ncbddd/autism/index.html

## *Getting Started: Strategies for Parents*

An ASD diagnosis carries with it a wide range of reactions and feelings for the parents and family members of the child. Among these are denial, guilt, anger, fear and confusion. It is important to remember you are not alone. Recognize these feelings, if you experience them and realize you can work through them as you begin to learn more about your child's diagnosis and the many ways you can meet the challenges you face.

The Indiana Resource Center for Autism (IRCA) suggests the following strategies when first told of your child's ASD diagnosis.

**Strategy 1:** Learn as much as possible about autism spectrum disorders, especially your child's particular diagnosis and how it affects your child.

The West Virginia Department of Education, Office of Special Programs (OSP), funds The West Virginia Autism Collaborative Community of Practice (WVACCoP). This is a good place to start!

The West Virginia Autism Collaborative Community of Practice (WVACCoP) is a statewide project which coordinates staff development and parent/community training to support services for children and youth with autism spectrum disorders.

Available resources/services:

- Information on educational interventions and links to national and local resources related to autism spectrum disorders.

- Staff who respond to questions and provide resource information about parent support groups and associations, autism consultants, recreational opportunities, government services, medical providers, higher education, research, early intervention, educational interventions and training opportunities.

**Website: http://wvde.state.wv.us/osp/autism.html**
**Email:  wvosp@access.k12.wv.us**

- Toll free telephone number  (1-800-642-8541)

**Strategy 2:** Learn as much as possible about the laws, government service, therapies and the array of educational approaches, as well as the medical and educational terms and various acronyms related to autism spectrum disorders.

 Remember:

- Other families and professionals have been down this road and can help unravel the web of laws, agencies, services and resources. A list of resources is provided at the end of this guidance document that will help you locate national, state and local resources.

- Support groups for families of children with disabilities also exist in many locales. They can assist in identifying types and availability of services in your area. They can also provide comfort, acceptance, support and understanding of issues as your child progresses through each stage of life.  Even if you choose not to actively belong to a support group, making an initial contact can provide valuable information.

**Strategy 3:** Learn how best to participate in important decisions related to your child's education, whatever the age of your child. Children with autism spectrum disorders can and do learn!

Note the following about your child's education:

- The Individuals with Disabilities Education Improvement Act of 2004 (IDEA) is a federal law providing for the education of children with disabilities. Part C of IDEA provides for early identification and intervention for birth through three year olds with disabilities. In West Virginia, the Birth to Three Program (WV Birth to 3) housed within the Department of Health and Human Resources (DHHR) oversees Part C early intervention services. WV Birth to 3 information can be found at http://www.wvdhhr.org/birth23/.

- IDEA also guarantees a free appropriate public education (FAPE) for students eligible for special education services ages three to twenty-one years. Local school districts serve preschool and school age children with autism spectrum disorders. WV State Board Policy 2419: *Regulations for the Education of Students with Exceptionalities* is the policy that is implemented on a state wide basis regarding the education of exceptional students. Parents may make a referral for special education services by contacting the local school district special education office (Appendix B). If you have questions about where your child will go to school, please contact your local school district.

- IDEA emphasizes the importance of family involvement when it comes to making educational decisions about their child. Parents who familiarize themselves with special education basics (or refresh their understanding of special education basics) are a valued member of their child's Individualized Education Program (IEP) Team. It will also improve your ability to effectively advocate on behalf of your child.

In West Virginia, state law for implementing IDEA, the federal special education law and state regulations are found in chapter 18-20-1, WV Code: Establishment of special programs and teaching services for exceptional children. The policy for exceptional students is Policy 2419: *Regulations for the Education of Students with Exceptionalities*. This document contains the state's rules that support IDEA. This policy can be found at: http://www.wvde.state.wv.us/policies.

**Strategy 4:** Create a system for keeping and organizing your child's educational records.

- Over time you will likely access a variety of services from numerous professionals. There will come a time when you need to access something specific in your child's records. For example, you may be asked about your child's developmental history to inform decisions about important diagnostic and evaluation information that can influence the educational process even into adulthood.

- Organizing the information in a concise manner will help you remember the information and will also make it easier for professionals to utilize information you share from your files. Having a system in place will become increasingly valuable as your child gets older and the amount of information and records increases.

**Strategy 5:**     Identify your child's needs, your needs as a parent(s) and your family's needs.

Remember:

- Family members may have different needs and these may change as your child gets older. It can be challenging to balance routines, schedules and plans; however, it is important that all family members feel accepted, supported and valued.

- Service needs for your child may change with time. Examples of the types of services individuals with autism spectrum disorders and their families may require include: physical; occupational and speech-language therapy; residential programs; medical and dental care; financial assistance programs; advocacy; legal information; respite care; sibling and family support; education; socialization; recreation and vocational needs.

- Available services may differ from community to community. The WVACCoP can assist in locating critical agencies, supports and resources.

**Strategy 6:**     Make it a priority to enjoy time with your family. This is good for every family member, including your child with ASD!

- Establish time for all family members to rejuvenate. You will all have ups and downs, so it is important to keep things in perspective and strive for balance in your lives. Take time for yourselves to reduce the stress that is part of parenting any child, but perhaps intensified when your child has disabilities.

- Laugh together to relieve pressures and stress.

**References:**

Becker-Cottrill, B and Wisman-McFarland, J (2007).  Autism:  *A Primer for Educators.* The John Deaver Drinko Academy for American Political Institute and Civic Culture, Huntington, WV.

Indiana University, Indiana Resource Center for Autism, Access Autism Modules. (2008). <http://www.iidc.indiana.edu/irca/fmodules.html>.
reference.  Team Autism and WVACCoP

West Virginia State Board Policy 2419:  *Regulations for the Education of Students with Exceptionalities* (revised January 2010). http://wvde.state.wv.us/policies/

West Virginia Department of Education

## *Autism Spectrum Disorders (ASD)*

Determining appropriate approaches, methodologies and treatment for a child with ASD requires an understanding of that child's unique strengths and specific learning needs.  Therefore, we will begin by defining autism spectrum disorders (as a group).

**Characteristics Associated with Autism Spectrum Disorders**

Autism spectrum disorders are disabilities with many variations in symptoms and/or behaviors.  Furthermore, people with autism spectrum disorders vary widely in abilities, intelligence and behaviors across those indicators. In other words, characteristics associated with autism spectrum disorders may be observed in a range of mild to very severe forms. For example, some children do not speak; others have limited or even advanced language skills. Those with more advanced language skills tend to use a small range of topics, as well as have difficulty with abstract concepts and pragmatic (practical) language skills. Repetitive play skills, a limited range of interests and impaired social skills are generally evident as well. Unusual responses to sensory information such as loud noises, lights and certain textures or food or fabrics are also common. Because the three disability groups included in autism spectrum disorders are syndromes (i.e., a collection of symptoms) (see figure 1), different children experience distinct characteristics with varying degrees of impairments. Each child is at different developmental levels from other children. Each child will be ready to learn certain skills at different ages.

The Diagnostic and Statistical Manual for Mental Disorders (DSM-IV-TR) is used to classify disabilities and provides refined definitions of autism spectrum disorders. ASD are a set of disability groups that are identified under the heading of Pervasive Developmental Disorders (PDD). PDD are characterized by severe and pervasive impairment in several areas of development, including reciprocal social interaction skills, communication skills or the presence of stereotyped behavior, interests and activities. Figure 1 shows the five disability disorders under the umbrella of PDD
.

**Figure 1**

**Pervasive Developmental Disorders As Classified by the DSM-IV-TR**
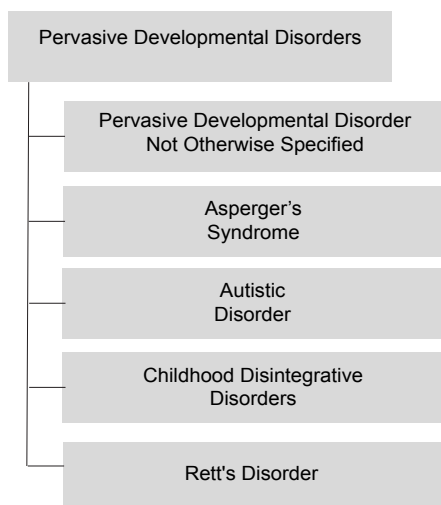
Pervasive Developmental Disorders

Pervasive Developmental Disorder
Not Otherwise Specified

Asperger's
Syndrome

Autistic
Disorder

Childhood Disintegrative
Disorders

Rett's Disorder

Autism spectrum disorders (see figure 2) account for three of the five Pervasive Developmental Disorders: pervasive developmental disorder-not otherwise specified, Asperger's Syndrome and autistic disorder. The term, autism spectrum disorder, implies that the three disorders share common characteristics, but also have unique qualities that allow for a differential diagnosis of each. Consequently, the severity of impairment varies within and across each individual diagnosed with an autism spectrum disorder.

**Figure 2**

**Autism Spectrum Disorders (ASD)**

Pervasive Developmental Disorders Not Otherwise Specified

Asperger's Syndrome

Autistic Disorders
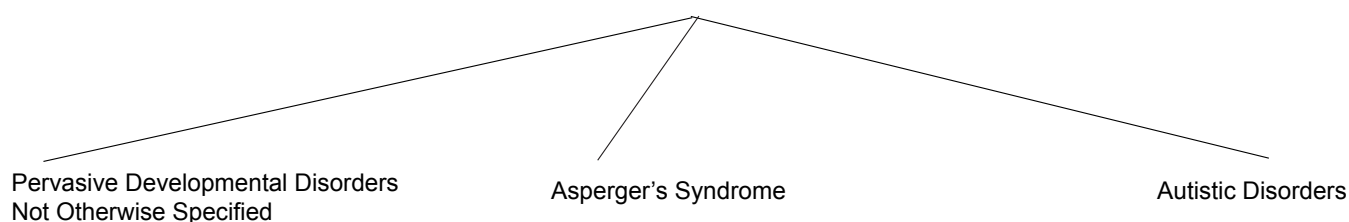
 A brief description of the three categories under the term ASD is provided below.

### Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS)

The category of Pervasive Developmental Disorder-Not Otherwise Specified is used when a child does not meet the diagnostic criterion for other disabilities, but does display a severe and pervasive impairment in the development of social interaction or communication skills, or the presence of restricted, repetitive and stereotyped patterns of behavior, interests and activities.

### Asperger's Syndrome

Children with Asperger's Syndrome have significant difficulties in social interaction and may exhibit restricted, repetitive and stereotyped patterns of behavior, interests and activities. Asperger's Syndrome causes observable significant impairment in social, occupational or other important areas of functioning. In contrast to Autistic Disorder, people with Asperger's Syndrome do not display clinically significant delays in language acquisition, although there may be deficits in the practical use of language and social-communication skills. Students with Asperger's Syndrome typically do not demonstrate cognitive delays during the first three years of life.

### Autism/Autistic Disorder

Children with autism have significant difficulties in social interaction, expressive and receptive communication and may exhibit restricted, repetitive and stereotyped patterns of behavior, interest and activities. Onset of autism may be evident before age three, with observable delays and/or abnormal functioning in social interaction, language or symbolic play.

**Common Social, Communication, Behavior, Learning and Related Characteristics**

Among all the possible behavior characteristics in autism spectrum disorders, some common behaviors do occur. It is important to be familiar with those as a basis of understanding their impact on educational programming. While not all of these characteristics will be the same in all diagnosed cases, they will include difficulties in the areas of social interaction, communication, behavior, sensory/motor processing and learning new skills. Figure 3 provides a quick look at some of the common behavior characteristics observed in infants and children with autism spectrum disorders. It should be noted that the table is neither all-inclusive nor is it intended to be used for diagnostic purposes. The characteristics will vary at different ages for individual children with autism spectrum disorders. Characteristics commonly associated with autism spectrum disorders are not exclusive to PDD-NOS, Asperger's Syndrome or Autistic Disorders could appear in individuals diagnosed with other disabilities.

**Figure 3**

**Common Characteristics in Autism Spectrum Disorders**

| Social characteristics | Communication Characteristics |
|---|---|
| • May exhibit poor eye contact.<br>• May not differentiate between strangers and those seen every day or show anxiety towards strangers.<br>• May have a narrow range of emotions—inappropriate displays.<br>• May not enjoy social games like peek-a-boo or patty cake.<br>• May lack pretend/imaginative play skills.<br>• May not show an awareness of others.<br>• May have difficulty reciprocating emotionally and socially and have difficulty relating to others.<br>• Often demonstrate little or no interest in establishing friendships, or have difficulty in developing and maintaining friendships.<br>• Difficulty initiating or sustaining play with peers or groups.<br>• May lack understanding of social cues, gestures, emotional expressions.<br>• May lack understanding of how others feel/express moods.<br>• May have strange fears or lack fear of real danger.<br>• May repeat preferred play schemes over and over again. | • May have difficulty reading and showing emotion (e.g. little smiling or bland face).<br>• May be unusually quiet.<br>• May not respond to name, or appear not to hear or attend.<br>• May not babble and coo.<br>• Language may be delayed.<br>• Stereotyped or idiosyncratic speech is common -may have echolalia (repeating words or phrases they hear) either immediately or later.<br>• Used to say a few words, but now does not.<br>• Often have trouble imitating or using nonverbal gestures and appropriate facial expressions to communicate.<br>• May have difficulty initiating interaction with others.<br>• May appear not to be interested in communicating with others.<br>• May not imitate or demonstrate functional and pretend play.<br>• May not point or wave bye-bye.<br>• Abnormal pitch, intonation, rhythm, stress.<br>• Grammatical structure may appear immature.<br>• Difficulty understanding and interpreting pragmatic language. |

| Behavior Characteristics | Learning Characteristics |
|---|---|
| • May dislike being held or stiffen when held.<br>• Exhibits repetitive body movements such as hand or finger flapping or rocking.<br>• May be extremely sensitive to some auditory stimuli.<br>• May not respond to some auditory stimuli.<br>• May exhibit stereotyped and repetitive use of language or idiosyncratic language.<br>• May perseverate on certain activities.<br>• May demonstrate persistent preoccupation with parts of objects.<br>• May resist changes in routines, unreasonable insistence on following routine.<br>• May lack fear of real danger.<br>• May explore environment by inappropriate methods such as licking, smelling and handling objects.<br>• Avoids looking at other people.<br>• Avoids contact with other people, preferring to touch objects. | • Will perform unevenly within and across skill areas, sometimes demonstrating exceptionality in some areas<br>• Resists changes in the learning environment.<br>• Has difficulty waiting or using unstructured time.<br>• May not generalize skills to other settings.<br>• Has problems with abstract and conceptual thinking; requires concrete interactions.<br>• Uses and interprets speech literally; doesn't usually read facial expressions, body language or other social cues.<br>• May be impulsive, compulsive or<br>• perseverate on certain activities; behavior is inconsistent.<br>• May be distracted by auditory or visual stimuli.<br>• Has trouble with organizational skills, planning or making choices.<br>• Relies on learned routines, cues and other learned patterns. |

**Figure 4**
**Related Characteristics in Autism Spectrum Disorders**

| Sensory/Motor Characteristics | Attention/Organization Characteristics |
|---|---|
| • May be over or under sensitive to certain sensory stimuli:<br>  • Sounds<br>  • Tastes<br>  • Visual input<br>  • Textures<br>  • Smell<br>• May have insensitivity to pain/ high pain threshold.<br>• Poor fine motor skills (e.g. writing may be extremely difficult and laborious or sloppy, off the lines and out of the boundaries).<br>• Gross motor skill difficulties<br>  • Difficulty with coordination<br>  • Balance problems<br>  • Playground activities or sports may be difficult, awkward or frustrating.<br>• Limited awareness of the physical presence or needs of others.<br>• Unaware of their bodies place in space. | • Poor Concentration:<br>  • Often off task<br>  • Distractible<br>  • Overloads easily<br>  • May be disorganized<br>  • Difficulty sustaining attention.<br>• Poor organizational skills:<br>  • May lose papers, assignments, etc.<br>  • Desk may be messy<br>  • Backpack never emptied<br>  • May not be able to predict or organize things needed for homework: book, packet, etc.<br>  • May not remember homework<br>  • Papers can be messy and written work unorganized<br>  • Difficulty knowing how and where to start work. |

**Other Considerations in Autism Spectrum Disorders**

Although there are no specific known causes of autism spectrum disorders, current research indicates the primary cause is some form of biological or neurological disorder (Boyle, Van Naarden Braun and Yeargin-Allsopp, 2004; Center for Disease Control and Prevention, 2007; Muhle, Trentacoste and Rapin, 2004). Autism spectrum disorders are not considered a mental illness and there is no credible evidence supporting the notion that deficient or improper parenting can cause autism spectrum disorders. Other factors can be associated with or found in conjunction with autism. These include conditions such as variable cognitive impairments, fragile X syndrome, seizure disorders, mental illness, attention deficit hyperactivity disorder, anxiety, depression and obsessive-compulsive disorders (Sturm, Fernell and Gillberg, 2004).

The scientific community continues its efforts to discover answers to the questions about autism. As we learn more from their efforts and as we gain more insights from their research, better educational programming for persons with autism spectrum disorders will follow.

**References:**

*American Psychiatric Association. (2000). Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition-Text Revised (DSM-IV-TR), Washington D. C.*

*Becker-Cottrill, B., and Whisman-McFarland, J (2007). Autism: A Primer for Educators. The John Deaver Drinko Academy for America Political Institution and Civic Culture, Huntington, WV.*

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## Background

The Individuals with Disabilities Education Improvement Act (IDEA) 2004 is the federal law that guarantees early intervention services (Part C) for children ages birth through three years and special education services (Part B) to children and youth ages three to twenty-one years.

### Birth through Three Years of Age

The Individuals with Disabilities Education Improvement Act (IDEA) 2004, Part C provides for early identification and intervention for birth through three year olds with disabilities. The lead agency for Part C in West Virginia is the Department of Health and Human Resources (DHHR). The DHHR Birth to Three Program (WVBTT) is responsible for administering the state system of early intervention services. The State Interagency Coordinating Council (ICC) advises and assists DHHR in administration of the state early intervention program.

### WV Birth to Three services include:

- Families who have children with disabilities

- Service Coordinators

- Service providers

- Members of the broader community

Early intervention emphasizes a family-centered approach. Families of infants and toddlers are always at the center of the service coordination. Families can enter the early intervention system through many access points. WVBTT provides support needed to assist families in maximizing the development of infants and toddlers within their natural routines, activities and culture.

The early intervention process is initiated by a referral to the local lead agency. Anyone can make a referral, with the family's permission – a doctor, a parent, childcare provider or a friend of the family – if there is a concern about an infant or toddler's development. The WVBTT Interim Service Coordinator is the person who works closely with the family to ensure that the services are designed to meet the needs of each eligible infant or toddler and the needs of the family.

To be eligible for early intervention services, infants and toddlers must be identified and assessed using tests and procedures that are appropriate for very young children. The findings from these evaluations determine if the infant or toddler is experiencing delays in one or more of the five developmental areas:

1. Cognitive – ability to learn and learning style

2. Physical – ability to move, see and hear

3. Communication – ability to understand language and express needs

4. Social or emotional – ability to relate with others

5. Adaptive skills – ability to dress, eat and take care of oneself

Once the evaluation and assessment procedures are complete and the infant or toddler is determined to be eligible for services, the family works with a team to develop an Individualized Family Service Plan (IFSP). The IFSP becomes the written description of services and supports required for an infant or toddler with a disability and his/her family. Services may be provided by a number of different agencies. An important part of the program is to ensure smooth connections or transitions as children move from the early intervention program to preschool education or other community services. A transition planning conference is arranged by the county Part C lead agency at least ninety (90) days (or at the discretion of all parties up to six months) before the child's third birthday. This transition meeting is for the purpose of planning a child's transition into the Part B preschool program, if child is eligible for these services, or into other appropriate services, such as Head Start, community preschool, etc. If a child is eligible for IDEA Part B (preschool) services, the Individualized Education Program (IEP) is developed by a team that includes the child's parents, educators and school administrators. The IEP, like the IFSP, is the written document that identifies a child's strengths, needs and educational goals. The IEP guides the services for the student eligible for special education.

**Three to Twenty-one Years of Age**

West Virginia state regulations, supporting IDEA Part B, provide for special education services for eligible students age three to twenty-one. The school district Eligibility Committee, which includes the child's parents, determines whether a child/youth is eligible for special education services. If the child/youth is eligible for special education services, an Individualized Education Program (IEP) is developed delineating the services to be provided.

**Eligibility Criteria for Autism – WV State Board Policy 2419:** *Regulations for the Education of Students with Exceptionalities*

An eligibility committee will determine that a student is eligible for special education services as a student with autism when the following criteria are met.

**Autism - Documentation the student meets <u>ALL</u> of the following (1-5):**
1. Documentation will assure that the student meets a total of six (or more) items from a., b., and c., with **at least two** from a and one each from b and c:
   a. Qualitative impairment in social interaction, as manifested by at **least two** of the following:
      1. Marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures and gestures to regulate social interaction;
      2. Failure to develop peer relationships appropriate to developmental level;
      3. A lack of spontaneous seeking to share enjoyment, interests or achievements with other people (e.g., by a lack of showing, bringing or pointing out objects of interest);
      4. Lack of social or emotional reciprocity.
   b. Qualitative impairments in communication as manifested by at least **one** of the following:
      1. Delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime);
      2. In individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others;
      3. Stereotyped and repetitive use of language or idiosyncratic language;
      4. Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level.

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

2. The student is diagnosed as having autism by a psychiatrist, physician, licensed psychologist or school psychologist.
3. The student's condition adversely affects educational performance.
4. The student needs special education.
5. The student's educational performance is not adversely affected primarily because the student has an emotional/behavioral disorder as defined in this chapter.

It is important to recognize that a diagnosis of PDD-NOS, Asperger's Syndrome or Autism, alone is not enough to qualify your child for special education services. WV Policy 2419 defines a student eligible for special education as a student who (1) has a disability or disabilities, (2) whose disability(ies) adversely affects educational performance and (3) whose unique needs cannot be addressed exclusively through education in general education classes with or without individual accommodations. The third part means a student requires specially designed instruction. Specially designed instruction is organized and planned instructional activities, which adapt, as appropriate, the content, methodology or delivery of instruction to address the unique needs that result from a student's disability. To meet the three eligibility components above a comprehensive evaluation of the student must be conducted.

IDEA entitles families to be actively involved in making decisions about their children's education. These and other student and parent rights are contained in a document called the Procedural Safeguards. Becoming familiar with the contents of this document will help you to become an informed and valued member of your child's IEP Team. If you have not received a copy of the Procedural Safeguards from your school district, contact them directly and request a copy. This document can also be found at http://www.wvde.state.wv.us/osp.

**Post-School Transition**

Transition services mean a coordinated set of activities for a child with a disability that helps prepare them for life after high school. These services support one or more post secondary student goals related to one or more of the following: postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living or community participation.

West Virginia Policy 2419, consistent with IDEA, provides a framework for the provision of transition planning and services for eligible students. Regulations require that transition services be included in the student's IEP beginning the year in which the student turns sixteen years old, or earlier, if appropriate. This IEP should include appropriate measurable postsecondary goals based on results of assessments completed before this IEP Team meeting, related to training, education, employment and when appropriate, independent living skills. The IEP must include the transition services and courses of study needed to assist the student in reaching his or her postsecondary goals. There are a number of services and supports available to assist in the transition process. Contact your local school district and/or review the list of resources at the end of this document.

**References:**

West Virginia Department of Health and Human Resources, Birth to Three Program, 350 Capitol Street, Room 427, Charleston, WV  25301-3714, 1-800-642-9704 (in WV) or 304-558-5388.  http://www.wvdhhr.org/birth23/.

West Virginia Division of Rehabilitation Services, State Capitol, P. O. Box 50890, Charleston, WV 25305-0890, 1-800-642-8207 (voice/TDD). In the Kanawha Valley, call 304-766-4600.  http://www.wvdrs.org/index.cfm .

West Virginia State Board Policy 2419:  *Regulations for the Education of Exceptional Students* (revised January 2010).  http://wvde.state.wv.us/policies.

## Overall  Goals

The overall goal of educational programs for all students, including students with disabilities, is for a life with independence and functioning within the community. Reaching this goal requires an education based on the individual needs of the child/student. Setting the individual goals for each child requires realistic assessment of present levels of ability, as well as identification of learning deficits. To this end, it is helpful to regularly ask some of the following questions:

- What can the child with an autism spectrum disorder do now?

- In what skills does the child excel?

- What skills can be enhanced?

- What skills does the student need to be able to seek employment and live in the community in adulthood?

- Is there improvement in the child's social and language development?

- Are negative behaviors being appropriately addressed?

- What kind of program does it take to accomplish the overall goal?

We know that the best learning environment for students with ASD is one that is in a structured classroom that supports an educational program that is consistent and predictable for students. In addition, students with ASD learn better when information is presented visually as well as verbally. To the maximum extent appropriate, children with autism spectrum disorders should have opportunities to interact with nondisabled peers who can provide valuable modeling of appropriate behavior, language, social and play skills.

Students with ASD should also have training in community living skills and vocational skills at the earliest possible age. They need to be taught how to interact with others and should be provided opportunities to develop relationships with other students. Teaching safety habits, such as crossing the street or asking for help when needed, is critical to developing independence. Learning to make simple purchases and to handle money is another example of a needed skill. All of these skills may be difficult, in varying degrees, for the student with ASD to learn. However, ongoing assessment of abilities along with the individualized education plan will facilitate the achievement of maximum independence for each child with ASD.

The importance of family involvement in the educational program is paramount. Family involvement allows for generalization (i.e. carry over) of learning activities, experiences and approaches to and from school, home and community. Generalization to home and community is essential for each child with ASD to develop maximum independence and integration into the community. There are also specialized adult support services in employment and living arrangements to support youth and adults with ASD to live and work with varying degrees of independence in the community.

The following sections will provide an overview of the strategies essential to implementing an effective educational program. Note, however, that these are general descriptions and that educational programs must be individualized to meet the assessed needs of each child.

**Quality Program Indicators**

The importance of individualizing education programs for children with autism spectrum disorders and the importance of family involvement in those educational programs cannot be overstated. Programs will differ from child to child because of the uniqueness of autism spectrum disorders and the range of potential symptoms involved. There is consensus among researchers, practitioners and educators that appropriate intervention begins early, usually by thirty months. Furthermore, researchers and professionals have identified a number of strategies that are essential to implementing an effective program. The following are suggested components or indicators to be considered in developing and maintaining a quality educational program for children with ASD.

1. Comprehensive team approach involving the family

2. Comprehensive assessment of skills and deficits

3. Clearly defined goals addressing the characteristics of autism spectrum disorders

4. Structure the environment

5. Effective teaching strategies

6. Applying functional behavior assessment to problem behavior

7. Assessment of the intervention (data collection)

8. Transition planning

9. Opportunities with peers

**Component 1: Comprehensive Team Approach Involving the Family**

As discussed throughout this guidance document, autism spectrum disorders are characterized by deficits in communication, behavior and social skills. Consequently, an effective program for students with ASD requires the expertise and input of family members and staff from multiple disciplines trained to understand the implications of autism spectrum disorders. A comprehensive team approach includes the child's parents and, as appropriate, related services personnel such as speech-language pathologists, psychologists and/or occupational therapists to address the child's social, behavior, language and motor skills as determined by the evaluation results. Furthermore, a comprehensive team includes special and general education teachers and/or paraprofessionals to ensure progress in meeting the individualized educational goals of each student. Working together, a comprehensive team assists in establishing and maintaining consistency of teaching and intervention techniques across individuals, lessons and settings, increasing the potential for students with ASD to acquire, maintain and generalize new skills and abilities.

| Summary Box: Comprehensive Team Approach |
| --- |
| • Parents are active members of the educational team, contributing to decision-making, training issues and follow-up provisions. |
| • All team members work together to assist in establishing and maintaining consistent interventions. |
| • Sufficient classroom support allows the student to demonstrate progress in meeting the individualized educational goals, objectives and outcomes. |
| • Related services personnel, such as speech-language pathologists, psychologists and occupational therapists address social, behavior, language and motor skills as identified by evaluation results. |
| • Goals are consistently generalized throughout the educational program. |

As previously mentioned, parent and family involvement is an essential component of the student with an autism spectrum disorder's educational program. It is important for professionals and parents to discuss how often and in what format ongoing communication can best take place. Although frustrations are often inevitable, it is important for staff and parents to keep communication as positive and free of blame as possible. Professionals need to present information in a clear fashion, avoiding the use of educational or medical terminology that may be intimidating and confusing to family members. Problems experienced by family or school members should be discussed as soon as they arise and before they get out of control. To accomplish this task, teachers should involve parents in problem solving and parents should not be afraid to ask questions about any aspect of their child's program.

| **Summary Box: Comprehensive Team Approach continued** |
|---|
| • Professional and parents discuss how often and in what format ongoing communication can best take place. |
| • Professionals present information in a clear fashion, avoiding the use of educational or medical jargon. |
| • Problems are discussed as soon as they arise and before they get out of control. |
| • Teachers involve the parents in problem solving. |
| • Parents are not afraid to ask questions about any aspect of their child's program. |

**Component 2: Comprehensive Assessment of Skills and Deficits**

A comprehensive assessment of a student's skills and abilities is the cornerstone of a quality Individualized Family Service Plan (IFSP) for children under three and Individualized Education Program (IEP) for children/students ages three to 21. By accurately determining the student's skills, strength and needs, appropriate goals and objectives can be written and accurate baselines determined.

Assessments may differ because of each student's age and ability level. However, it is essential to consider the characteristics of autism spectrum disorders in completing each assessment. Thus, assessment may include:

- pre-academic and academic skills

- pre-vocational and vocational skills

- self-help and adaptive skills

- communication

- socialization

- sensory regulation

- motivation and reinforcement

- behavior

- fine and gross motor

- leisure activities

- cognition

Methods of assessment will be dependent upon individual student needs and ability level. WV Policy 2419 provides a framework for the identification process and evaluation procedures. For further information on specific assessment tools, contact the special education director in your local school district. (See Appendix D)

It is important to realize that assessment is an on-going process. For each child, a formalized assessment of skills must be conducted at regular intervals. The on-going assessment results are then utilized to develop and change, as needed, the IFSP or IEP.

| Summary Box: Comprehensive Assessment of Skills and Deficits |
| --- |
| • Comprehensive assessment of skills, strengths and deficits in multiple domains: pre-academic, academic, pre-vocational, vocational, self-help, adaptive, communication, socialization, sensory regulation, motivation, reinforcement, behavior, fine and gross motor and leisure activities, as well as cognition. |
| • Parents are involved in the assessment process, contributing valuable information about their child's skills, strengths, interests and needs. |
| • Assessment considers the characteristics of the disability. |
| • Assessment data is utilized to create appropriate goals and objectives. |
| • Assessment data is used to determine accurate baseline of skills, strengths and needs. |
| • Assessment is an on-going process, conducted at regular intervals, to measure progress and as a guide for planning what to teach next. |

**SOCIAL PARTICIPATION:**

*The student displays difficulties or differences or both in interacting with people and events. The child may be unable to establish and maintain reciprocal relationships with people. The student may seek consistency in environmental events to the point of exhibiting rigidity in routines.*

***Explanation***
Students with autism exhibit differences in the development of social relation skills that most typical students develop innately. While students with autism may show interest in social interaction and /or affection, they may not be able to initiate or maintain interactions with peers and adults in the expected manner for their age. Some students with autism may successfully learn the rote aspects of interaction including manners, social niceties and eye gaze. Exercise caution in interpreting these rule-based social skills as being an overall indicator of the quality of the student's social abilities.

Social expectations change as students grow and develop. For very young children, most social contact occurs within the family and community. As students get older, their social interactions include those outside of the family context. Friendships with peers become increasingly important. Students with autism often have difficulty developing and maintaining appropriate social relationships. Many students with autism prefer the company of, or have better social success with, adults or younger children versus same-age peers. Be cautious in interpreting students' social abilities based only 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:

- **Attachment** – Does the student form attachments to family members and others?
- **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 autism may take another person's hand or point solely to get their wants and needs met, but this is not considered sharing or joint attention.
- **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 group classroom discussions?
- **Social rules/codes of conduct** – Does the student understand the unstated, tacit rules of social interactions and social situations? For example, does the student understand the social rules around how to show interest in a person she or he likes?
- **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 or her behavior has an impact on others?

***Interviews - Interviewing*** the student and those who know the student well will provide insight into the student's social abilities. Ask questions about the aspects of social interaction that were not evident during observations. Inquire about aspects of your observations to corroborate the information obtained.

***Record Review -*** Look at report cards for teacher comments about the student's social interactions. Notes between parents and teachers, behavioral records such as disciplinary referrals and preschool records, etc., may be sources for social interaction information.

**COMMUNICATION:**

*The student displays problems which extend beyond speech and language to other aspects of social communication, both receptively and expressively. The student's verbal language may be absent or, if present, lacks the usual communicative form which may involve deviance or delay or both. The student may have a speech or language disorder or both in addition to communication difficulties associated with autism.*

### Explanation

Students with autism exhibit a wide range of language and communication abilities, ranging from pre-speech or nonverbal to highly verbal with excellent vocabularies. Though some students with autism exhibit appropriate language form skills (vocabulary, speech sound skills, grammatical skills, sentence length and structure) all students with autism exhibit communication difficulties or differences in language use. Both receptive and expressive communication skills should be evaluated.

Speech-language pathologists (SLPs) have specialized skills and can evaluate speech and language skills and provide services to improve language and communication. A student who meets the educational eligibility criteria for autism may or may not also meet the educational eligibility criteria for speech and language impairment. The IEP team has several options to consider in determining how the student's language and communication needs will be met. For example, language and communication needs may be met by direct service from an SLP or by others, including the regular education teacher or other special education providers.

> **NOTE:** Strong verbal skills often mask underlying deficits in comprehension of verbal and nonverbal language. Many students with autism, even those with high sophisticated verbal skills, appear to understand and know more than they are able to actually process of 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 or 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 or 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 by asking questions about the other person's interests?

- Show awareness and ability to repair communication breakdowns?

- Exhibit a knowledge base of his or 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?

### Interviews

Interviewing the student and those who know the student well will provide insight into the student's communication abilities. Ask questions about the aspects of communication that were not evident during observations. Inquire about aspects of your observations to corroborate the information obtained. Seek information from parents and others about the student's early communication/language development, i.e. delays, differences, regressions.

### Record Review

Look at report cards for teacher comments about the student's communication. Notes between parents and teachers, behavioral records such as disciplinary referrals and preschool records, etc. may be sources for communication/language information.

## DEVELOPMENTAL RATES AND SEQUENCES

*The student exhibits delays, arrests, or regressions in motor, sensory, social or learning skills. The student may exhibit precocious or advanced skill development, while other skills may develop at normal or extremely depressed rates. The student may not follow normal developmental patterns in the acquisition of skills.*

### Explanation

Children generally develop in similar stages and sequences. Diverse patterns of behavior and learning emerge as a result of the interaction of several factors including: genetic predisposition and physical characteristics; socio-economic status; and values, beliefs, cultural and political practices of their families and communities.

The developmental rates and sequences of students with autism typically include a splintering of skills with clear strengths and weaknesses. In addition, students with autism often exhibit advanced or precocious development in certain concrete visual rote learning skills while exhibiting depressed rates in other areas. These students do not always follow a normal developmental pattern or progression in acquiring skills.

> **NOTE:** Information in this area is often gathered through thorough developmental history interviews and record review.

### Assessment Considerations

***Standardized Tests, Assessments and Checklists -*** If standardized tests are given, look for discrepancies among subtest scores or scores between different tests, including standardized testing measuring motor, sensory, social or learning skills.

***Observations -*** Observations are especially important for assessing development of early childhood students.

***Interviews -*** Parents, teachers, early caregivers, outside therapists and other service providers can be sources of information about uneven developmental rates and sequences.

***Record Review -*** Thoroughly review school records, available medical or outside service provider records for information about uneven developmental rates and sequences.

**COGNITION:**
*The student exhibits abnormalities in the thinking process and in generalizing. The student exhibits strengths in concrete thinking while difficulties are demonstrated in abstract thinking, awareness and judgment. Perseverant thinking and impaired ability to process symbolic information may be present.*

***Explanation***
Students with autism 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.

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**NOTE:** Strong verbal skills often mask underlying deficits in comprehension of verbal and nonverbal language. Many students with autism, even those with high sophisticated verbal skills, appear to understand and know more than they are able to actually process of perform.

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### Assessment Considerations Standardized Tests, Assessments and Checklists

If standardized tests are given, look for evidence of processing strengths and difficulties. School Psychologists are able to analyze information about cognitive processing.

### 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 solve and make inferences.

- Make realistic, practical predictions about situations and events.

- Understand the concept of the passage of time and time management.

- Organize herself or himself and materials and get started on an action or activity.

- Generalize concepts (be aware of both over-generalization and under-generalization) across people, settings, materials, etc.

- Understand the difference between reality and pretending.

- 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.

**Interviews -** Parents, teachers, early caregivers, outside therapists and other service providers can be sources of information about cognitive processing.

**Record Review -** Thoroughly review school records, available medical or outside service provider records for information about cognitive processing.

**SENSORY PROCESSING:**

*The student exhibits unusual, inconsistent, repetitive or unconventional responses to sounds, sights, smells, tastes, touch or movement. The student may have a visual or hearing impairment or both in addition to sensory processing difficulties associated with autism.*

### Explanation

Sensory processing involves receiving information about the world around us through our senses. Information is received in our brain and organized and sorted in an efficient manner. The brain then uses this information to form our behaviors, emotions and readiness to perform learning tasks. In students with autism 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 be manifested through behavior challenges, emotional outbursts or unwillingness to participate. The student may exhibit hypersensitivity (over sensitivity or sensory aversion) or hyposensitivity (under sensitivity or sensory seeking). Hypersensitivity may escalate until the student stops responding and appears lethargic. Hyposensitivity may also present itself as low arousal to sensory stimuli, causing the student to appear lethargic.

> **NOTE:** Everyone exhibits sensory processing differences. For these purposes we are concerned with sensory processing differences that affect or impact the student's ability to function in the expected manner in various environments.

**Assessement 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 sensory areas:

| Sensory Areas | Examples of **Hypersensitivity** | Examples of **Hyposensitivity** |
|---|---|---|
| Visual (Sight) | Closing eyes, squinting, avoidance of visual stimuli. | Throwing items, staring intensely at object, moving objects or fingers in front of eyes. |
| Tactile (Touch) | Clothing/food issues, avoidance of textures, difficulty in crowds, overreaction to unexpected touch, toe walking, poor hygiene. | Fidgeting with objects, need to touch others or objects. |
| Auditory (Hearing) | Covering ears, avoiding noisy environments, overreaction to unexpected sounds such as fire alarms or barking dogs. | Not responding to auditory input including sounds and voices, turning volume up loud on computers, radios, etc., seeking auditory input by creating noise (tapping pencils, etc.). |
| Olfactory (Smell) | Plugging nose, verbalizing discomfort, gagging, vomiting, ability to smell things undetectable to others, avoiding certain odorous foods, people, or environments | Smelling items, even those that typically do not have an odor, sniffing people |
| Gustatory (Taste/Oral) | agging, vomiting, extremely limited diets, refusal to try new foods, preference for certain textures/ temperature of foods. | outhing and chewing objects and clothing, craving certain types or flavors of foods, eating non-food items. |
| Vestibular (Movement) | Avoids playground/gym activities, avoids head movement. | Toe walking, spinning, swinging, running, bouncing, fidgety behavior, constant movement. |
| Proprioceptive (Sense of body in space) *Note: Proprioceptive atypicalities are not characterized by hyper or hyposensitivity.* | 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. | |

**Interviews -** Parents, teachers, including physical education, music and art teachers, playground and lunch supervisors, custodians, bus drivers, early caregivers, outside therapists and other service providers can be sources of information about sensory processing. Ask questions related to sleep patterns, toileting, dressing, eating habits, hygiene, community participation, etc. Ask about strategies parents and students have found successful for calming or arousing.

*Record Review -* Thoroughly review school records, available medical or outside service provider records for information related to sensory processing. School records, such as report cards and progress reports often provide historical information about sensory needs.

## BEHAVIORAL REPERTOIRE:

The student displays marked distress over changes, insistence on following routines and a persistent preoccupation with or attachment to objects. The student's capacity to use objects in an age–appropriate or functional manner may be absent, arrested or delayed. The student may have difficulty displaying a range of interests or imaginative activities or both. The student may exhibit stereotyped body movements.

### Explanation
Students with autism often demonstrate a need for consistency and predictability in daily routines and learning environments. Due to their challenges in processing language, social, sensory and cognitive information, students with autism tend to rely heavily on learned and predictable rules, routines and structures. Alterations in rules, routines and structures significantly impact students with autism. 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 the manner expected. Students may have a restricted range of interests and may resist participation in other activities or discussions about other topics unless provided additional motivation. Students may use objects or their bodies in unconventional or repetitive ways.

### Assessment Methods and Suggestions

### Standardized Tests, Assessments and Checklists
### Observations
When assessing 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 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.

- Insistence on sameness.

- 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.

### Interviews
Parents, teachers, early caregivers, outside therapists and other service providers can be sources of information about the need for routine and consistency. Explore what motivates the student. Talk about similarities and differences in routines at school, home and the community.

### Record Review
Thoroughly review school records, available medical or outside service provider records for information about the need for routine and consistency.

**Component 3: Clearly Defined Goals**

The key to teaching new skills, or improving emerging skills, is creating clearly defined IFSP outcomes or IEP goals that are developmentally appropriate, functional and based on the assessment results, student's strengths and interests and individual characteristics of autism spectrum disorders. The IEP process and procedures for eligible special education students in West Virginia, including the vital role of parents in the development and implementation of the IEP are found in Policy 2419. Clearly, a number of factors must be considered in developing individualized goals for students with ASD. Although individual goals will vary for each student based on their age, diagnostic characteristics and ability level, research has revealed that attention paid to the areas below may increase the student's ability to benefit from the educational experience.

Based on the results of the student's evaluation, goals may be written in one or more of the following areas:

- Attention (awareness of others, objects, or activities) - Attention goals may focus on sustained attention; joint attention; and shifting attention from event to event, object to object, object to person and person to object.

- **Imitation** – Imitation is an essential prerequisite skill in learning from others. Imitation goals may include imitation with objects, motor actions, oral motor actions, vocalizations, verbalizations, gestures, academic tasks and social skills.

- **Communication** – Communication goals may focus on expressive and/or receptive language and include verbal or augmented communication skills, social-communication skills and the use of functional communication systems to provide alternatives to challenging behaviors.

- **Social development** – Social development is a core deficit area for individuals on the autism spectrum. Goals in this area may include body language, manners, conversation skills, friendship management, cooperative play skills, self-regulation, empathy and conflict management, among others.

- **Play** – Developmentally appropriate and functional play skills can be targeted as an avenue to increase social skills with peers.

- **Cognitive Development** – Cognitive goals may include a focus on conceptual development, problem-solving, academic performance and executive functions (i.e. flexible, strategic plan of action to solve a problem or attain a future goal).

- **Challenging Behaviors** – The function of challenging behaviors are identified and appropriate alternative behaviors are taught using positive behavior supports (for more information see Component 7: *Functional Approach to Problem Behavior*).

- **Sensory and Motor development** – Individual differences in motor and sensory functioning are identified and planned for, including tactile/touch, visual, smell, sound and taste; environmental stressors are identified and modified.

- **Adaptive Behavior** –Essential life skills, including hygiene, self-help and safety are considered and planned for in order to enhance personal independence and create opportunities for greater community participation, including independent living, working and recreating.

- **Recreation/Leisure/Physical Education** – Recreation skills are important goals as they enhance cognitive, social and motor skills; enhance relationships between self and environment; shape appropriate use of unstructured time; increase opportunities to get physical exercise and stay healthy and increase enjoyment of life.

In writing clearly defined outcomes or goals, the IFSP or IEP Team should consider the following:

Have meaningful IFSP outcomes or IEP goals been identified for the student?

- Were family members involved in identifying goals to be addressed at home and school?

- Are the outcomes developmentally significant and appropriate for the student?

- Have the characteristics of the autism spectrum disorder been considered?

- Do the goals promote educational gain?

- Do the goals allow for the learned skills to be used in other settings (home, community) and with a variety of people?

A review of goals would not be complete without a discussion of the importance of programming for the generalization and maintenance of newly acquired skills. Generalization is the ability to demonstrate a learned behavior or skill in a new or novel way, setting, environment, time or date or among different individuals and materials. Maintenance, on the other hand, is the ability to demonstrate a skill over time. The ability to generalize and maintain meaningful skills that can be practiced and utilized within as well as outside of the classroom is essential to the success of each student's program. Meaningful tasks enhance the student's independence, give more opportunity for personal choice and allow for more freedom in the community. Thus, the classroom teacher needs to work closely with the student's family as well as the support staff to ensure that new skills and desired behaviors can be practiced in all settings, at home with family members, at school with peers and school staff and in the community.

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**Summary Box: Clearly Defined Goals**

- Parents are involved in identifying goals that can also be practiced at home.

- Goals have clearly defined entrance and exit criteria, are developmentally appropriate, functional and based on the assessment results, the student's strengths and interests, as well as the individual characteristics of the student.

- Goals are individualized to the student and promote educational gains.

- The team has considered these skill areas based on the evaluation results and the identified needs of the student:
  - Attention
  - Imitation
  - Communication
  - Social development
  - Play / Leisure
  - Cognitive development
  - Challenging behaviors
  - Sensory / motor development
  - Adaptive behaviors

- The goals allow for generalization and maintenance of newly acquired skills at home, at school and in the community.

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## Component 4: Structure the Environment

Although all students thrive on routine and predictability, students with autism spectrum disorders are especially sensitive to changes in the environment or routine. Although the level of structure needed for each student will vary based on their age, diagnostic characteristics and ability level, research has revealed that effective educational programs for students with autism spectrum disorders have structured environments which include:

- Physical Structure

- Routines

- Visual Supports

Teaching Tools for Young Children with Challenging Behavior is an electronic document that provides samples of routines and visual supports along with various tools and can be accessed at the following website http://www.challengingbehavior.org/do/resources/teaching_tools/ttyc.htm.

**Physical Structure**

Physical structure refers to the way each area in the classroom or school is set up and organized. To the student with ASD who may perceive the world differently or has unique sensory impairments, the school or classroom can be a confusing and overwhelming place. Therefore, the classroom should be set up and organized with clear physical and visual boundaries. Boundaries such as carpets, bookcases, dividers or study carrels are frames that visually identify an area, helping the student to understand where different activities take place and materials are stored.  Two examples of work stations can be seen in Figures 5a and 5b.  Consider providing a specific location for quiet activities and individual work activities. Once the various locations and boundaries are identified, signs, symbols, schedules and choice boards can provide visual information on the rules and expectations of each area.  Additionally, when planning the physical structure of the classroom, it is important to consider and decrease visual and auditory distractions, such as bright lights and noises, e.g., bells, student's loud voices, chairs scraping on the floor and the humming of overhead projectors, lights or computers.

As identified by Henry and Smith Myles (2007), components of a well organized classroom include:

1. Clearly defined areas for each activity;

2. Visual reminders of classroom expectations;

3. Adequate spacing to allow for personal space preferences, such as sitting at least twenty-four inches from another person; and

4. Clear and consistent organization of materials, for example, by color coding and labeling (with written words, pictures or both).

**Figure 5a**:  Example of Individual Work Stations for turn taking.
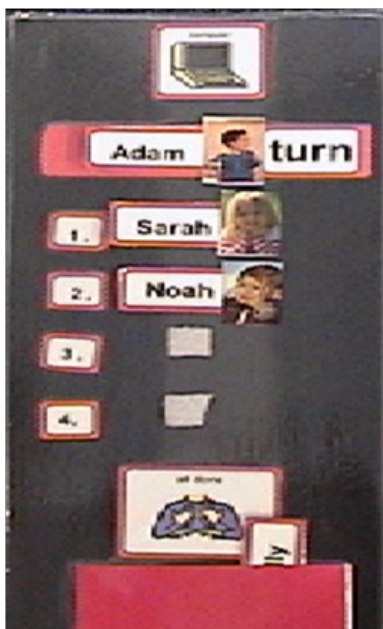


**Routines**

Students with ASD are more socially responsive and attentive to learning in the classroom, when information is presented in a highly predictable and routine manner. They can also become easily overwhelmed at even minor changes in their daily schedule or routine. To build independent work skills and to create a comfortable environment in which the student is ready to learn, develop and teach within routines. For example, a routine for independent seatwork may be as simple as "first we work", and "then we take a break". A routine for large group instruction might be, first, the teacher lectures; second, the students do group practice problems, followed by independent seatwork; and, third, take a break. Routines are also effective in teaching functional, leisure and vocational skills. Of course, routines can become problematic if the student begins to demonstrate an obsession for sameness that results in negative behaviors when change occurs. To decrease the stress, plan and prepare the student for potential changes in the routine by utilizing transition strategies, role playing and visual supports systems.

**Figure 5b:**  Example of an Individual Work Station

**Visual Supports**

Figure 6 shows an example of a visual support for routines. Students with autism spectrum disorders have strong visual skills. Visual organization of instruction and materials allows the student to utilize these visual learning strengths. Examples of helpful visual supports may include the use of activity schedules and calendars, posted rules, choice boards and other organizational methods as appropriate for individual students.



**Figure 6:** Example of Visual Supports for "First, Then" Routines
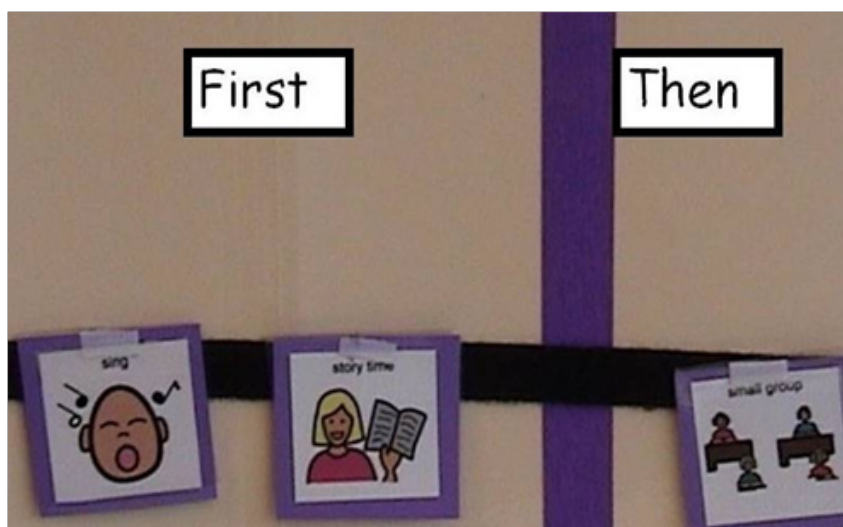
***Activity schedules*** are a set of pictures or words that cue a student to participate in an activity. Depending on the student's age and ability level, an activity schedule may be a three ring binder with only one activity on each page, it may be a partial or full day picture schedule, or it may be as complex as a day timer or personal digital assistant (PDA). Mini-schedules are a set of pictures or words that cue students to the individual steps involved in a complex task as shown by the two examples in Figures 7 and 8.

For example, a student learning to wash his/her hands, may have a mini-schedule breaking down the task of hand washing into four steps, including turning on the water, washing hands, turning off the water and drying hands. Another example is a written mini-schedule for social studies class, breaking down the subject period into its component parts of silent reading, note taking during lecture and small group work.



**Figure 7:**  Example of "Hand washing" mini-schedule

**Figure 8**:  Shows an example of an individual schedule in picture form.  This type of visual support is another effective way for the student to organize the day's activities.

***Choice boards and menus*** are a set of pictures or words that visually communicate to the student with an ASD what materials, rewards or tasks are available to choose. Choice boards can be effectively utilized to present a menu of leisure activities, work or tasks, restaurant or food selection, work areas, places to visit, songs to sing or any other activity that may be a part of the student's life or education. Using a choice board is a method to help eliminate frustration caused by being unable to communicate a request and to help motivate a student by allowing her/him the power to choose which task or activity in which to participate.



**Figure 9** provides an example of an activity choice board.

**Figure 10** is an example of a choice menu.

Choice menus can be developed as surveys to assist with the development of effective acknowledgement systems. In this example, each student prioritizes their preference by number 1-9 with 1 being their 1st choice and 9 being their least favorite.  This is only an example and should be personalized based on each student's preferences.
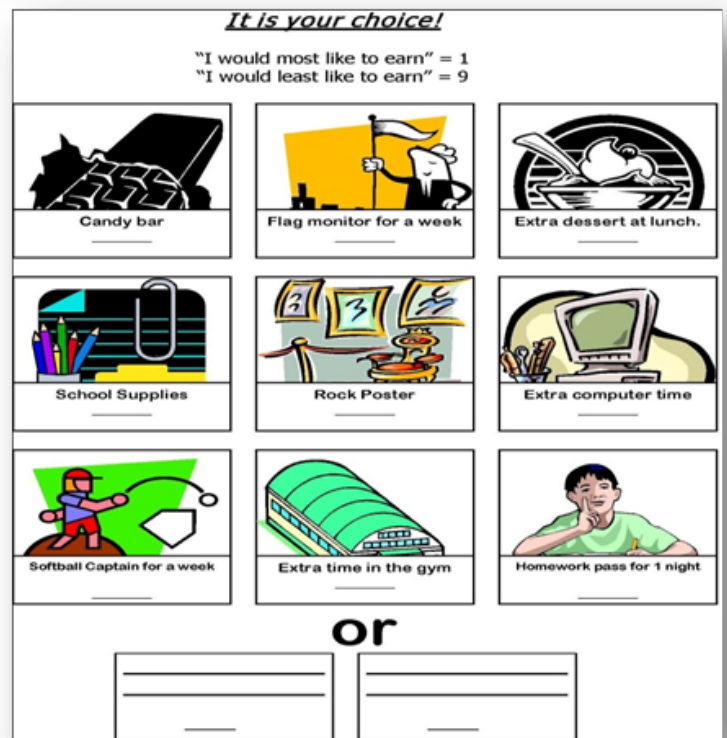
## Visual Organization

Other visual organizational methods may include organizing and labeling materials in the classroom or in the student's locker or book bag. Providing cue cards for rules and checklists for tasks, homework or learning materials can be helpful as well.

| Summary Box: Structure the Environment |
| --- |
| • The environment is set up with clear physical and visual boundaries, which allow the student to understand where different activities take place and where materials are kept. |
| • Visual and auditory distractions, such as bright lights and loud noises, have been considered and minimized. |
| • Instruction and materials are visually organized to allow the students to know what is expected and to increase independence. |
| • Examples of visual organization include the use of schedules and posted rules. |
| • A predictable routine with a schedule is used. |

## Component 5: Effective Teaching Strategies

In addition to the use of structure, visual supports and routine, programs that result in educational progress for students with autism spectrum disorders also utilize motivational strategies and teach skills in a highly structured method either in a one-to-one or small group format, with minimal distraction, attention to specific details of the skill and a focus on consistency, repetition and predictability relative to the individual needs of the student. This section addresses such strategies and provides practical, low-tech suggestions for teaching students with ASD.

When choosing an intervention or teaching strategy, remember that no single approach is likely to be right for every student; rather, teachers may need to utilize a wide variety of teaching strategies for their students with ASD. Further, strategies may need to be modified to fit the developmental level and educational placement of the student. As each student is an individual, it is essential that teachers adapt teaching strategies to meet the student's individual interests, strengths and needs. The intervention methods chosen should also allow the student to demonstrate progress toward his/her IFSP outcomes or IEP goals.

**Motivation and Reinforcement**

For the student with an ASD, verbal directions and unfamiliar materials often cause confusion that results in frustration and failure. As a result, many students with ASD become resistant to learning new skills. Therefore, it is necessary to identify and use reinforcement and teaching strategies that help motivate the student to learn. Reinforcement is more than just a reward; it is a powerful teaching tool. Reinforcement involves delivering a specific consequence when the student demonstrates a target behavior to increase the likelihood that the behavior will occur again when requested (Henry and Smith Myles, 2007).

A reinforcer may be positive (giving a reward) or negative (taking away a privilege). Individual reinforcers can be identified through observation of the student's free time preferences, asking the student or parent directly and by presenting choices. Some potential reinforcers may include:

- Social/Activity:
    - Take a break
    - Play a game
    - Use the computer
    - Spend time with a preferred person
    - Earn five minutes towards preferred activity or time with friend

- Tangible/Edible:
    - Healthy snack or beverage
    - Small toy
    - Bubbles
    - Baseball/trading cards
    - Certificates, badges, ribbons
    - CD, videogames

- Acknowledgement System: An acknowledgement system is a system in which an individual earns tokens for targeted behaviors. Once the student has collected a predetermined number of tokens he can trade them for an item or activity that he desires. Examples of tokens include:
    - Points
    - Play money
    - Gold stars
    - Stickers
    - Tickets, coupons
    - Poker chips

**Figure 11:  Example Acknowledgement System**



**Class Point Card**

| Behaviors / Classes | 1 Don't pick my nose in class | 2 Raise my hand to talk | 3 Stay in my seat | 4 Turn in my homework |
|---|---|---|---|---|
| A Math | | | | |
| B Reading | | | | |
| C Book Time | | | | |
| D Spelling | | | | |
| E Science | | | | |
| TOTALS | | | | |

| Points Saved | Points Earned | Points Used | Points Left |
|---|---|---|---|
| | | | |

Name: Jessica Wilson          Date: 9/1/2009

**Figure 11** is an example of a point card.  This example and additional templates for creating an acknowledgement system can be found at the following website http://kidtools.org/index.php.  All materials posted at this website are available for free download.

Many students with ASD have a limited repertoire of interests. Utilize these natural interests to capture the student's attention, to teach them in a meaningful way and as a reward for completed work. For example, if the student has an interest in computers, find an interesting way to use computers to teach new skills, or use the computer as a reward for task completion of a non-preferred activity.

Additional motivational strategies may include providing choices, changing the way in which instructions are given, modifying the appearance or presentation of a task, changing the length of a task or adjusting the pacing of your instructional presentation.

In developing a reinforcement system, an important consideration is the schedule of reinforcement used. When teaching new skills or attempting to replace a challenging behavior, reinforcement should be delivered in a one to one system. In other words, every time the student performs a skill, they should be rewarded for the behavior. After the student has demonstrated acquisition of the new skill, the level of reinforcement can be faded (eliminated) over time.

### General Teaching Strategies

When the student does not have a skill in his repertoire or does not demonstrate a skill often enough to provide evidence of mastery, it is important to remember that a wide range of teaching strategies may be used to meet an individual student's needs.

**Discrete Trial** is a structured teaching strategy, used to teach tasks or lessons that have been broken down into their simplest teachable components. It consists of four components: the instruction, the student's response, a consequence and a brief pause.

**Pivotal Response Training** utilizes the discrete trial paradigm in lessons that are student directed. It also encourages teachers to create lesson plans and to work within the student's preferred activities.

**Shaping**, which is the reinforcement of successive approximations of the target behavior, is helpful when the student does not initially have the desired skill in her repertoire.

**Prompting** provides students with extra help to achieve the desired response. Strategies may include verbal prompts, modeling, physical or gestural prompts and the use of positional cues. Prompts can be used at the same time as instruction, during the student's response to help decrease errors or after the student's incorrect response to demonstrate the correct answer. Although prompting strategies can be helpful in teaching new skills, it is essential to fade these prompts over time in order to avoid the student becoming dependent on the prompt.

**Task analysis** is the analysis of how a task is accomplished, including a detailed description of both manual and mental activities, task and element durations, task frequency, task allocation, task complexity, environmental conditions, necessary clothing and equipment and any other unique factors involved in or required for one or more people to perform a given task. Task analysis emerged from research in applied behavior analysis and still has considerable research in that area.

**Chaining** is the process of breaking down a skill to be learned into small steps using <u>task analysis</u>. Parts of a chain are referred to as links. The learner's skill level is assessed by an appropriate professional and is then either taught one step at a time while being assisted through the other steps <u>forward or backwards</u> or if the learner already can complete a certain percentage of the steps independently, the remaining steps are all worked on during each trial <u>total task</u>. A verbal stimulus or prompt is used at the beginning of the teaching trial. The stimulus change that occurs between each response becomes the reinforcer for that response as well as the prompt/stimulus for the next response without requiring assistance from the teacher. For example, in purchasing a soda you pull the money out of your pocket and see the money in your hand and then put the money in the machine. Seeing the money in your hand both was the reinforcer for the first response (getting money out of pocket) and was what prompted you to do the next response (putting money in machine).

Once new skills are acquired, it is important to gradually fade the high levels of support and begin the generalization of the behavior and skill to other natural environments (home and community) and daily routines.

### Academic Strategies

Most students with ASD require some sort of academic modifications. Modifications are diverse and range from altering the way in which materials are presented to modifying how student's indicate competence of academic concepts. Graphic organizers, handwriting modifications and priming, as well as assignment and test taking alternatives are useful strategies to consider for students with ASD.

> **Graphic** organizers, such as semantic maps, Venn diagrams, outlines and charts help students with autism spectrum disorders organize and visually represent important concepts.

> **Handwriting modifications**, for students with fine motor difficulties, may involve responding orally, keyboarding, answering questions in true/false format, transcribing into tape or digital format or using a scribe.

> **Priming** refers to the process of preparing the student for an activity in advance of its completion. Previewing an upcoming activity helps to decrease the stress associated with change and the unknown. Some examples of priming may include reviewing an upcoming worksheet or activity; or going over an outline of what will be covered in the next section of a class, the next day or in the next hour. Priming typically occurs close to the activity and can occur at home or in school.

> **Assignment and test taking modifications** should match each student's specific need. Some examples of modifications include: additional time, advanced practice/priming, having the assignment /test read aloud, reduced number of items, a sample problem example, multiple choice versus essay format, keyboard versus handwritten.

Again, it is the *individual needs* of the student that will determine the academic strategies used.

### Communication Strategies

The communication abilities of students with autism spectrum disorders vary greatly, from students who are pre- or nonverbal to students with amazing expressive vocabularies and from students who have very limited receptive abilities to those who can understand complex conversations and instructions.

For preverbal and nonverbal students with autism spectrum disorders, a communication program may focus on teaching the student to communicate through gestures, speech and/or an augmentative or alternative communication system. Alternative and augmentative communication systems such as sign language, visual symbol systems, communication boards and voice output devices can provide an effective format for allowing students to communicate their wants and needs in any setting. Augmentative and alternative communication are most effective when implemented early to ensure a method of reciprocal interaction and a system for teaching functional communication skills such as making requests, asking for help, protesting and making choices. Early systems should be very functional and concrete. A typical progression for a visual-symbol communication system might be to move from a concrete to more abstract system. For example, starting with objects or actual photographs, moving next to colored photos and line drawings and finally to printed words.

Whether teaching a student to communicate through gestures, speech or an augmentative or alternative communication system, new skills should generally be introduced in quiet, non-distracting environments, with generalization occurring in more natural contexts where natural cues and reinforcements are available to make the skills meaningful and spontaneous. Utilize student interests to help motivate the student to initiate and use the communication system. For example, if a student has a favorite toy or book, the teacher may keep the material just out of reach but within visual sight of the student; thus, encouraging the student to request the wanted item using the communication system. All communicative attempts and initiations should be praised and encouraged.

In contrast to the pre- or nonverbal student, many students with ASD are able to utilize complex language. However, these students, along with their nonverbal peers, often demonstrate a significant impairment in pragmatic (practical) language. For example, students with autism spectrum disorder often struggle with such skills as having a social conversation; perceiving, understanding and using gestures, facial expressions and body language; initiating, maintaining and closing conversations; as well as understanding and using social conventions and rituals. Pragmatic communication skills are an important component of the student's educational program effectively taught through direct instruction as well as through social skill instruction (See the section on *Social Development Strategies* below for specific instructional strategies). In addition to difficulty with pragmatic language, students with ASD also have difficulty understanding and comprehending complex language.

When working with any student with an ASD, a verbal or nonverbal student, it is important not to assume understanding. Teachers must closely monitor the student for receptive comprehension. Talk slowly and carefully. Some students will require simplified one or two-step directions, while others will require extra time to process spoken language. Clearly state instructions and directions indicating what the student is expected to do rather than telling the student what not to do. Additionally, use proximity, gestures and visual supports to help enhance and clarify the spoken message.

While the content of language and communication instruction is similar for all students, the problems and strategies may differ. Work with the speech language pathologist to develop a comprehensive communication program.

### Social Development Strategies

Most students with ASD want to have friends, fit in and be an active member of the social world. However, they have difficulty reading, understanding and responding to social cues. Social skills, such as having a social conversation; perceiving, understanding and using gestures, facial expressions and body language; initiating, maintaining and closing conversations; as well as understanding and using social conventions and rituals, are difficult for students with ASD. Because of this deficit in social understanding, students with ASDs may say or do things that irritate and offend other people. Fortunately, a variety of approaches have been demonstrated to successfully teach students with ASD to understand and succeed in their social world.

Helping students with ASD to develop social understanding requires both systematic instruction as well as opportunities to practice the skills within naturally occurring routines. Rules, social stories, role-playing and scripts, cue cards and checklists, coaching, modeling, peer tutoring and friendship groups are all effective strategies for systematically teaching social skills.

Many classroom teachers find it helpful to teach and post the classroom social rules to help students understand the expectations of the classroom or other social situation. In writing rules, be sure to provide concrete, positively stated rules that are easy for the student to see and understand. Be sure to include a statement regarding why the rule is important. For example, "we use an inside voice so that students can finish their work." Including why a rule is important provides the social link that students with ASDs often fail to make on their own. Review the rules on a regular basis and reward the student with positive contingencies for following the appropriate social rules. In addition to posting and reinforcing social rules, it is important to provide instruction around social situations that confuse the student.

Social stories, originally developed by Carol Gray, use visual instructional materials in the form of a short story to describe social situations that may be confusing for the student. The goal of any social story is to share information at the student's developmental level regarding what is occurring in a given situation and why. Once written, the social story is read to or by the student to teach the new social skill and then later to cue the student to practice the new skill. The team should develop a schedule to introduce and review the story. Gradually, the student will no longer need the social story.

In addition to social stories, scripting and role-playing are also effective strategies for teaching new social skills. Before introducing a student to a new social situation, it is often helpful to provide the child/student with a script of what to say and then role-play the situation. For example, a teacher may write a script teaching a student how to ask other students to play with him/her. The teacher and student might then role-play the scenario practicing how to respond to a variety of different outcomes. With practice this will become more natural for the student.

Once a student has begun to demonstrate success with social skills in a structured setting, it is essential to practice the skills within naturally occurring routines. Social skills and friendship groups provide a context for students to both learn and practice social skills in a supportive and structured environment. Additionally, many teachers find it helpful to assign a peer mentor or friend to help the student with an ASD practice and use social skills in the natural environment. Whether through groups, peer mentors or other systems, it is important to create opportunities for the student to successfully practice newfound social skills with peers and with other adults both in and out of the classroom.

Depending on training and background, a variety of professionals may have knowledge in teaching social development. Talk with the speech-language pathologist, school counselor or psychologist and special education teacher for suggestions on strategies to include social development in the student's IEP depending on the individual needs of the student.

### Behavior Strategies

Challenging behaviors, such as self-injurious behavior, stereotypic behavior, physical aggression, tantrums, defiance and property destruction, are among the most difficult and stressful issues faced by parents and educators of students with ASD. Fortunately, a long line of research, stretching over four decades, has supported the use of functional behavior assessments (FBA) or functional analysis and positive behavior supports (PBS) in the treatment of challenging behaviors for students with ASD (Iwata & Worsdell, 2005). To learn more about FBA and PBS, please refer to Component 6: *Applying Functional Behavior Assessment to Challenging Behavior.*

### Other Considerations

In addition to the previously mentioned teaching strategies, a number of individual treatment methodologies have been and continue to be developed for students with ASDs. For a description of some of the most cited treatment methodologies, refer to the *Interventions* section of this guidance document. Before choosing a teaching method or specific intervention strategy, Heflin and Simpson (1998) suggest that the IFSP or IEP Team consider the following questions:

- Is the treatment evidenced-based and published in peer-reviewed journals?

- Does the information regarding effectiveness come from a variety of sources?

- Are the studies validating effectiveness of high quality?

- Is empirical validation available, or does the majority of the support come from personal testimonials?

- Do the proponents claim that the option will help almost everyone with autism?

- How does this treatment rate in terms of restrictiveness and intensity?

- Are there less restrictive/intensive alternatives that may be just as effective?

- Are there options that are better researched than this one?

- Does the treatment ignore the functional communication and socialization needs of the student?

| **Summary Box: Effective Instructional Methods** |
|---|
| • Parents and education staff work together to identify appropriate intervention methods. |
| • Intervention methods are consistent across environments (i.e. home, school, community). |
| • Intervention methods, tools, and materials are supported by research and address the areas of strength and needs of the student. |
| • Intervention methods allow the student to demonstrate progress toward his/her IFSP/IEP goals. |
| • New skills are taught are developmentally appropriate and meet the student's individual needs. |
| • Once new skills are acquired, these are practiced in all natural environments (home, school, community). |

**Component 6: Applying Functional Behavioral Assessment and Positive Behavior Support Planning to Address Challenging Behavior**

As mentioned before behaviors, such as self-injurious behavior, stereotypic behavior, physical aggression, tantrums and property destruction, are difficult and stressful for parents and educators of students with ASD. Research supports the use of functional behavioral assessments (FBA) or functional analysis and positive behavior supports (PBS) in the treatment of challenging behaviors for students with ASD (Iwata & Worsdell, 2005).

Functional behavior assessments are found by research to reduce maladaptive skills while enhancing adaptive ones. This is because seventy to eighty percent of challenging behaviors have a communicative function (Koegel, Koegel and Brookman, 2005). In addition, challenging behaviors may satisfy a sensory need for the student. For example, a student with ASD may learn that when he bangs his head a caregiver attempts to soothe him by providing a favorite toy or allowing him to escape an adverse situation. For a student with poor communication skills, head-banging then becomes a functional way to meet her/his needs. Functional analysis allows a person to understand what function a student's problem behavior serves and then teach appropriate skills, through the use of PBS, to meet this need.

***The Four Primary Outcomes of the Functional Behavioral Assessment Process***

- A clear description of the problem behaviors

- Events, times and situations that predict when behaviors will and will not occur (i.e., antecedents or setting events)

- Consequences that maintain the problem behaviors (i.e., functions)

- Summary statements or hypotheses

A formal approach to the FBA process typically involves at least three steps using an assessment process. The basic steps are:

1) Identifying the challenging behavior;

2) Identifying antecedents (events before the behavior occurred), consequences of the behavior and setting events which maintain the problem behavior; and

3) Designing an intervention, based on the conclusions of the assessment, which may alter the identified antecedents, consequences or setting events.

In a review of the literature, Horner and colleagues (2002) reported, "The more precise the assessment, the more likely the intervention will result in intervention success" (p. 429).

**Goal identification:** The first step in the positive behavioral support process is to determine the goals of intervention. Preliminary work should include developing a profile of the student's strengths and needs, identifying the team members who will be involved in behavioral support and targeting specific settings and situations which require intervention. Awareness of a student's strengths and needs will help the team determine intervention goals and support the student.

**Defining Target Behaviors**

In order to gather data consistently and monitor the outcomes of interventions, specific target behaviors and objectives must be identified. Target behaviors should be defined in observable and measurable terms (in terms of what you see or hear) rather than being based on mental states or processes.

The team should establish goals for behavior change and criteria for determining the success of the intervention based on estimates of the frequency, duration or severity of the behaviors that are currently occurring. If teams are unable to provide confident estimates, observations should be conducted to gather baseline data for target behaviors. Objectives may involve eliminating or reducing problem behaviors to acceptable levels, increasing alternative or desirable behaviors and/or teaching the student to tell when certain behaviors are appropriate. Teams should keep in mind the broad goals of intervention. These will guide the team in not only targeting behaviors for reduction, but in identifying skills that contribute to the overall quality of the individual's life (e.g., engaging in new activities, developing friendships).

The team should consider the broader impact of the interventions desired for the student (and team) through the behavioral support process. Interventions may address not only changing specific behaviors, but also enhancing the student's overall quality of life (expanding social networks and making friendships; participating in a greater range of settings and activities). An excellent avenue for establishing a vision and identifying these outcomes is person-centered planning. (See the reference list for some relevant citations.)

Effective intervention is based on a comprehensive understanding of the focus student and environmental circumstances influencing his or her behavior. A variety of data collection methods, ranging from highly precise and systematic to relatively informal, have been developed to obtain this information. Teams implementing functional behavioral assessments will need to decide which tools and methods will be most useful given the nature of the student's behavior, sources of relevant information, circumstances in which data must be collected and time and resources available. In general, it is important to gather information from multiple perspectives and across a range of settings, activities and situations. Gathering data should be conducted as a collaborative process and is not necessarily the responsibility of one team member (e.g., a teacher or behavior specialist). It may be beneficial to develop an action plan with specific timelines and responsibilities to guide information gathering.

**Step 1:  Identify the Challenging Behavior**

1.  Define the behavior of concern (be specific).

2.  How often (frequency) does it occur? How long (duration) does it last?

3.  How intense is it (on a scale of 1-10, compared to rating on a similar behavior)?

4.  Do frequency, duration and intensity vary by incident, location or person?

**Step 1:  Identify the Challenging Behavior (continued)**

5. When/where/with whom is the behavior *most likely* to occur?

6. When/where/with whom is this behavior *least likely* to occur?

7. What is the escalation pattern of the behavior?

8. Were there any prior attempts to change? What happened during these attempts?

**Questions to Consider:**

- What would increase or strengthen the student's friendships and social support?

- How can participation and inclusion in the student's home, school and community be increased?

- What would increase the student's opportunity to exercise appropriate choice making and control aspects of his or her life?

- How can the student's self esteem and confidence be strengthened?

- What barriers might interfere with the student's progress?

**Gathering Information**

When beginning the information gathering process, it is helpful to remind the team of the five primary outcomes of the functional assessment process (O'Neill et al., 1997).

- Description of the problem behaviors, including classes or sequences of behaviors that frequently occur together.

- Identification of the events, times and situations that predict when problem behaviors occur across the full range of typical daily routines.

- Identification of the consequences that maintain the problem behaviors (that is, what functions the behaviors appear to serve for the student).

- Development of one or more summary statements or hypotheses that describe specific behaviors, types of situations in which they occur and the outcomes or reinforcers maintaining them.

- Collection of data from direct observation that support summary statements.

Identifying team members and intervention settings helps to focus information gathering and intervention efforts. It is important to engage all support providers as active participants and to design strategies that can be implemented across the full range of circumstances in which the behaviors pose a concern (e.g., in classrooms, on the bus, at home, in the community). Extended team members may be involved in aspects of the process, but not be required for all planning and review sessions.

A behavioral support team is a group of individuals who assess the student's behavior and circumstances to develop individualized, proactive and effective supports. The positive behavioral support process is most effective when implemented as a collaborative process. Team members work together to gather information, analyze patterns, generate the support plan and implement strategies. Strong teams will include individuals responsible for supporting students and willing to commit time and energy to making the intervention work.

Information gathering typically involves indirect and direct methods. Indirect methods include record reviews, interviews or questionnaires and tools to assess the broader physical or social environment. Direct observation involves observing and recording the student's behavior and events in the environment while the behavior is occurring. Whereas indirect methods provide a great deal of descriptive information, direct methods confirm ideas about the variables affecting behavior. People collecting data must insure objectivity in their recording and reporting of information.

The purpose of reviewing information generated from records is to obtain insights into factors affecting the person's behavior. The following sources of information may be relevant in a record review:

- diagnostic and medical records

- psychological information

- assessments from therapies (e.g., occupational, physical, or speech therapy, etc.)

- social histories

- developmental profiles

- previous behavior management programs

- individualized education programs

- individualized family service plans

- anecdotal records

- incident reports/discipline summaries

**Direct Observation**

Data collection through direct observation focuses on recording patterns of behavior and events in the environment as they are actually occurring. Data should be collected at various times and in different settings, continuing until discernible patterns emerge.

Gathering information through direct observation provides

- measurable units of information

- new or additional insights about the variables influencing behavior

Systems should be selected based on circumstances and needs. Two particularly useful tools included in this section are scatter plots and ABC (Antecedent-Behavior-Consequence) recording.

**Guidelines for Data Collection**

- Define behavior in observable and measurable terms

- Insure the reliability of the behavioral definition

- Select a data collection system that fits behavior and circumstances

- Provide training for the individuals collecting data

- Collect data across people, time and circumstances

- Analyze trends and patterns in the data

**ABC Recording**

ABC recording is a method of recording the Antecedents, Behaviors and Consequences that occur in particular circumstances. ABC Recording:

- identifies factors that precipitate the behavior

- identifies variables that maintain the occurrence of the behavior

- identifies patterns between the behavior and antecedent or consequent variables

**Step 2: Identifying Antecedents, Consequences and Setting Events Maintaining the Problem Behavior**

- In what settings does the behavior occur?

- What times of day does the behavior occur?

- Does the behavior occur in the presence of a certain person(s)?

- In what activities is the behavior most likely to occur?

- In what activities is the behavior least likely to occur?

1. Where were key participants before the behavior occurred? What were they doing, thinking, feeling and saying?

2. What were the expectations (of the student and teacher/parent) at the time of the behavior?

3. Is the behavior associated with a specific event (e.g. circle time, science, etc)?

4.  Do environmental events appear to trigger or support this behavior?

| | | | |
|---|---|---|---|
| | Lack of social attention | | Peer attention |
| | Demand/request | | Adult attention |
| | Difficult task | | Public praise |
| | Transition (task) | | Transition (setting) |
| | Behavior ignored | | Time out |
| | Warning reprimand | | Interruption in routine |
| | Negative social interaction | | Loss of privileges |
| | Negative consequences | | Unstructured activity |
| | Crowded setting | | |

5. Can we create a setting in which the behavior is highly unlikely to occur?

**Consequences (after the behavior occurred)**

- What happens to the student after the behavior?
- Do the surroundings in the environment change as a result of the behavior?
- What is gained or lost?
- How do others respond to the behavior?

1.  What did the student gain or escape?

2.  What did the student say they wanted and/or expected?

3.  What did the student do, think, feel and/or say?

4.  What did the key participants do, think, feel and/or say?

5.  What did the student's friends or peers do, think, feel and/or say?

6.  If the student had done nothing, how do they think they would have felt?

7.  Describe strategies or consequences that have helped and not helped decrease the behavior.

**Setting Events (that may exaggerate the likelihood of challenging behaviors)**

In addition to events immediately preceding and following behavior, broader issues may be important. Setting events refer to conditions or circumstances that alter the probability of a behavior occurring. Such variables may have an indirect impact on behavior.

Examples:

1. Medical concerns (e.g., failing to take regularly delivered medication increases the probability that Johnny will shout in class; when Susie has physical discomfort associated with sitting for long periods of time it increases the likelihood she will throw down her books and cry)

2. Activity patterns (when the curriculum offers little variety and mostly repetitive tasks this increases the likelihood that Margaret will get out of her seat, wander around the room and tease peers; Michael will attempt to pull out his hair especially when his schedule is disrupted due to a special activity)

3. Relationships with others (Kevin is more likely to put his head down and close his book when he was reprimanded by a teacher earlier in the day; Darrel is more likely to use profanities when a friend or peer group is present)

**What function does this behavior serve for the student?**

| <u>To Escape</u> | | <u>To Gain</u> |
|---|---|---|
| __ Sensory | (i.e., bright light, loud sounds, etc) | __ Sensory |
| __ Tangible | (i.e., a person, place or thing, etc.) | __ Tangible |
| __ Attention | (i.e., a preferred adult, a peer, etc.) | __ Attention |

**Other Assessments**

Other assessments may also produce valuable information for better understanding of an individual's behavior. For example, medical evaluations may provide insight into physiological issues affecting behavior. Academic, vocational or speech-language assessments may assist a team in evaluating a student's current capabilities and more effectively selecting replacement skills. Reinforcer inventories may help clarify the functions of behavior and assist teams in identifying strategies to motivate student performance. Assessment tools that evaluate broader environmental factors affecting student behavior (e.g., curriculum, physical environment, classroom management) may also be extremely useful in the functional assessment process.

**Step 3: Identify the Intervention(s)**

Once the maintaining variables have been identified through the FBA, an intervention is created by altering the identified antecedents, consequences or setting events. Effective interventions may include environmental modifications (e.g. visual supports to increase structure), curricular interventions (e.g. alternate setting for instruction) or instruction designed to match the student's identified needs (e.g. social or communication skills). The intervention includes finding and teaching appropriate replacement behaviors to serve the same function as the negative behavior originally exhibited. These interventions are considered Positive Behavior Supports (PBS) because the focus is on teaching positive behaviors in an effort to reduce and replace negative ones.

According to Horner et al. (2002), early use of PBS systems can result in a reduction of eighty to ninety percent of challenging behaviors. These findings were also supported by a separate review of the PBS literature by the National Research Council (2001), who reported a success rate of ninety percent or greater reduction in problem behaviors from baseline. In addition to a reduction in problem behavior, increases in positive behaviors and improvement in life-style were also reported. Below is a sample format for a PBS Plan.

Useful hypotheses are:

Accurate: supported by data (observations, interviews)

Precise: describe relationships in specific, observable terms

Concise: worded as simply as possible

Constructive: helpful for guiding intervention

Patterns identified during data collection and analysis should be summarized so that the team can use the information to guide the intervention. A hypothesis is a summary statement that describes one's best guess about the relationship between behaviors and characteristics of the environment (i.e., the specific contexts and functions). The goal is to identify circumstances regularly associated with the occurrence (and nonoccurrence) of problem behavior.

Sample format for hypothesis/summary statement:

A.  when this occurs (describe context)

B.  the student does (describe the behavior)

C.  to gain or escape (describe functions)

**Designing Support Plans**

The development of summary statements is a significant accomplishment because it signals that the team is ready to move from functional assessment to intervention. Well developed hypotheses provide the foundation for positive and effective individualized behavioral support plans. Plans should include components that promote positive behavior and deter problem behavior. Such components are based on the understanding reflected in the hypotheses.

Using the information from the summary statements, one recommended strategy is to begin intervention planning by using the competing behaviors model (O'Neill et al., 1997). This model uses summary statement information (setting events, antecedents, behaviors and maintaining consequences) to identify specific replacement skills and other desired behaviors.

*Effective Positive Behavioral Support Plans are:*

**Proactive**. Behavioral support plans should include adjustments to the environment that reduce the likelihood of problem behavior occurring and allow the student to be as independent and successful as possible. Proactive strategies may include modifying the curriculum, reorganizing the physical setting and clarifying routines and expectations.

**Educative**. Teaching replacement skills and building generalizable competencies are critical for producing broad, durable behavioral change for students. A support plan should target specific skills that will allow the student to meet his or her objectives in more effective, efficient and appropriate ways (e.g., communicative alternatives to the problem behavior) and enhance the student's overall independence, integration and quality of life.

**Functional**. Effective interventions also involve managing consequences so that reinforcement is given for desired behaviors (e.g., use of replacement skills) and withheld following problem behavior, making problem behaviors less effective for the student. Positive interventions use the most natural, least intrusive consequences that adequately address the functions of behavior.

**Questions**

1. What modifications to the environment (social or physical) may prevent problem behavior?

2. What skills does the student need to develop to:
   - achieve the same function as the problem behavior?
   - allow the student to better cope with his or her circumstances?

3. How can consequences be managed so that the specific reinforcers maintaining the student's behavior are:
   - maximized for positive behavior?
   - minimized for problem behavior?

4. What broader changes to the person's lifestyle might indirectly support his or her behavior?

Well designed behavioral support plans should produce broad, durable changes in student behavior (e.g., enhancement of peer relationships, increased participation in integrated activities). Specifically, intervention strategies lead to achievement of important goals established by the team at the outset of the assessment and intervention process. It may be necessary to identify specific methods to promote generalization and maintenance of the student's behavior change.

Consideration should be given to:
- Focusing on target behaviors relevant to the social and physical context (specify replacement behaviors for multiple environments if needed)

- Teaching skills where they will be practiced in the natural environment (classroom, playground, grocery store, with different people, etc.)

- Modifying aspects of the supporting settings to promote adaptive behavior (planning for inclusion in a variety of settings and activities)

- Utilizing existing natural reinforcers and contingencies (use self reinforcement, use everyday activities and people as reinforcers)

***Positive Behavior Support Plan Process Description***

1. What is your hypothesis regarding the function of the problem behavior?

2. State the initial goal for behavior reduction.

3. List socially appropriate replacement behavior that will serve the same function as the undesirable behavior (be specific).

4. List reinforcers to be used.

5. List consequences to be used.

6. Describe the step by step intervention plan to be used when behavior occurs.
   a.
   b.
   c.

7. Describe safety risks and crisis management plan if needed.

8. Identify the method that will be used to document progress such as direct observation, notes and frequency / duration data.

9. Specify people responsible for distributing, monitoring and implementing this plan.

10. Date for review.

**Implementing the Plan and Monitoring Outcomes**

- Once the behavior support plan has been developed, it must be consistently implemented in order to be effective. Teams may need to use additional resources to implement the plan and train personnel and other support providers. Implementation may require reevaluating existing systems and providing opportunities for staff development.

- A good support plan will fit naturally within the routine and structures of the environment in which it is implemented (e.g., the classroom or home). The plan must be "doable" and team members must be committed to its implementation.

- The team will need to track changes in the student's target behaviors and evaluate broader lifestyle changes that occur as a result of the intervention (i.e., based on the original goals determined by the team). Teams will want to use objective measures to document success. (See table below – Summary Box: Challenging Behavior)

- If minimal progress occurs in decreasing problem behaviors, increasing replacement skills, or enhancing the student's lifestyle (e.g., providing more opportunities for integration, expansion of social networks), the behavior support plan and possibly the assessment, should be reevaluated. It may be necessary to repeat or expand the information gathering process and/or to adjust aspects of interventions.

Positive behavioral support is a collaborative, problem-solving approach to resolving serious behavioral challenges and promoting improved quality of life. It reflects not only a shift in methods to address problem behavior, but also changing perspectives on what constitutes appropriate intervention and the roles of individuals with disabilities, families, educators and other service providers in the educational process. To the greatest extent possible, elements of PBS should be infused within existing educational structures and processes.

| Summary Box: Challenging Behavior |
|---|
| • Consideration is given to environmental modifications as well as to communication, social, academic and motivational strategies that may help to prevent challenging behaviors. |
| • Functional behavior assessment is applied to challenging behavior, looking for the communicative intent of the student's behavior. |
| • Based on the results of the FBA, positive behavior supports are developed and implemented. The intervention may include finding and teaching appropriate replacement behaviors to serve the same communicative function as the originally exhibited negative behavior. |
| • Positive behaviors are then reinforced. |

**Component 7: Assessment of the Intervention (Data Collection)**

Prior to using any intervention, it is important to record a baseline of functioning in the particular area of need. That is, it is important to assess or determine how the student is currently functioning in the area(s) of need. Once the goals are established, data are recorded to monitor progress in the program designed to improve the target area. The data are analyzed to determine if a lesson or educational intervention is effective and what changes in the lesson or educational intervention may need to be made. The IFSP or IEP Team must determine how often data will be recorded and the criterion for determining when a particular intervention is unsuccessful and must be abandoned. Ongoing assessment of the student's skill via the data collection system can help determine the next set of goals.

| Summary Box: Data Collection |
|---|
| • Prior to intervention, baseline data on functioning level in the particular area of need is collected. |
| • IFSP/IEP Team determines how often and in what format data is recorded. |
| • A criterion is set for determining when a particular intervention is unsuccessful. |
| • Data are recorded to monitor progress in the program designed to improve the area of need. |
| • Data are recorded to identify problems or lack of progress. |
| • Ongoing assessment of the student's skill via the data collection system determines the next set of goals (if appropriate). |

**Component 8: Transition**

As discussed earlier, students with ASD often have difficulty with changes in the routine or the environment; this is especially true during unstructured periods, such as a planned or unplanned transitions. Consequently, students with ASD often need additional support and instruction in the skills that will allow the student to be as independent as possible during transitions, such as those occurring from:

- Activity to activity

- Home to school

- School to home

- One grade/school to the next grade/school

- School to post-school environments

When planning for a transition, it is important to prepare the student for upcoming changes. When transitioning from activity to activity, provide verbal and visual warnings before ending an activity and use visual supports, such as schedules, to inform the student as to which activity will occur next. Transition objects, which provide a visual cue as to where the student is going, are often helpful for students transitioning from one activity to another. For example, a student may carry a spoon as a reminder they are going to lunch. When transitioning a student into a new grade, school, community, job or post-school environment, it is important to prepare the student for the upcoming change. Assess the new environment to determine what skills the student will need in order to be independent and successful and pre-teach those skills to the student. Talk with the student about the new environment and if possible allow the student to visit the new environment. If a site-visit is not possible, consider videotaping, taking pictures, writing a social story and compiling a list of expectations for the new environment. Additionally, meet with the staff members of the next setting to discuss the student's strengths and particular learning needs. Prepare the staff in the new setting by providing them with information on ASDs, arrange to have them visit or learn about the student's current placement and if possible arrange a meeting between the student and the new staff. In these ways, when typical and major life transitions are systematically addressed and planned for, students with ASD are more likely to experience success, have confidence and be more independent, creating a positive experience for everyone involved.

| Summary Box: Transition Planning |
| --- |
| • Skills are taught and support given to allow the student to be as independent as possible during transitions, such as those occurring from: |
| • Activity to activity |
| • Home to school and school to home |
| • One grade/school to the next grade/school |
| • School to post-school environments |

**Component 9: Opportunities with Peers**

Students with ASDs have significant difficulty in social and communicative interactions with others. Consequently, it is important for students with ASD to have regular and planned interactions with same-age peers who have a variety of abilities and skills. Through same-age peers with and without disabilities, students with ASD may observe more appropriate models for social behavior, receive social feedback from peers and engage in more appropriate social experiences than they would in the company of peers with ASD alone. However, it is important to recognize that merely placing a student with an ASD in the same place as same-age peers does not ensure acquisition of social and communication skills. According to Wagner (1999), the most effective methods for helping students with ASD gain essential social and communicative skills include:

- Play or recreational activities that have been appropriately structured

- Peers receive training

- Teachers actively prompt and reward interactions between the student with an ASD and peers

| Summary Box: Planned Peer Interactions |
|---|
| • Structured activities with one peer or in small groups are provided to practice newly learned social, academic, communication, coping and self-help skills. |
| • Opportunities are provided for interaction with peers who have different abilities and skills, which allows for generalization of mastered social, academic, communication, coping and self-help skills. |
| • Student is given support and opportunities to develop friendships with peers in order to initiate and practice social interaction. |
| • Peers are provided with a time and environment where they are comfortable to ask questions and receive age appropriate information about ASDs. |
| • Parents are encouraged to meet the staff and share information about their student. |
| • Resources, such as videos, books and pamphlets, on ASD are available for staff, students and families. |
| • Support for the staff is provided as they learn to include the student into activities. |

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## Interventions

### Comprehensive

The evaluation or analysis of the existing research in the literature relating to assessment and the development of educational programs based on that analysis is confusing and difficult at best. The federal Office of Special Education Programs (OSEP) Research to Practice Division recently funded the National Academy of Sciences to study educational interventions for students with autism. Their findings are documented in a report, *Educating Children with Autism*. This document is a valuable resource that will enhance understanding and facilitate informed decision-making with respect to assessment and intervention for students with autism.

The following interventions are presented as information on the most often cited interventions. Inclusion of information in this guidance document should not be construed as an endorsement of the intervention. Where available, information regarding research efficacy is included.

**DISCRETE TRAIL (DT)/ INTENSIVE BEHAVIOR INTERVENTION (IBI)/ APPLIED BEHAVIOR ANALYSIS (ABA)** Beginning in 1963, Dr. Ivar Lovaas, of the University of California at Los Angeles (UCLA) and his colleagues applied behavioral techniques to students with autism. The Lovaas treatment methodology has evolved over the years. Although, initially practiced only in clinic settings, the methods refined by Lovaas are currently practiced in clinics, homes and school settings.

The objectives of this treatment are twofold: teach the student to want to learn and help the student to understand that learning is possible. The methodology calls for one-on-one treatment model which entails breaking down a skill goal into small, sequenced steps. Each part of a skill must be mastered before the next part is presented. Prompts and reinforcements (both positive and negative) are used to achieve desired behavior. The underlying philosophy is that behavior changes slowly and in small increments.

Research has demonstrated this intervention to be most successful when provided in an intensive one-on-one format by trained individuals, which may include family members, professionals, paraprofessionals, volunteers or college and high school students. Appropriate training in the theory and methodology of applied behavior analysis is especially critical to the success of the student's program.

**FLOOR TIME-DIR (Developmental Individual-Differences, Relationship Based) Model** is a developmental approach developed by Dr. Stanley Greenspan. A child psychologist, Dr. Greenspan, has been involved in clinical practice with students with special needs and their families for several decades in the Washington, D.C., area. His method calls for focusing on each student's current level of functioning and individual nervous system rather than grouping students under similar disability labels like autism and providing one treatment option for that disability.

The term "Floor Time" refers to the typical area used to foster a student's development - the floor.

The philosophy of treatment emphasizes creating emotional attachments between adult and student. The comprehensive treatment program involves interactive intervention time spent with a student in both the home and school settings where the parents or professionals channel activities to emphasize three types of experiences: _Floor Time_ where the student leads one to an activity of choice which gradually becomes interactive, _Semi-Structured Play_ where one interacts with the student to create highly motivating situations in which to engage in problem solving and _Motor, Sensory Spatial Play_ where the student is involved in physical activities such as running, jumping, spinning, etc.

**TEACCH (Treatment and Education of Autistic and related Communication handicapped CHildren)** was started in the 1970s by Dr. Eric Schopler at the University of North Carolina at Chapel Hill, School of Medicine. The program recognizes the need for educational supports from early childhood through adulthood. It requires teacher training and follow-up training as well as collaboration with parents and co-therapists.

The philosophy of TEACCH is to focus on the student with autism and to design a program around the student's interests, skills and needs. It promotes a broad-based intervention approach, which includes extensive evaluation to determine the starting point for educational programming. The student's educational goals and strategies to address these goals continue to evolve over a student's lifetime based on individual assessment and measured progress.

The teaching strategies are implemented in highly structured, modified physical environments using individualized curriculum.

## Individualized

### Communication

The communication abilities of students with ASD vary tremendously, from non-verbal students to those with an extensive expressive vocabulary and from students with limited receptive abilities to those who can understand complex conversations. The DSM-IV-TR lists four symptoms under the category of communication, including: 1) a delay in, or total lack of, the development of spoken language; 2) for individuals with adequate speech, a marked impairment in the ability to initiate or sustain conversations with others; 3) stereotyped and repetitive use of language or idiosyncratic language; and 4) lack of varied, spontaneous make-believe play (American Psychiatric Association, 2000, p. 75). From this description, it is clear the language and communicative abilities of students with ASD is markedly diverse. Yet, the level of communicative competence attained by students with ASD has been identified as an important predictor of long-term outcome (Stone and Yoder, 2001). In fact, the presence of fluent speech prior to age five is a critical predictor of IQ scores, language measures, adaptive skills and academic achievement in adolescence (National Research Council, 2001, p. 47). Thus, the importance of early intervention in communication skills cannot be understated. However, like much of the field of ASD, the intervention approaches for enhancing communication skills vary tremendously and range from traditional, discrete trial approaches to more contemporary behavior approaches using naturalistic language techniques to developmentally-based approaches and augmentative and alternative communication strategies.

**Discrete Trial.** The earliest research efforts at teaching speech and language to students with ASD used massed discrete trial methods, which were designed to enhance verbal skills by teaching simple vocabulary and sentences through highly structured direct teaching sessions (Delprato, 2001; National Research Council, 2001). While these strategies led to improvements in IQ scores and language skills, students taught with the discrete trial methods often failed to exhibit or generalize their language skills in other environments (Goldstein, 2002). Consequently, interventions designed to teach speech and language skills have increasingly moved toward naturalistic intervention techniques.

**Naturalistic Behavior Interventions.** There is now a large body of empirical support for contemporary behavioral approaches using naturalistic behavior interventions to effectively teach speech, language and communication skills to students with ASD. These approaches include incidental teaching, time delay, milieu interventions and pivotal response training (Delprato, 2001; Goldstein, 2002). These methods use systematic teaching trials that occur in natural activities and contexts, such as play, to enhance spontaneity and generalization. In general, they tend to share several common elements. For example, naturalistic behavior interventions are student centered, with a focus on the student's interests and the initiation for communication coming from the student; they are embedded within the student's natural environment, such as during play settings; and they use naturally occurring reinforcers, such as a favored toy requested by the student (National Research Council, 2001, p. 53). In a review of the literature, Goldstein (2002) examined 12 studies that investigated naturalistic behavior interventions. In each of the 12 studies, the language skills of students with ASD were significantly enhanced and a variety of communicative functions were taught, including eye contact, joint attention and motor imitation; spontaneous productions of social and descriptive language; positive interactions with peers; and increased language production (p. 387-388). Taken together, these studies suggest naturalistic behavior interventions are an effective strategy for teaching a variety of communication skills. Given the success of both naturalistic and discrete trial behavior interventions, direct comparison studies were needed to compare the efficacy of the two interventions.

**Developmental Approaches.** In addition to behavioral techniques, there are numerous intervention approaches based on a developmental framework, such as the **SCERTS** (Supports, Communication, Emotional Regulation, Transitional Support) model developed by Prizant and Wetherby and the **Floor Time/DIR** model developed by Greenspan and Wieder. According to the National Research Council (2001), developmental approaches share a number of commonalities. First, the environment is arranged to provide opportunities for the student to initiate communication, for example, interesting toys are placed just out of the student's reach. Second, the teacher follows the student's lead by responding to all of the student's communicative attempts, which may include such actions as speech, body gestures or hand leading. Third, emotional expressions and affect sharing are emphasized by the teacher. To this end, the teacher may use simplified language to focus on the student's emotion, for example "you're happy".

While the developmental approach shares a number of similarities with naturalistic behavior interventions, Ingersoll, Dvortcsak, Whalen and Sikora (2005) argue there are important differences. For example, they state naturalistic behavior interventions target specific communication forms, such as two-word phrases, while developmental approaches focus on increasing social interactions and general communication ability. While it is true behavior interventions may target specific communication skills, they are also frequently used to enhance social interactions and general communicative abilities (Yoder and Stone, 2006). Ultimately, the IEP goals will target those skills necessary to enhance the student's communication. A variety of strategies, including developmental and/or naturalistic approaches, may be used to support the student in meeting his communication goals.

### Augmentative and Alternative Communication (AAC)

While there is empirical evidence to support the systematic teaching of speech using the naturalistic behavior approach and early support for the use of developmental strategies, twenty to forty percent of students fail to make meaningful gains in speech (National Research Council, 2001). For these students, AAC is often an appropriate intervention to temporarily or even permanently compensate for the communication impairment. A number of AAC strategies have been studied for students with ASD, including sign language and Picture Exchange Communication System (PECS). Both sign language and PECS have research to support their use. (National Research Council, 2001).

**Sign Language** has a strong research base for students with ASD. According to Goldstein (1999), there have been numerous experimental studies of the efficacy of teaching sign language to students with autism (as cited in National Research Council, 2001). These studies suggest that sign language combined with speech training results in faster and more complete receptive and expressive vocabulary acquisition than speech training alone. While, signing may support some children in learning to speak and provide others with a basic form of communication, the National Research Council cautions that "it is very rare to find a student with autism who learns to sign fluently and flexibly" (p. 58). In addition to sign language, visual symbol systems, such as PECS, have also received attention.

**PECS (Picture Exchange Communication System),** developed by Dr., andrew Bondy and Lori Frost, is a pictorial system that utilizes basic behavior principles and techniques, such as a discrete trial teaching format, as well as shaping and differential reinforcement.

The goal of the PECS is to have the student spontaneously initiate a communicative interaction. The underlying philosophy is that a reason for communication must precede actual speech production. The method begins with identifying potential reinforcers (items the student likes and wants). Training begins with physically assisted exchanges of pictures for actual items and continues through a total of six phases. These are meant to lead to desired results in the final stages where a student will use simple sentence structure to make a spontaneous request (phase 4); respond to the question "what do you want?" (phase 5) and responding to other simple questions, such as "what do you see?" with an appropriate comment, such as "I see a bird" (phase 6).

The originators of PECS stress that professionals should go through training in the PECS program to appropriately use the communication strategy and those aspects of behavioral analysis and behavioral teaching techniques are used in conjunction with PECS.

PECS has become increasingly popular with practitioners and research has supported its effectiveness in enhancing the communication skills of students with ASD (Ganz & Simpson, 2004), as well as emergence of speech in play and academic settings and the number and complexity of words used including appropriate grammar (Charlop-Christy, Carpenter, Loc Le, LeBlanc, & Kellet, 2002).

## Social Interventions

Social difficulties are among the hallmark symptoms of ASD. Students with ASD often have significant delays in the use of nonverbal behaviors, such as the ability to read and use gestures and facial expressions. Further, students with ASD often struggle to understand social norms and unwritten social rules. These deficits often separate them from their peers and make developing friendships with same-age students difficult. Deficits in the ability to show social and emotional reciprocity and to share achievements and enjoyments with others further limit the student with ASD's ability to connect on an emotional level with others. Given the severity of these social deficits, many consider it to be the most defining and handicapping feature of the disability (Rogers, 2000). Fortunately, students with ASD have been found to be responsive to a wide variety of social interventions aimed at decreasing inappropriate social behaviors, while also increasing social engagement with others. By increasing social skills, some researchers have even demonstrated a concurrent increase in related skills, such as enhanced communication (Taylor, Levin and Jasper, 1999). Thus, a number of adult, student and peer interventions have been developed and empirically studied, including Social Stories, Video Modeling, Peer Mediated strategies, Theory of Mind and Social Skills Groups.

**Social Stories**, developed by Carol Gray, are an increasingly popular strategy for improving the social skills of students with ASD. A Social Story is an individualized short-story designed to help the student with ASD understand the social context and expectations of a variety of situations. The methodology of Social Stories is founded on the belief that understanding social rules is an essential part of learning an appropriate social behavioral response. The objective is to teach understanding rather than compliance. The stories are usually written by parents or professionals involved with the student who are able to write stories to teach specific social situations of concern to an individual student.

Social Stories use a simplified story formula to develop a story specific to an individual's social needs. The formula for writing the stories calls for clearly defining the social situation which is a problem for the student, identifying social cues which give perspective to the situation and providing a directive for an appropriate response. The resulting story is to be read to or by the person with autism enough in advance to allow for multiple readings before the situation is to occur.

Sansoti, Powell-Smith and Kincaid (2004) noted there was research support for the efficacy of Social Stories, for students ages five to 12, in reducing behaviors, such as tantrums, as well as increasing appropriate social behaviors, such as time spent on task and appropriate hand-washing. However, according to Sansoti et al., it was difficult to determine whether Social Stories alone were responsible for the gains as more research is needed with better experimental controls to determine if the original results can be replicated.

**Video Modeling** utilizes video-taped segments of students, adults or cartoons performing appropriate social-behaviors in an attempt to improve these same behaviors in students with ASD. Early research in video modeling, outside the ASD arena, has demonstrated that the most effective models tend to be individuals close to the observer's age, with similar demographic characteristics, who function at a slightly higher social level than the observer (Buggey, 2005).

A number of ASD researchers have begun to build on these early video modeling studies with promising results through computer programs, video-self modeling and modeling of others (Ayres and Langone, 2005).

**Computer-Based Video Modeling** uses a computer-based program to teach students with ASD an array of social skills, such as turn-taking and following instruction. Early research has provided initial support for the strategy; however, more research is needed (Simpson, Langone and Ayres' as cited in Ayers and Langone, 2005).

**Video Self Modeling (VSM)** involves showing students positive performances of a target behavior and has demonstrated positive results with a number of behaviors, ages and abilities (Buggey, 2005). The strategy typically involves showing students a video of a target behavior one time per day, usually prior to the situation in which the behavior is required. Students are then video-taped on the target behavior and then perform a self-evaluation of their behavior. Other strategies include, editing video tapes, such that students only see themselves correctly performing the target behavior and using Social Stories prior to videotaping.

Researchers of VSM have reported significant gains in the specific target behaviors, as well as good generalization of the skill. Given these findings, VSM seems to be a promising intervention; however, caution is warranted given the lack of experimental controlled research.

**Video Models of Others** involves having students with ASD watch a video tape of other students performing a target behavior successfully. Students are then verbally praised for attending to the video before being asked to repeat the behavior. According to Ayers and Langone (2005), although gains were small, researchers reported a faster acquisition via video as compared to in-person models.

**Peer-Mediated** Given the extensive time and equipment constraints of video-modeling, peer-mediated approaches may be an attractive low-tech alternative for some practitioners. In peer mediated approaches typical peers are taught to repeatedly initiate interactions with students on the autism spectrum. Specifically, typical peers are trained by adults to elicit, prompt and reinforce the social behavior of students with ASD. Research suggests it is important for these interactions to occur with same-age peers in a natural play setting (Paul, 2003). For example, a 1988 study by Dewey, Lord and Magill demonstrated that rule-governed and construction games appeared to facilitate "the most complex social interactions, were the most fun and kept the students most involved with the interactions" (as cited in Roger, 2000).

Over 20 years of research by Strain and colleagues, as well as Lord and colleagues, has demonstrated the power of peer-mediated approaches to increase social interactions and purposeful play, as well as reduce atypical behaviors in both preschool and school-age students with ASD (Rogers, 2000; National Research Council, 2001). Further, maintenance and generalization of these skills to unfamiliar trained peers as well as to new environments has been successfully demonstrated as well (Rogers, 2000). While training and monitoring of peer partners can be complex, numerous publications have described the procedures (Paul, 2003); further, various manuals, such as the Buddy Skills Training Program (Goldstein and Wickstrom, 1986) and Danko, Lawry and Strain's 1998 manual (as cited in National Research Council, 2001) have been written to assist practitioners in its implementation.

Recent research into the area of peer-mediated interventions continues to support its use among students with ASD (DiSalvo and Oswald, 2002; Kalyva and Avramidis, 2005; Morrison, Garcia and Parker, 2001). In fact, Kamps et al., (2002) demonstrated an increase in the frequency and length of social interactions of students with ASD over control groups, with maintenance of these effects lasting over a three year period. Interestingly, in a comparison of two peer-mediated programs, the authors noted a significantly greater improvement in the social skills of school-age students with ASD involved in a cooperative learning group over those involved in a social skills group. Kamps and colleagues hypothesized that the structure of the cooperative learning group over the free-play nature of the social-skills group may have contributed to the findings. The multi-component nature of the cooperative learning group, which also incorporated a social skills component, may have further contributed to its success. Given these findings, peer-mediated interventions appear to be a research supported intervention for enhancing social initiation and social interactions among preschool and school-age students with ASD.

**Theory of Mind** is an evolving psychological concept that describes the development of an individual's understanding of how other people think. Dr. Simon Baron-Cohen is one of the leading professionals associated with Theory of Mind as it relates to autism.

The Theory of Mind concept describes the ability to understand intentions, beliefs, desires and emotions from another perspective. Dr. Cohen termed a significant deficit in this area as "mind blindness." Infants are born with what Dr. Cohen calls two core areas: Folk Psychology- understanding how **people** work and Folk Physics-understanding how **things** work. Each individual's cognitive style depends on how these two core areas develop. A significant deficit in folk psychology development can be found in individuals with autism.

Theory of Mind proposes "mind blindness" can be overcome by teaching the individual to "mind read." This teaching includes fostering the development and understanding of social behavior, communication and imagination. The theory does not provide definitive methodology to accomplish this. Two of the most popular interventions lending itself to this teaching are those of Carol Gray's Social Stories and Michelle Garcia Winner's "I LAUGH" Social-Cognitive Interventions.

**Social Skills Groups** are a broad category of interventions in which a small group of students with ASDs are brought together on a regular basis to receive specific instruction in relevant social skills. Social skills groups vary in the frequency and duration of sessions, number and type of students involved, as well as the content of instruction. For example, a school-based social skills group may occur on a daily basis, across the school year and involve a group of three to four same age peers with related disabilities, but diverse social skills. Alternatively, an outpatient group may take place once a week for six to eight weeks with students of similar ages and skill levels (Barry, Klinger, Lee, Palmary, Gilmore and Boding, 2003). Curriculum or teaching materials also tend to vary across skills groups. According to Williams White, Koenig and Cahill (2007), who completed a review of the literature, group-based social skill training approaches appear to be a useful intervention for students with ASD; however, additional randomized controlled studies are needed.

## Sensory Interventions

There are fewer empirical studies for sensory problems and interventions for students with ASD than for other aspects of development; however, the evidence converges to confirm the existence of sensory difficulties for many students with ASD (National Research Council, 2001). Unusual sensory-perceptual reactions, such as hyper or hypo-sensitivity to touch, taste, sound and visual stimuli, often contribute to challenging behaviors. Unfortunately, there is little rigorous research on intervention techniques for the sensory symptoms students with ASD may display.

**Sensory Integration (SI)** was originally developed by Dr. Jean Ayres, an occupational therapist, who worked in California with students and adults with neurological disabilities. Since Dr. Ayres' death in the early 1990s, the approach has continued to be defined and refined by various individuals.

SI is the ability of an individual to organize sensations received by the body to move, learn and behave normally. We learn through sensory systems, which include visual/sight, auditory/sound, olfactory/smell, gustatory/taste, tactile/touch and vestibular/inner ear movement and gravity.

Assessment and intervention techniques were developed to assist parents and professionals in the remediation and accommodation of sensory system deficits. The area of SI is primarily a treatment used by occupational therapists but can be applied effectively with other disciplines such as speech-language therapy and in classroom learning situations. However, non-informed parents and professionals should not provide stimulation to sensory systems without consultation or advice from an informed professional. Initial studies have provided limited support for SI; and, additional well-controlled experimental studies are still needed. American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders-fourth edition-test revised* (DSM-IV-TR), Washington D.C.

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**Possible Risk Factors for Considering Autism Screening**

Risk Factors: Socialization

- Does not smile socially
- Seems to prefer to play alone
- Gets things for himself
- Is very independent
- Has poor eye contact
- Is in his own world
- Tunes us out
- Is not interested in other children

Social questions to ask if you suspect autism. Does he/she…

…cuddle like other children?
…look at you when you are talking or playing?
…smile in response to a smile from others?
…engage in reciprocal, back and forth play?
…play simple imitation games, such as pat-a-cake or peek a boo?
…show interest in other children?

Risk Factors: Communication

- Does not respond to name
- Cannot tell me what he or she wants
- Language is delayed
- Doesn't follow directions
- Appears deaf at times
- Does not point or wave bye-bye
- Used to say a few words, but now doesn't

Communication questions to ask if you suspect autism. Does he/she or is there….

…point with his finger?
…gesture? Nod yes and no?
…direct your attention by holding up objects for you to see?
…anything odd about his/her speech?
…show things to people?
…lead an adult by the hand?
…given inconsistent responses to name or commands?
…use rote, repetitive, or echolalic speech?
…memorize strings of words or scripts?

Risk Factors: Behavior

- Tantrums
- Is hyperactive/uncooperative or oppositional
- Does not know how to play with toys
- Gets stuck on things over and over
- Toe walks

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# Appendix A

## Definitions

## Autism Spectrum Disorders
## Key Terms and Acronyms

ABA
    See applied behavior analysis

ABC Antecedent, Behavior, Consequence
    What happens before, during and after the behavior (ABC), specifying setting(s).

Accommodations
    Alterations to the environment, equipment, or format of a curriculum to allow
    equal access to the content; accommodations do not alter the actual
    content of the material being taught.

Adaptive behavior
    An individual's manner of dealing with the demands of daily life, including self-care
    skills, organizational skills, basic interpersonal skills, and conformance to
    community standards (obeying rules, taking responsibility, etc.)

Antecedent:
    An event or activity that immediately precedes a behavior

Applied behavior analysis (ABA)
    Based on behavioral theory, a prescribed set of interventions designed to
    improve socially relevant behaviors and skills

Assistive technology
    Means any device or service that is used to increase, maintain, or improve  the
    functional capabilities of a child with a disability

Attention
    The ability to concentrate as needed

Attention-deficit/hyperactivity disorder (ADHD)
    Any of a range of behavioral disorders in children characterized by symptoms that
    include poor concentration, an inability to focus on tasks, difficulty in paying
    attention, and impulsivity. A person can be predominantly inattentive (often
    referred to as ADD), predominantly hyperactive-impulsive, or a combination of
    these two.

Attribution
    The ability to connect cause and effect, and to understand why  things happen to
    us.

Auditory processing
    How the brain processes and interprets what is heard through the ear

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**Baseline**

Data collected prior to starting an intervention

**Behavior Intervention Plan (BIP)**

A plan that defines how a setting will be changed to improve a learner's behavioral success

**Body language**

Information about a person's thoughts or feelings that is unconsciously conveyed through physical mannerisms

**Cartooning**

Cartooning is a method that takes an abstract social situation and makes it into a concrete visual representation. When a student is involved in social circumstances that didn't go as expected, drawing it out as a cartoon with speech and thought bubbles can help the student "see" what happened. The cartooning allows the student to better understand the interactions, gain perspective on what others were thinking, and identify the hidden rules that were involved

**Cause and effect**

The ability to connect how a certain action leads to a certain reaction.

**Cognition**

Conscious mental activity, including thinking, perceiving, reasoning, and learning

**Collaboration**

Working together for a common goal

**Communication**

The deliberate conveying of information to another person

**Communication disorder**

Stuttering, impaired articulation, language or voice impairment that adversely affects a child's educational performance

**Community of Practice (CoP)**

Concept referring to the process of social learning that occurs when people who have a common interest in some subject or problem collaborate over an extended period to share ideas, find solutions, and build innovations. This work is meant to expand knowledge and/or improve practice.

**Connecting cause and effect**

Although students with autism may be able to repeat a rule or a consequence about a social situation, they may not connect how the rule or consequence can apply to them personally. A universal support for all students is teaching why a social behavior can result in a given effect. This can be done using a social

situation that has happened, or when teaching subject matter in language arts or history, or by using video clips of social situations and discussing what was the cause and effect. Embedding the teaching of cause and effect as it applies to social situations naturally makes it an ongoing experience, rather than a separate topic to teach.

Consequence
> The response (positive or negative) to a behavior

Contextual factors
> Those factors in the learning environment that determine whether or not the student can be successful. Information regarding those factors collected both indirectly and directly, allows school personnel to predict the circumstances under which the problem behavior is likely and not likely to occur. For instance, if the student acts out when given a worksheet, it may not be the worksheet that caused the acting-out, but the fact that the student does not know what is required and thus anticipates failure or ridicule.

Contingency
> Something that occurs as a result of another factor

Data
> A well-developed assessment plan and a properly executed functional behavioral assessment should identify the contextual factors that contribute to behavior. Determining the specific contextual factors for a behavior is accomplished by collecting information on the various conditions under which a student is most and least likely to be a successful learner. Information collected both indirectly and directly, allows school personnel to predict the circumstances under which the problem behavior is likely and not likely to occur. This information collection becomes the data upon which decisions can be based.

Data based decision-making
> Instructional decisions based on student performance data

Data collection
> Any method of recording behavioral data for subsequent analysis

Dialogue Guides
> Tools for building shared understanding and shared implementation efforts through conducting interactive discussions that seek common ground and encourage application

DSM-IV-TR
> The Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition Text Revised is the main diagnostic reference of mental health professionals. In this manual, autism spectrum disorders are referred to as Autistic Disorder, Asperger Syndrome, and Pervasive Developmental Disorder not otherwise specified.

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**Duration**
How long a behavior lasts.

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

**Emotional regulation**
Control of emotions, stabilization, ability to recognize your emotional state and make changes as necessary

**Empathy**
The ability to understand how another person feels or what he/she may be thinking; sometimes referred to as "putting yourself in another person's shoes."  Sometimes referred to as theory of mind.

**Empirically supportive intervention**
Educational practices/instructional strategies supported by relevant scientific research studies or research-based "best practice".

**Evidence-based practice**
Educational practices/instructional strategies supported by relevant scientific research studies or research-based "best practice".

**Executive function**
A collection of brain processes which are responsible for planning, flexibility, abstract thinking, rule acquisition, initiating appropriate actions and inhibiting inappropriate actions, and selecting relevant sensory information.

**Fading**
Decreasing the level of assistance needed to complete a task or activity.

**Free Appropriate Public Education (FAPE)**
Special education and related services that – (a) Are provided at public expense, under public supervision and direction, and without charge; (b) Meet the standards of the SEA, including the requirements of this part; (c) Include an appropriate preschool, elementary school, or secondary school education in the State involved; and (d) Are provided in conformity with an individualized education program (IEP) that meets the requirements of §§ 300.320 through 300.324. [IDEA 2004 Part B Regulations, §3

**Fidelity of implementation**
Implementation of an intervention, program, or curriculum according to research findings and/or on developers' specifications

**Flourishing**
Positive mental health

**Fluency**

A stage of learning, during which a person can perform an activity with little to no thought

**Frequency**
How often a behavior occurs during a set period of time

**Functional Behavior Assessment (FBA)**
A comprehensive and individualized strategy designed to:
- Identify why a behavior occurs and the context in which it 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**
The ability to receive or to convey a message, regardless of the mode, to communicate effectively and independently in a given environment

**Functional performance**
A term that is generally understood to refer to skills and activities that are not considered academic, i.e. routine activities of everyday living

**Function of the behavior**
The function of the behavior may usually be described as an effort to "get something", or to "avoid and/or escape something".

**Generalization**
Transferring a skill/behavior into other environments

**Graphic organizer**
Strategy for graphically representing concepts and providing links among concepts.

**Hidden curriculum**
A term to used to describe the unwritten social rules and expectations of behavior that we all seem to know, but were never taught.

**Hypothesis**
An educated guess based on data collected.

**IDEA – Individuals with Disabilities Education Improvement Act of 2004**
Original passage in 1975; latest reauthorization 2004; federal statute relative to education and services to students with disabilities ages 3 through 21

**IDEA Partnership**
IDEA Part D federal grant; collaboration of 55 plus national organizations, technical

assistance providers, and State and local organizations and agencies, together with the Office of Special Education Programs (OSEP)

Incredible 5-Point Scale
The Incredible 5-Point Scale was developed by Kari Dunn Buron and Mitzi Curtis. The scale is a visual representation using numbers, words, and/or pictures to represent levels of a social behavior and can include supports to help at each level. The process works well with students with Asperger Syndrome/High Functioning Autism, but can work with students on the more classic end of the spectrum also.

Individualized education program (IEP)
A written plan developed by a specified group of people who know the child, including parents, that specifies the services and accommodations the school will provide to a child with a disability.

Integrated play groups
Based on the work of Pamela Wolfberg, Ph.D., an Integrated Play Group places children with autism and peer partners who have demonstrated capable play experience in a play situation guided by an adult facilitator to teach how to play and socialize with each other.

Intervention
Specialized activities that target students' individual needs to develop their knowledge or skills in their area of weakness.

Intervention strategies
See Intervention

Joint attention
Consciously focusing one's attention on the same event or object as another person.

Least Restrictive Environment  (LRE)
A student who has a disability should have the opportunity to be educated with non-disabled peers, to the greatest extent possible.

LEA– Local Education Agency
Refers to a specific school district or a group of school districts in a cooperative or regional configuration

Linguistic
Related to language

Mental health
"a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with people, and the ability to adapt to change and cope with adversity" (U.S. Department of Health and Human Services, 1999, p. 4). Mental health is not merely the absence of mental illness but the presence of

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something positive

**Motivation**

Wanting to partake of an object or activity. Intrinsic desire within one's self.

**Natural reinforcers**

Reinforcers that are logically related to the task at hand For example, if the student points at a book and says "book," handing him the book is the natural reinforcer. Consequences that increase the likelihood of the reoccurrence of the behavior.

**Nonverbal behaviors**

Deliberate behaviors other than speech/vocalizing

**Nonverbal communication**

Facial expression, gestures, body language, and distance you keep from other people when talking to them. There are some estimates that say as much of 90% of our communication messages come from the nonverbal elements of our communication.

**Obsessive-compulsive disorder (OCD)**

A chronic anxiety disorder most commonly characterized by obsessive, distressing, repetitive thoughts and related compulsions

**Operational definition**

Describes a behavior in observable and measurable terms such that any person may identify the behavior when it occurs

**Overt behaviors**

Behaviors that can be observed

**Patterns of Behavior**

As data is analyzed, it is often helpful to determine if there are any patterns of behavior, e.g., "when Trish doesn't get her way, she reacts by hitting someone".

**Peer network**

A group of peers that includes an individual with ASD and is structured around a specific purpose such as tutoring or play.

**Positive Behavior Supports (PBS)**

Evidence-based practices embedded in the school curriculum/culture/expectations that have a prevention focus; teaching, practice, and demonstration of pro-social behaviors. A decision making framework that guides the selection, integration, and implementation of the best evidence practices for improving important academic and behavior outcomes for all students. Services are often organized within a three-tiered approach including universal, targeted and tertiary prevention.

**Positive psychology**

The study of processes and conditions that promote optimal functioning in people

including positive affect, positive character strengths, and positive institutions (Seligman & Csikszentmihalyi, 2000)

Positive reinforcement
Presentation of something immediately following a behavior that makes that behavior more likely to occur in the future

Positive Youth Development
Building and improving assets that enable youth to grow and flourish throughout life (Larson, 2000).

Priming
See rehearsal below

Prompts
Supplemental support to elicit the target behavior

Punishment
Events that follow a behavior and decrease the likelihood of the behavior reoccurring

Reciprocal interactions/conversation
Social situations that involve give-and-take or back-and-forth exchanges

Regression
A child appears to develop typically but then begins to lose speech and social skills, typically between the ages of 15 and 30 months, and is subsequently diagnosed with autism.

Rehearsal/Priming
Acting out a situation in order to practice skills in a structured, positive environment

Replacement behavior
A more acceptable behavior that serves the same purpose as the behavior in question. For example, if the IEP team determines through a functional behavioral assessment that a student is seeking attention by acting-out, they can develop a plan to teach the student more appropriate ways to gain attention, thereby filling the student's need for attention with a replacement behavior that serves the same function as the inappropriate behavior.

Replacement Skills
Some student problems are so severe they require direct instruction of new skills to replace the problem behaviors. For example, if the student finds it difficult to control his or her anger, she or he may need to be taught certain skills, such as recognizing the physical signs of anger, using relaxation skills, applying problem-solving skills, and practicing communication skills.

**Response to Intervention/Response to Instruction/Responsiveness to Intervention (RTI)**
Practice of providing high quality instruction and interventions matched to student need, monitoring progress frequently to make changes in instruction or goals and applying child response data to important educational decisions

**Role-playing**
Acting out a situation in order to practice skills in a structured, positive environment.

**Scaffolding**
Adjusting the level of support provided based on the child's level of comfort and competence. This can include supports in the form of modeling, prompts, direct explanations, and targeted questions.

**SEA – State Education Agency**
Refers to the Department of Education at the state level

**Self-advocacy**
Speaking up for oneself-- asking for what one needs.

**Self-advocacy strategies**
Assist the individual in being able to articulate needed supports and to advocate for them.

**Self-awareness**
The ability to monitor, assess, and modify one's own behavior.

**Self-determination**
Deciding one's own fate/future.

**Self-monitoring**
Recording data about one's own behavior

**Self-regulation**
In sensory processing, an individual's method of responding to sensory input

**Self-stimulatory behaviors**
Repetitive, apparently non-functional behaviors that provide some sensory input (e.g., finger flicking or rocking); also known as "stereotypies"

**Semantic mapping**
Incorporates visual strategies to help students stay on a selected topic.

**Sensory integration**
The organization of sensory input for use. The use may be a perception of the body or world, an adaptive response or learning process.

**Sensory processing**

A person's way of noticing & responding to sensory messages from their body and the environment. A complex set of actions that enable the brain to understand what is going on both inside your own body and in the world around you. Individuals with disabilities may respond to sensory input in more extreme ways. For example, persons with autism may be more sensitive to sounds and touch. Two major patterns of sensory processing:

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

**Setting Event**

Conditions or events that influence behavior by temporarily changing the value or effectiveness of reinforcers

**Severity**

Intensity of a behavior

**Shaping**

Development of a new target behavior by the reinforcement of closer approximations the target behavior (e.g. target behavior placing utensils appropriately in a place-setting, reinforcement initially occurs for getting utensils to table, then placing utensils at each place-setting and then finally for placing the fork on the left and the spoon and knife on the right).

**SLA - State Lead Agency**

The state agency designated to provide oversight for IDEA Part C Program

**SOCCSS (Situation, Options, Consequences, Choices, Strategies, Simulation)**

SOCCSS is another technique that provides a framework for tackling many situations. In this problem solving method, first the SITUATION is discussed using Wh- type questions (who, what, where, when, why). Next, OPTIONS for the problem are identified and then CONSEQUENCES for each option. Following that, the options are prioritized and the best one is selected. Then, STRATEGIES are developed so the student knows how to handle the situation next time. The final step is SIMULATION, which allows the student to practice the chosen strategies to prepare for the next time the situation occurs. A student with autism is going to need guidance and support to move through these steps, as perspective taking and flexible thinking is required to think of more than one solution or what the consequences might be.

**Social cognition/social thinking**

How a person processes and interprets information about other people and

their interactions.

Social communication

The reciprocal use or exchange of information that has a deliberate effect on another person's concentration, thought processes, or emotions

Social Emotional Learning (SEL) -

Social emotional learning is the process of teaching children and youth skills needed to handle ourselves effectively in everyday life and establish meaningful relationships. These skills include recognizing and managing emotions, developing caring and positive relationships, making responsible decisions and handling life challenges effectively. (www.casel.org )

Social interaction

Dynamic, changing sequence of social actions between individuals or groups who modify their behavior in response to one another.

Social learning

Learning to understand others' perspectives and to behave in ways that others will consider socially appropriate

Social Narratives

Social narratives are phrases, sentences, or stories that help explain a social behavior or situation to an individual with autism. There are a variety of types, such as Power Cards, Social Stories TM, social scripts, or cartooning, to choose from based on the student's needs. Most of the narratives include the following steps: (1) Identify the target behavior; (2) Collect data to determine baseline; (3) Write the narrative based on the student's abilities; (4) Teach the narrative and review as determined by need; (5) Continue to collect data and evaluate the effect of the narrative (based on Texas Autism Resource Guide for Effective Teaching).

Socialization/Social skills

Socially acceptable learned behaviors that enable a person to interact with others in ways that elicit positive responses and assist in avoiding negative responses

Social Skills Groups

Gathering groups of students who are challenged with gaining social competence can allow for teaching and practicing positive social behaviors. The groups can be school based, agency based, or community based with a focus on social skills, social frameworks, or recreation and leisure skills.

Social translator

Used to help interpret the person's behavior in the context of their characteristics, and helps to interpret situations and the behavior of others to the student with ASD.

Social validity

The extent to which the people directly involved with social skills programming believe it is valuable for the child or adolescent with ASD and, therefore, are likely

to be enthusiastic about supporting and implementing it.

**SODA (Stop, Observe, Deliberate, Act)**
SODA is a framework for approaching social situations.  For instance, if I were going to lunch with a group of friends, first I would STOP before entering the situation.  Next, I would OBSERVE what people are doing and saying.  Then, I would DELIBERATE about how I can fit into the situation.  And last, I would ACT on what I decided during the deliberation phase.  SODA gives a method for approaching many social situations rather than a breakdown of each and every skill.

**Stakeholder**
Anyone affected by or invested in the implementation and outcomes of a process or activity.  For example, teachers, students, administrators, and families are all stakeholders in education

**Stress Thermometers**
Stress thermometers are a visual support that can show students with autism how their emotions affect their levels of stress and what supports can be helpful for each level.  Using a picture of a thermometer, the student shares what is least stressful to most stressful and those are written on the left side of the red line rising on the thermometer.  On the right side, supports for each stressor are added.  The visual is reviewed and taught to the student.

**Structured leisure participation**
Participation in organized activities that possess the following characteristics: regular participation schedules, rule-guided interaction, direction by one or more adult leaders, an emphasis on skill development that increases in complexity and challenge, and performance that requires sustained active attention and the feedback (Mahoney et al., 2005).  Participation in structured leisure is associated with both personal and interpersonal development.

**Symbol**
An abstract representation that communicates an idea; symbols can range  from pictures to written and spoken language

**Symbolic communication**
Use of symbols of any sort to communicate meaning

**Token**
An item that may be earned for displaying an appropriate behavior and redeemed later for a reinforcer Examples include stickers, points, fake coins.

**Transition**
Any environmental change, such as a change of location, activity, or support personnel   1) Transitions can be minor, such as changing activities within the classroom, or major, such as moving from elementary school to middle school.  2) The change from school to post-school life.

*Autism Spectrum Disorders Glossary of Terms*
*The IDEA Partnership located at the National Association of*
*State Directors of Special Education is sponsored by the*
*U.S. Department of Education Office of Special Education Programs.   2011*

**Underlying Characteristics**
Characteristics across a number of domains associated with ASD.

**Visual schedule**
A visual schedule will tell the student what activities will occur and in what sequence. Schedules can be object-based (e.g. a shopping bag means student is going shopping), photograph/picture symbol (e.g. a picture of the grocery store) or traditional orthography.

**Visual supports**
Tools that are used to increase the understanding of language, environmental expectations, and to provide structure and support. For example a photograph of the staff member with whom the child will be working or a skittles candy wrapper that is handed-over to request a skittle snack.

**The following stakeholders worked together within the IDEA Partnership to create this Autism Spectrum Disorders glossary:**

Regional Technical Assistance Provider
Arizona

State Parent Technical Assistance Provider
California

Technical Assistance Provider
Canada

Related Service Personnel
Connecticut

General Education Administrator
Illinois

National Organization Representative
Illinois

State Technical Assistance Provider
Illinois

State Technical Assistance Provider
Kansas

National Technical Assistance Provider

Maryland

State Department of Education
Minnesota

National Organization Representative
Maryland

Special Education Administrator
New Jersey

Teacher
New Mexico

Parent/Professional Development Specialist
New York

Related Service Provider/Higher Education
Ohio

State Technical Assistance Provider
Ohio

State Technical Assistance Provider

Ohio

State Technical Assistance Provider
Ohio

Parent
Oregon

Regional Technical Assistance
Provider/Parent
Pennsylvania

Special Education Administrator
Tennessee

Higher Education/Vocational
Administrator
Virginia

National Technical Assistance Provider
Washington, DC

State Technical Assistance Provider
West Virginia

Person on the Spectrum/Parent/Related
Service Personnel
Wisconsin

Special Education Administrator
Wisconsin

# Appendix B

## Examples of Assessment Tools

**Examples of Assessment Tools**

| Autism/Asperger's General Diagnostic Tools | | |
|---|---|---|
| **Title** | **Company** | **Comments** |
| Autism Diagnostic Observation Schedule (ADOS) | WPS (Western Psychological Services) | • Standardized behavior observation scale. |
| | http://portal.wpspublish.com | • Requires training to administer. |
| | | • Used with toddlers through adults. |
| | | • Provides diagnostic information across ages, developmental levels, and language skills. |
| | | • Takes 35-40 minutes to complete each of four modules. |
| Autism Diagnostic Interview, Revised (ADI-R) | WPS (Western Psychological Services) | • Clinical assessment interview tool. |
| | http://portal.wpspublish.com | • Requires training to administer. |
| | | • Used with children with mental age above 2 years. |
| | | • Takes about 1 ½ to 2 ½ hours to administer and score. |
| Australian Scale for Asperger's Syndrome - 1998 | Available free on-line at www.udel.edu/bkirby/asperger | • Questionnaire designed to identify behaviors and abilities indicative of Asperger's Syndrome in school age students. |
| | | • Also in the book "Asperger's Syndrome: A Guide for Parents and Professionals" by Tony Attwood. Published by Jessica Kingsley Publishing (1998) |
| Gilliam's Asperger's Disorder Scale (GADS) – 2001 | ProEd, Inc. | • Standardized behavior rating scale. |
| | www.proedinc.com | • Used with students aged 5-18. |
| | | • Takes about 10-15 minutes to complete. |
| Childhood Autism Rating Scale (CARS) - 1988 | WPS (Western Psychological Services) | • 15-item behavior rating scale designed to identify students with ASDs and determine symptom severity through quantifiable ratings based on direct observation. |
| | http://portal.wpspublish.com | • Requires training to administer. |
| | | • Used with children ages 2 and above. Takes about 15 minutes to administer. |
| | | • Distinguishes autism from other developmental disabilities. |

| Autism/Asperger's General Diagnostic Tools | | |
|---|---|---|
| **Title** | **Company** | **Comments** |
| Gilliam Autism Rating Scale (GARS-2) – 2006 | ProEd, Inc.<br><br>www.proedinc.com | • Norm-referenced instrument. |
| | | • Identifies autism and estimates severity. |
| | | • Used with ages 3-22. |
| | | • Takes about 5-10 minutes to administer. |
| Social Responsiveness Scale (SRS) | WPS (Western Psychological Services) | • Rating scale designed to distinguish ASD from other child psychiatric conditions. |
| | http://portal.wpspublish.com | • Measures severity of ASD symptoms as they occur in natural settings. |
| | | • Used with students aged 4-18 years. |

| Social Participation Assessment Tools | | |
|---|---|---|
| **Title** | **Company** | **Comments** |
| Battelle Developmental Inventory, 2nd Edition (BDI-2) | Riverside Publishing | • Developmental assessment for early childhood. |
| | http://www.riverpub.com | • Measures personal-social, adaptive, motor, communication, and cognitive ability. |
| | | • Norm referenced. |
| | | • Used with children 0-7 years. |
| Child Development Inventory (CDI) | Pearson Education | • Norm referenced parent questionnaire. |
| | http://ags.pearsonassessments.com | • Used with children aged 15 months to 6 years. |
| *DO-WATCH-LISTEN-SAY* (2008) | Brookes Publishing | • Social skills checklist. |
| | http://www.brookespublishing.com | • Used with young children. |
| | | • In book *DO-WATCH-LISTEN-SAY* (2008) by Kathleen Quill. |
| The New Portage Guide 0-6 (Portage) | Portage Project | • Criterion referenced observation. |
| | http://www.portageproject.org | • Norm referenced parent questionnaire. |
| | | • Used with children aged 18 months to 6 years. |
| Social Thinking Dynamic Assessment Protocol | Social Thinking | • In book *Thinking About You Thinking About Me* (2nd Edition, 2008) by Michelle Garcia Winner. |
| | http://www.socialthinking.com | |
| **Developmental Rates and Sequences Assessment Tools** | | |
| **Title** | **Company** | **Comments** |
| Battelle Developmental Inventory, 2nd Edition (BDI-2) | Riverside Publishing | • Developmental assessment for early childhood. |
| | http://www.riverpub.com | • Measures personal-social, adaptive, motor, communication, and cognitive ability. |
| | | • Norm referenced. |
| | | • Used with children 0-7 years. |
| Child Development Inventory (CDI) | Pearson Education | • Norm referenced parent questionnaire. |
| | http://ags.pearsonassessments.com | • Used with children aged 15 months to 6 years. |
| Mullen Scales of Early Learning | Pearson Education | • Norm referenced. |
| | http://ags.pearsonassessments.com | • Used with children from birth to 68 months. |
| The New Portage Guide 0-6 (Portage) | Portage Project | • Criterion referenced observation. |
| | http://www.portageproject.org | • Norm referenced parent questionnaire. |
| | | • Used with children aged 18 months to 6 years. |

*Examples of Assessment Tools*

| Communication Assessment Tools | | |
|---|---|---|
| **Title** | **Company** | **Comments** |
| CELF 4 – Pragamatic Profile | Pearson Publishing | • Used with ages 5-21. |
| | http://pearsonassess.com | • Provides Criterion Score. |
| CELF Preschoool 2 – Descriptive Pragmatics Profile | Pearson Publishing | • Used with children aged 3 to six years. |
| | http://pearsonassess.com | • Provides criterion score. |
| Children's Communication Checklist-2 | Pearson Publishing | • Identifies students with pragmatic language impairments who may require further autism assessment. |
| | http://pearsonassess.com | • Use with students aged 4 years to 16 years 11 months. |
| Communication Assessment Record | Jessica Kingsley Publishers | • Use with pre- or non-verbal students. |
| | http://www.jkp.com | • In book *Assessing and Developing Communication and Thinking Skills in People with Autism and Communication Difficulties* (2005) by Kate Silver. |
| Comprehensive Assessment of Spoken Language (CASL) | Pearson Publishing | • Use with ages 3 years to 21 years 11 months. |
| | http://pearsonassess.com | • Includes pragmatic language, supralinguistic (abstract language), lexical/semantic language, and syntactic language subtests. |
| Social Language Development Test – Elementary | LinguiSystems | • Used with ages 6 years to 11 years 11 months. |
| | http://www.linguisystems.com | • A standardized tool that assesses the social interaction skills of students. |
| Test of Language Competence – Expanded (TLC-E) | Pearson Publishing | • Used with ages 5 years to 18 years 11 months. |
| | http://pearsonassess.com | • Assesses abstract elements of language (e.g. inferences, ambiguous sentences, figurative language, etc.). |

| Communication Assessment Tools | | |
|---|---|---|
| **Title** | **Company** | **Comments** |
| Test of Problem Solving 2 Adolescent (TOPS 2) | LinguiSystems | • Used with adolescents ages 12 years to 17 years, 11 months. |
| | http://www.linguisystems.com | • Assesses a broad range of critical thinking skills in five different subtest areas: making inferences, determining solutions, problem solving, interpreting perspectives, and transferring insights. |
| Test of Problem Solving 3 (TOPS 3) | LinguiSystems http://www.linguisystems.com | • Used with students ages 6 years to 11 years, 11 months. |

| Cognition Assessment Tools | | |
|---|---|---|
| **Title** | **Company** | **Comments** |
| Battelle Developmental Inventory, 2nd Edition (BDI-2) | Riverside Publishing | • Developmental assessment for early childhood. |
| | http://www.riverpub.com | • Measures personal-social, adaptive, motor, communication, and cognitive ability. |
| | | • Norm referenced. |
| | | • Used with children 0-7 years. |
| Behavior Rating Inventory of Executive Functioning (BRIEF) | Pearson Publishing | • Standardized assessment instrument. |
| | http://pearsonassess.com | • Completed by caregivers and educators. |
| | | • Assesses executive functioning in both home and school environments. |
| | | • Used with students age 5-18. |
| Mullen Scales of Early Learning | Pearson Education | • Norm referenced. |
| | http://ags.pearsonassessments.com | • Used with children from birth to 68 months. |

| Sensory Processing Assessment Tools | | |
|---|---|---|
| **Title** | **Company** | **Comments** |
| The New Portage Guide 0-6 | Portage Project<br>http://www.portageproject.org | • Criterion referenced observation.<br>• Norm referenced parent questionnaire.<br>• Used with children aged 18 months to 6 years. |
| Sensory Processing Measure (SPM) | WPS (Western Psychological Services)<br>http://portal.wpspublish.com | • Norm referenced.<br>• Measures sensory functioning at home, school and in community.<br>• Home and Main Classroom forms take 10-15 minutes to complete. |
| Sensory Profile -1999 | Pearson Publishing<br>http://pearsonassess.com | • Classification system based on normative information.<br>• Multiple tools including caregiver questionnaire and school companion. |
| Behavioral Repertoire Assessment Tools | | |
| **Title** | **Company** | **Comments** |
| Gilliam's Asperger's Disorder Scale (GADS) – 2001 | ProEd, Inc.<br>www.proedinc.com | • Standardized behavior rating scale.<br>• Used with students aged 5-18.<br>• Takes about 10-15 minutes to complete. |
| Gilliam Autism Rating Scale (GARS-2) – 2006 | ProEd, Inc.<br>www.proedinc.com | • Norm-referenced instrument.<br>• Identifies autism and estimates severity.<br>• Used with ages 3-22.<br>• Takes about 5-10 minutes to administer. |

# Appendix C

## West Virginia Birth to Three Contacts

# AUTISM SPECTRUM DISORDERS:  SERVICES IN WEST VIRGINIA SCHOOLS

*West Virginia Birth to Three Contacts*

**Region I Regional Administrative Unit**
Catholic Charities West Virginia
1025 Main Street, Suite 510B
Wheeling, WV 26003
(304) 214-5775; Fax (304) 214-5792
Toll Free: 1-800-619-5697
Serves: Brooke, Hancock, Marion, Marshall,
Monongalia, Ohio, Tyler, Wetzel

**Region II Regional Administrative Unit**
The Arc of Mid Ohio Valley
521 Market Street, #17
Parkersburg, WV 26101
(304) 485-2000; Fax (304) 865-2072
Toll Free: 1-866-401-8919
Serves: Calhoun, Doddridge, Gilmer, Harrison,
Pleasants, Ritchie, Wirt, Wood

**Region III Regional Administrative Unit**
River Valley Child Development
1701 5th Ave., Box 14
Charleston, WV 25312
(304)414-4460; Fax (304)414-4461
Toll Free:  1-866-402-2094
Serves:  Jackson, Kanawha, Roane

**Region IV Regional Administrative Unit**
Administrative Unit River Valley Child Development
611 7th Avenue, Suite 205
Huntington, WV 25701
(304) 523-5444; Fax (304) 523-5556
Toll Free: 1-866-982-8855
Serves: Boone, Cabell, Lincoln,
Logan, Mason, Mingo, Putnam, Wayne

**Region V Regional Administrative Unit**
Mountain Heart Community Services
1200 Harrison Avenue, Suite 220
Elkins, WV 26241
(304) 637-2844; Fax (304) 637-2845
Toll Free: 1-800-449-7790
Serves: Barbour, Lewis, Preston, Randolph, Taylor,
Tucker, Upshur

**Region VI Regional Administrative Unit**
Mountain Heart Community Services
Work 4 WV Center, 25 Red Oak Shopping Center
Post Office Box 1610
Lewisburg, WV 24901
(304) 647-3810; Fax (304) 647-5521
Toll Free: 1-866-229-0461
Serves: Braxton, Greenbrier, Monroe, Nicholas,
Pocahontas, Summers, Webster

**Region VII Regional Administrative Unit**
Mountain Heart Community Services
Post Office Box 5650
Princeton, WV 24740
(304) 425-2926; Fax (304) 425-7367
Toll Free: 1-866-207-6198
Serves:  Fayette,  McDowell,  Mercer,  Raleigh,
Wyoming

**Region VIII Regional Administrative Unit**
RESA VIII Child Development Services
109 S. College Street
Martinsburg, WV 25401
(304) 267-3595; Fax (304) 267-3599
Toll Free: 1-866-681-4957
Serves: Berkeley, Grant, Hampshire, Hardy,
Jefferson, Mineral, Morgan, Pendleton

# Appendix D

## Local District Directory

West Virginia Department of Education

**BARBOUR COUNTY**
105 South Railroad Street
Philippi, WV 26416-1177
Phone: 304-457-3030
Fax: 304-457-3559

**BERKELEY COUNTY**
515 West Martin Street
Martinsburg, WV 25401-3285
Phone: 304-264-5055, Ext. 303
Fax: 304-264-5058<

**BOONE COUNTY**
69 Avenue B
Madison, WV 25130-1196
Phone: 304-369-8245
Fax: 304-369-0305

**BRAXTON COUNTY**
411 N. Hill Road
Sutton, WV 26601-1147
Phone: 304-765-7101, Ext. 622
Fax: 304-765-7148

**BROOKE COUNTY**
1201 Pleasant Avenue
Wellsburg, WV 26070-1497
Phone: 304-737-3481, Ext. 26
Fax: 304-737-3480

**CABELL COUNTY**
P.O. Box 446, 2850 5th Avenue
Huntington, WV 25709
Phone: 304-528-5200
Fax: 304-528-5344

**CALHOUN COUNTY**
HC 89 Box 119
Mt. Zion, WV 26151
Phone: 304-354-7011 Ext. 17
Fax: 304-354-7420

**CLAY COUNTY**
P.O. Box 120
Clay, WV 25043-0120
Phone: 304-587-2077
Fax: 304-587-4181

**DODDRIDGE COUNTY**
Rt. 18 South
104 Sistersville Pike
West Union, WV 26456-1099
Phone: 304-873-1855
Fax: 304-873-3291

**FAYETTE COUNTY**
111 Fayette Avenue
Fayetteville, WV 25840-1299
Phone: 304-574-1176, Ext. 2167
Fax: 304-574-3643

**GILMER COUNTY**
201 North Court Street
Glenville, WV 26351-1294
Phone: 304-462-7386, Ext. 15
Fax: 304-462-5103

**GRANT COUNTY**
204 Jefferson Avenue
Petersburg, WV 26847-1628
Phone: 304-257-1011, Ext. 20
Fax: 304-257-2453

**GREENBRIER COUNTY**
202 Chestnut Street
Lewisburg, WV 24901-0987
Phone: 304-647-6463, Ext. 26
Fax: 304-647-6483

**HAMPSHIRE COUNTY**
46 South High Street
Romney, WV 26757-1832
Phone: 304-822-3050
Fax: 304-822-5382

**HANCOCK COUNTY**
P.O. Box 1300
104 North Court Street
New Cumberland, WV 26047-9521
Phone: 304-564-3346
Fax: 304-564-3990

**HARDY COUNTY**
510 Ashby Street
Moorefield, WV 26836-1099
Phone: 304-530-2348, Ext. 237
Fax: 304-530-2340

**HARRISON COUNTY**
P.O. Box 1370
Clarksburg, WV 26302-1370
Phone: 304-624-3300, Ext. 3313
Fax: 304-624-3361

**JACKSON COUNTY**
P.O. Box 770
Ripley, WV 25271-0770
Phone: 304-372-7309
Fax: 304-372-7312

**JEFFERSON COUNTY**
P.O. Box 987
110 Mordington Ave.
Charles Town, WV 25414-0987
Phone: 304-725-9741, Ext. 9233
Fax: 304-728-9274

**KANAWHA COUNTY**
200 Elizabeth Street
Charleston, WV 25311-2119
Phone: 304-348-7740
Fax: 304-348-6671

**LEWIS COUNTY**
239 Court Avenue
Weston, WV 26452-2002
Phone: 304-269-8300, Ext. 120
Fax: 304-269-8342

**LINCOLN COUNTY**
10 Marland Avenue
Hamlin, WV 25523-1025
Phone: 304-824-5531, Ext. 253
Fax: 304-824-2197

**LOGAN COUNTY**
66 School Street
Logan, WV 25601
Phone: 304-792-2076 or 2073
Fax: 304-752-7471

**MARION COUNTY**
200 Gaston Avenue
Fairmont, WV 26554-2778
Phone: 304-367-2120
Fax: 304-367-8976

**MARSHALL COUNTY**
P.O. Box 578
Moundsville, WV 26041-0578
Phone: 304-843-4400, Ext. 138

**MASON COUNTY**
1200 Main St.
Point Pleasant, WV 25550-1298
Phone: 304-675-4540, Ext. 49115
Fax: 304-675-5207

**MCDOWELL COUNTY**
30 Central Avenue
Welch, WV 24801-2099
Phone: 304-436-8441, Ext. 264
Fax: 304-436-4149

**MERCER COUNTY**
1403 Honaker Avenue
Princeton, WV 24740-3048
Phone: 304-487-1551, Ext. 290
Fax: 304-425-1840

**MINERAL COUNTY**
One Baker Place
Keyser, WV 26726-2898
Phone: 304-788-4218
Fax: 304-788-4204

**MINGO COUNTY**
Route 1, Box 310
Williamson, WV 25661-9746
Phone: 304-235-7110
Fax: 304-235-3705

**MONONGALIA COUNTY**
13 South High Street
Morgantown, WV 26501
Phone: 304-291-9210, Ext. 543
Fax: 304-296-1379

**MONROE COUNTY**
P.O. Box 330
Union, WV 24983-0330
Phone: 304-772-3094
Fax: 304-772-5020

**MORGAN COUNTY**
247 Harrison Avenue
Berkeley Springs, WV 25411-1909
Phone: 304-258-2014 ext. 21
Fax: 304-258-9146

**NICHOLAS COUNTY**
400 Old Main Drive
Summersville, WV 26651-1388
Phone: 304-872-3611, Ext. 143
Fax: 304-872-5102

**OHIO COUNTY**
2203 National Road
Wheeling, WV 26003-5299
Phone: 304-243-0477
Fax: 304-243-0347

**PENDLETON COUNTY**
P.O. Box 888
Franklin, WV 26807-0888
Phone: 304-358-2207
Fax: 304-358-2936

**PLEASANTS COUNTY**
P.O. Box 210
St. Marys, WV 26170-0210
Phone: 304-684-2215
Fax: 304-684-3569

**POCAHONTAS COUNTY**
926 Fifth Avenue
Marlinton, WV 24954-1298
Phone: 304-799-4505
Fax: 304-799-4499

**PRESTON COUNTY**
300 Preston Drive
Kingwood, WV 26537-0566
Phone: 304-329-0580, Ext. 223
Fax: 304-329-0720

**PUTNAM COUNTY**
9 Court House Drive
Winfield, WV 25213-9348
Phone: 304-586-0500, Ext. 111
Fax: 304-586-0555

**RALEIGH COUNTY**
301 Park Avenue
Beckley, WV 25801
Phone: 304-256-4559
Fax: 304-256-4715 or 4563

**RANDOLPH COUNTY**
40 11th Street
Elkins, WV 26241-3512
Phone: 304-636-9150, Ext. 153
Fax: 304-637-2516

# AUTISM SPECTRUM DISORDERS: SERVICES IN WEST VIRGINIA SCHOOLS

*Local District Directory*

**RITCHIE COUNTY**
134 South Penn Street
Harrisville, WV 26362-0216
Phone: 304-643-2991, Ext. 226
Fax: 304-643-2994

**ROANE COUNTY**
P.O. Box 609
Spencer, WV 25276-0609
Phone: 304-927-6405
Fax: 304-927-6440

**SUMMERS COUNTY**
116 Main Street
Hinton, WV 25951-2439
Phone: 304-466-6006
Fax: 304-466-6008

**TAYLOR COUNTY**
1 Prospect Street
Grafton, WV 26354
Phone: 304-265-2497, Ext. 21
Fax: 304-265-2508

**TUCKER COUNTY**
501 Chestnut Street
Parsons, WV 26287-1005
Phone: 304-478-2771
Fax: 304-478-3422

**TYLER COUNTY**
P.O. Box 25
Middlebourne, WV 26149-0025
Phone: 304-758-2145
Fax: 304-758-4566

**UPSHUR COUNTY**
102 Smithfield Street
Buckhannon, WV 26201
Phone: 304-472-5480 ext. 1016
Fax: 304-472-0258

**WAYNE COUNTY**
P.O. Box 70
Wayne, WV 25570-0070
Phone: 304-272-5116, Ext. 348
Fax: 304-272-5993

**WEBSTER COUNTY**
315 South Main Street
Webster Springs, WV 26288-1123
Phone: 304-847-5638, Ext. 120
Fax: 304-847-2538

**WETZEL COUNTY**
333 Foundry Street
New Martinsville, WV 26155-1110
Phone: 304-455-2441, Ext. 23
Fax: 304-455-3446

**WIRT COUNTY**
P.O. Box 189
Elizabeth, WV 26143-0189
Phone: 304-275-4279
Fax: 304-275-4581

**WOOD COUNTY**
1210 Thirteenth Street
Parkersburg, WV 26101-4198
Phone: 304-420-9655, Ext. 15
Fax: 304-420-9689

**WYOMING COUNTY**
P.O. Box 69
Pineville, WV 24874-0069
304-732-6262, Ext. 203

**WV SCHOOLS FOR THE DEAF AND BLIND**
301 East Main Street
Romney, WV 26757
Phone: 304-822-4863, Ext. 863
Fax: 304-822-4849

# Appendix E

## RESA Contact Information

West Virginia Department of Education

# AUTISM SPECTRUM DISORDERS:  SERVICES
# IN WEST VIRGINIA SCHOOLS
*RESA Contact Information*

**RESA 1**    McDowell, Mercer, Monroe, Raleigh, Summers, Wyoming
400 Neville Street
Beckley, WV 25801
**Telephone**: 304-256-4712
**Fax:**  304-256-4683
**Webpage**: http://resa1.k12.wv.us/

**RESA 2**    Cabell, Lincoln, Logan, Mason, Mingo, Wayne
2001 McCoy Rd
Huntington, WV 25701
**Telephone**: 304-529-6205
**Fax**: 304-529-6209
**Webpage**: http://resa2.k12.wv.us

**RESA 3**    Boone, Clay, Kanawha, Putnam
3942 39th Street
Nitro, WV 25143
**Telephone**:  304-766-7655
**Fax**:  304-766-7915
**Webpage**: http://resa3.k12.wv.us

**RESA 4**    Braxton, Fayette, Greenbrier, Nicholas, Pocahontas, Webster
404 Old Main Drive
Summersville, WV 26651
**Telephone**: 304-872-6440
**Fax**: 304-872-6442
**Webpage**: http://resa4.k12.wv.us

**RESA 5**    Calhoun, Jackson, Pleasants, Ritchie, Roane, Tyler, Wirt, Wood
2507 9th Ave
Parkersburg, WV 26101-5855
**Telephone**: 304-485-6513
**Fax**: 304-485-6515
**Webpage**: http://resa5.k12.wv.us

**RESA 6**    Brooke, Hancock, Marshall, Ohio, Wetzel
30 GC&P Rd
Wheeling, WV 26003-6129
**Telephone**: 304-243-0440
**Fax**: 304-243-0443
**Webpage**: http://resa6.k12.wv.us/

**RESA 7**     Barbour, Doddridge, Gilmer, Harrison, Lewis, Marion, Monongalia, Preston, Randolph, Taylor, Tucker, Upshur
1201 N 15th Street
Clarksburg, WV 26301-1936
**Telephone**: 304-624-6554
**Fax**: 304-624-5223
**Webpage**: http://resa7.k12.wv.us/

**RESA 8**     Berkeley, Grant, Hampshire, Hardy, Jefferson, Mineral, Morgan, Pendleton
109 S. College Street
Martinsburg, WV 25401
**Telephone**: 304-267-3595
**Fax**: 304-267-3599
**Webpage**: http://resa8.k12.wv.us/

# Appendix F
# Autism Mentor Information

The following information is being provided to answer frequently asked questions regarding West Virginia State Board Policy 5314.01 Autism Mentor that established the mandated standards and experience necessary to qualify for the service personnel class title "Autism Mentor". Those standards include:

1. **Meet the qualifications "Aide III" as delineated in West Virginia Code 18-A-4-8.**
   - The LEA is responsible for verifying this standard.
   - Documentation of this standard is to be kept in the aide's personnel file and does not need to be submitted to the Office of Special Programs.

2. **Successful completion of a staff development program related to autism as determined by the State Department of Education.**
   - The WVDE is responsible for verifying this standard.
   - The state requires the completion of 30 hours of training and will award one-half point per hour.
   - A minimum of 15 points must be earned and verified in order for a candidate to meet this requirement.
   - Award of points for this item will be determined by the Office of Special Programs with proper documentation of approved training being submitted to the WVDE.
   - The documentation must, at a minimum, include the name of training, date of training, number of hours and agency providing training.
   - Once the analysis of the documentation has been competed the employee and county personnel director will receive a letter verifying whether or not they have met the state requirements for this standard.

3. **Two years of successful experience working with autistic students.**
   - The LEA is responsible for verifying this standard.
   - Summer work while employed by the school system may be used at the rate of 8 hours equaling one school day.
   - A school year equals 133 days, therefore 266 days of work with students diagnosed with an ASD is needed to satisfy this requirement.
   - The aide does not necessarily have to work directly with the student diagnosed with an ASD.
   - They may be in a classroom where students with Autism are placed or are in from time to time.
   - The two year requirement is so that the aide is aware of the complexities associated with this type of student assignment.
   - The student's eligibility, as determined and certified by the LEA is the determining factor in granting this time credit. A student must be identified as having an ASD for the time with that student to be counted. (Eligibility must be "Autism" or any eligibility with accompanying documentation of a diagnosis of ASD.) A student who has had a change in area of disability or is newly eligible goes by what the eligibility status was when the aide was working with/in the classroom with that student. Eligibility or area of disability prior or post to the time an individual worked with a student is not considered, only the current eligibility status when the aide was working with that student.
   - Dates must be listed for the time seeking credit for working with students with ASDs.
   - Documentation of this standard is to be kept in the aide's personnel file and does not need to be submitted to the Office of Special Programs.

4.  **Physical ability and stamina necessary to complete all job tasks, including tasks related to ensuring student safety.**
    The LEA is responsible for verifying this standard.
    - Acceptable documentation would include a letter from the current school principal, school nurse or private physician on the individual's physical fitness to perform the duties of the job.
    - Documentation of this standard is to be kept in the aide's personnel file and does not need to be submitted to the Office of Special Programs.

**General Clarifications**:

- An Autism Mentor must be working in such position to be receiving the wages attached to that particular pay grade (E). If they are not working in such a position they are paid according to the position they currently occupy and their aide designation. Having the designation does not necessarily translate to the pay level.
- This designation can be earned by any employee in the aide classification. Any other classified employee having met the requirements but not currently employed in an aide position will have documentation place in their file for future designation once employed as an aide.
- For seniority purposes this is a multi-classified position as instructional aide/autism mentor. There is no separate seniority listing for autism mentors. The designation does not prevent one from being reduced in force but does aid in the application of positions being posted as such.

If you have questions regarding issues pertaining to Autism Mentors, please contact Jacqui Young at (304) 558-2696 or jlyoung@access.k12.wv.us.

# Appendix G

## Parent Educator Resource Center Directory

# AUTISM SPECTRUM DISORDERS: SERVICES IN WEST VIRGINIA SCHOOLS

*Parent Educator Resource Center Directory*

**Barbour County**
Parent-Educator Resource Center
Rt. 2, Box 343
c/o Belington Middle School
Belington, WV  26250
(304)823-1245
Mary McCartney-Parent
bswdpe@yahoo.com
Lisa Lepsch-Educator
llepsch@access.k12.wv.us

**Berkeley County**
Parent Educator Resource Center
515 W. Martin St.
Martinsburg, WV 25401
(304)263-5717
Fax 304-263-5767
Educator-Lynn Reichard
lreichar@access.k12.wv.us
Parent-Vacancy
perc@berkeleycountyschools.org
www.freewebs.com/berkeleycoperc

**Cabell County**
Family Connection
1901 Hall Avenue
Huntington, WV 25701
(304) 528-5208
Fax: (304) 528-5145
Billie J. Chapman - Parent
bchapman@access.k12.wv.us
Lisa Shuler - Educator
lledbett@access.k12.wv.us
Tiffany Copenhaver - Educator
tcopenha@access.k12.wv.us
Kim Watson - Educator
kmwatson@access.k12.wv.us
Renee Kessinger - Educator
pkessing@access.k12.wv.us
Lisa Caviani - Educator
lcaviani@access.k12.wv.us

**Calhoun County**
Parent-Educator Resource Center
HC 89, Box 119
Mt. Zion, WV  26151-9734
(304) 354-9504
Fax (304) 354-7420
Patsy Kisner-Parent
pjkisner@access.k12.wv.us
Lisa Groves-Educator
lgroves@access.k12.wv.us

**Doddridge County**
Parent-Educator Resource Center
104 Sistersville Pike
West Union, WV  26456
(304)873-2778
Fax (304)873-3291
Jean Lackey – Parent
Dodd_co_perc@yahoo.com
Melanie Britton - Parent
melaniebritton@aol.com
Judy Robinson – Educator
jdrobins@access.k12.wv.us

**Fayette County**
 Parent-Educator Resource Center
111 Fayette Avenue
 Fayetteville, WV  25840
 (304) 574-1176 ext.2183
Fax (304) 574-3643
Sheryl Elkins-Parent
 skelkins1@verizon.net
Tina Lilly-Educator
tlilly@access.k12.wv.us

**Hampshire County**
Parent-Educator Resource Center
46 South High Street
Romney, WV  26757
(304)822-3050
Fax (304)822-5382
Vacant - Parent
Vacant - Educator

## Harrison County
Parent-Educator Resource Center
Rt. 3 Box 43-B, Suite 205
Clarksburg, WV 26301
Melody Waybright-Parent
(304)326-7693
hcperc@yahoo.com
Pam Hotsinpiller-Educator
(304)326-7692
phostinp@access.k12.wv.us
Fax (304) 326-7695
Web page - http://www.harcoboe.com/
Parents/perc/index.cfm

## Jackson County
Parent-Educator Resource Center
P.O. Box 770
Ripley, WV 25271
(304) 273-3545
Fax (304)273-0841
Jo Beth Smith-Parent
djccsmith@suddenlink.net
Cathy Stout-Educator
ccstout@access.k12.wv.us

## Jefferson County
Parent-Educator Resource Center
110 Mordington Avenue
Charles Town, WV 25414
(304) 725-6473
Fax (304)725-6473 (call first)
Angie Dillow – Parent
Jcresourcecenter@aol.com
Sharon Martin - Educator

## Kanawha County
Parent-Educator Resource Center
200 Elizabeth Street
Charleston, WV 25311
(304) 348-7715
Fax: 304-348-7715 (call first)
Sheila Harper-parent
sfharper@kcs.kana.k12.wv.us
Marilyn Nichols-Parent
mwolfingbarger@kcs.kana.k12.wv.us
Marianne LeDonne-Educator
mledonne@kcs.kana.k12.wv.us
Jane Pierce-Educator
jpierce@kcs.kana.k12.wv.us
http://kcs.kana.k12.wv.us/kcs/StudentsParents/
Programs/ParentEducatorResourceCenter/
tabid/1305/Default.aspx
perc@kcs.kana.k12.wv.us

## Lincoln County
Parent-Educator Resource Center
10 Martin Avenue
Hamlin, WV 25523
(304) 824-3033 Ext. 238
Fax (304) 824-2197
Donna Jarrell – Parent
dsjarrel@access.k12.wv.us
Carolyn Walls – Educator
cwallswvprek@hotmail.com

## Logan County
Parent-Educator Resource Center
P.O. Box 477
Logan, WV 25601
(304) 792-2086
Fax (304) 752-7471
Vacant – Parent
Debbie Willis – Educator
dwillis@access.k12.wv.us

**Marion County**
Parent-Educator Resource Center
1993 Airport Road
Fairmont, WV  26554
(304) 363-5012
Fax (304) 367-8976 (call first)
Vacant – Parent
Linda Bond – Educator
ibond@access.k12.wv.us

**Marshall County**
Parent-Educator Resource Center
2600 4th St.
Moundsville, WV  26041
(304) 843-4461
Fax (304) 843-4457 (call first)
Cathy Givens– Parent
cjgivens@acces.k12.wv.us
Susie Baker - Parent
psbaker@access.k12.wv.us

**McDowell County**
Parent-Educator Resource Center
McDowell County Career and
Technical Center
Box V
Welch, WV  24801
(304) 436-4831
Fax (304) 656-7430
Nancy Buckland-Parent
nbuckland7@yahoo.com
Vacant-Educator

**Mingo County**
Parent-Educator Resource Center
Route 2 Box 310
Williamson, WV  25661
Deanna New-Educator
dnew@access.k12.wv.us
304-235-3333 ext. 7113
Teria Keathley-Educator
tkeathle@access.k12.wv.us
(304) 235-3333 ext. 115
Christie Tilley-Parent
ctilley@access.k12.wv.us
(304) 235-3333 ext 214
Fax (304) 235-5191 or 235-5705

**Monongalia County**
Parent-Educator Resource Center
200 W Park Ave
Westover, WV  26501
(304) 291-9258 ext 238
Fax (304) 284-9385
Julie Parsons – Parent
jbparson@access.k12.wv.us
Vacant - Educator

**Ohio County**
Parent-Educator Resource Center
Elm Grove Elementary School
RR2, Box 444
Wheeling, WV  26003
(304) 243-0363
Fax (304) 243-0364
Candia Riddle – Parent
cnriddle@access.k12.wv.us
Vacant - Educator

# AUTISM SPECTRUM DISORDERS:  SERVICES IN WEST VIRGINIA SCHOOLS

*Parent Educator Resource Center Directory*

**Pendleton County**
Parent-Educator Resource Center
P.O. Box 888
Franklin, WV  26807
(304) 358-7072
Fax (304) 358-2936 (board office)
Vacant-Parent
Diana Smith-Educator
dnsmith@access.k12.wv.us

**Pleasants County**
Parent-Educator Resource Center
P.O. Box 308
St. Marys, WV  26170
(304) 684-7643
Fax (304) 684-7644
Sherri West – Parent
West_marty@hotmail.com

**Putnam County**
Parent-Educator Resource Center
West Teays Annex
3676 Teays Valley Rd.
Hurricane, WV 25526
304-757-6741 ext. 5
Vacant - Parent
Elaine McClaugherty - Educator
 emcclaug@access.k12.wv.us

**Raleigh County**
Parent-Educator Resource Center
301 Park Avenue
Beckley, WV  25801
(304) 256-4555
Fax (304) 256-4563
Lori Thompson – Educator
llthomps@access.k12.wv.us
Ann Darby-Parent
adarby@access.k12.wv.us

**Ritchie County**
Parent-Educator Resource Center
Ritchie County Middle School
P.O. Box 249
Ellenboro, WV  26346
(304) 869-3512 ext. 250
Fax (304) 869-3031
Pam Copeland-Parent
ritchieperc@hotmail.com
Jodie Adams – Educator
jladams@access.k12.wv.us
http://rchs.ritc.k12.wv.us

**Tucker County**
Parent-Educator Resource Center
501 Chestnut Street
Parsons, WV  26287
(304) 478-3827
Fax (304) 478-3829
Cindy Simmons-Educator
cindyrobson@hotmail.com
Angie Davis-Parent
foreverdavis@hotmail.com

**Wayne County**
Parent-Educator Resource Center
P.O. Box 70
212 North Court Street
Wayne, WV  25570
(304) 272-5116 ext. 330 or 387
Fax (304) 272-5993 (special education office)
Patricia Cline-Parent
plcline@access.k12.wv.us
Elaine May-Educator
emay@access.k12.wv.us

**Webster County**
Parent-Educator Resource Center
315 South Main Street
Webster Springs, WV  26288
(304) 847-5638, Ext 120
Fax (304) 847-2538
Vicki Hamrick – Parent
vhamrick@access.k12.wv.us
Vacant – Educator

**Wirt County**
Parent-Educator Resource Center
PO Box 699
Elizabeth, WV
304-275-3977 Ext. 30
Fax (304)275-4581
Mary Beth McCloy-Parent
 Ashley Gunnoe-Educator
agunnoe@access.k12.wv.us

**Wood County**
Parent-Educator Resource Center
Wood County Board of Education
1210 13th Street
Parkersburg, WV  26101
(304) 420-9590
Fax (304) 420-9689 (call first)
Beverly Shelton-Parent
bshelton@access.k12.wv.us
Suzy Howell -Parent
sahowell@access.k12.wv.us
Anthony Lautar-Educator

**West Virginia Parent State Team**
Office of Special Programs
West Virginia Department of Education
Building 6, Room 304
1900 Kanawha Boulevard, East
Charleston, WV  25305
(304) 558-2696
Toll Free:  1-800-642-8541
Fax:  (304) 558-3741
Betsy Peterson, Coordinator
bpeterso@access.k12.wv.us
Ginger Huffman, Coordinator
vhuffman@access.k12.wv.us
Kathy Knighton, Coordinator
kknighto@access.k12.wv.us

# Appendix H

## Senate Bill No. 321

## House Bill No. 2693

(By Delegates Fleischauer, Ellem, Overington, Hunt, Skaff, Lane and Rodighiero)

_____

(Originating in the Committee on Finance)

_____

A BILL to amend and reenact §5-16-7 of the code of West Virginia, 1931, as amended; to amend said code by adding thereto a new section, designated §5-16B-6e; to amend said code by adding thereto a new section, designated §9-5-21; to amend said code by adding thereto a new section, designated §33-15-4k; to amend said code by adding thereto a new section, designated §33-16-3v; to amend said code by adding thereto a new section, designated §33-24-7k; and to amend said code by adding thereto a new section, designated §33-25A-8j, all relating to requiring insurance coverage for autism spectrum disorders; providing definitions; and providing reporting requirements by state agencies.

*Be it enacted by the Legislature of West Virginia:*

That §5-16-7 of the Code of West Virginia, 1931, as amended, be amended and reenacted; that said code be amended by adding thereto a new section, designated §5-16B-6e; that said code be amended by adding thereto a new section, designated §9-5-21; that said code be amended by adding thereto a new section, designated §33-15-4k; that said code be amended by adding thereto a new section, designated §33-16-3v; that said code be amended by adding thereto a new section, designated §33-24-7k; that said code be amended by adding thereto a new section, designated §33-25A-8j, all to read as follows:

**CHAPTER 5. GENERAL POWERS AND AUTHORITY OF THE GOVERNOR, SECRETARY OF STATE AND ATTORNEY GENERAL; BOARD OF PUBLIC WORKS; MISCELLANEOUS AGENCIES, COMMISSIONS, OFFICES, PROGRAMS, ETC.**

**ARTICLE 16. WEST VIRGINIA PUBLIC EMPLOYEES INSURANCE ACT.**

**§5-16-7. Authorization to establish group hospital and surgical insurance plan, group major medical insurance plan, group prescription drug plan and group life and accidental death insurance plan; rules for administration of plans; mandated benefits; what plans may provide; optional plans; separate rating for claims experience purposes.**

(a) The agency shall establish a group hospital and surgical insurance plan or plans, a group prescription drug insurance plan or plans, a group major medical insurance plan or plans and a group life and accidental death insurance plan or plans for those employees herein made eligible, and to establish and promulgate rules for the administration of these plans, subject to the limitations contained in this article. Those plans shall include:

(1) Coverages and benefits for X ray and laboratory services in connection with mammograms when medically appropriate and consistent with current guidelines from the United States Preventive Services Task Force; pap smears, either conventional or liquid-based cytology, whichever is medically appropriate and consistent with the current guidelines from either the United States Preventive Services Task Force or The American College of Obstetricians and Gynecologists; and a test for the human papilloma virus (HPV) when medically appropriate and consistent with current guidelines from either the United States Preventive Services Task Force or The American College of Obstetricians and Gynecologists, when performed for cancer screening or diagnostic services on a woman age eighteen or over;

(2) Annual checkups for prostate cancer in men age fifty and over;

(3) Annual screening for kidney disease as determined to be medically necessary by a physician using any combination of blood pressure testing, urine albumin or urine protein testing and serum creatinine testing as recommended by the National Kidney Foundation;

(4) For plans that include maternity benefits, coverage for inpatient care in a duly licensed health care facility for a mother and her newly born infant for the length of time which the attending physician considers medically necessary for the mother or her newly born child: Provided, That no plan may deny payment for a mother or her newborn child prior to forty-eight hours following a vaginal delivery, or prior to ninety-six hours following a caesarean section delivery, if the attending physician considers discharge medically inappropriate;

(5) For plans which provide coverages for post-delivery care to a mother and her newly born child in the home, coverage for inpatient care following childbirth as provided in subdivision (4) of this subsection if inpatient care is determined to be medically necessary by the attending physician. Those plans may also include, among other things, medicines, medical equipment, prosthetic appliances and any other inpatient and outpatient services and expenses considered appropriate and desirable by the agency; and

(6) Coverage for treatment of serious mental illness.

(A) The coverage does not include custodial care, residential care or schooling. For purposes of this section, "serious mental illness" means an illness included in the American Psychiatric Association's diagnostic and statistical manual of mental disorders, as periodically revised, under the diagnostic categories or sub classifications of: (i) Schizophrenia and other psychotic disorders; (ii) bipolar disorders; (iii) depressive disorders; (iv) substance-related disorders with the exception of caffeine-related disorders and nicotine-related disorders; (v) anxiety disorders; and (vi) anorexia and bulimia. With regard to any covered individual who has not yet attained the age of nineteen years, "serious mental illness" also includes attention deficit hyperactivity disorder, separation anxiety disorder and conduct disorder.

(B) Notwithstanding any other provision in this section to the contrary, in the event that the agency can demonstrate that its total costs for the treatment of mental illness for any plan exceeded two percent of the total costs for such plan in any experience period, then the agency may apply whatever additional cost-containment measures may be necessary, including, but not limited to, limitations on inpatient and outpatient benefits, to maintain costs below two percent of the total costs for the plan for the next experience period.

(C) The agency shall not discriminate between medical-surgical benefits and mental health benefits in the administration of its plan. With regard to both medical-surgical and mental health benefits, it may make determinations of medical necessity and appropriateness, and it may use recognized health care quality and cost management tools, including, but not limited to, limitations on inpatient and outpatient benefits, utilization review, case management, implementation of cost-containment measures, preauthorization for certain treatments, setting coverage levels, setting maximum number of visits within certain time periods, using capitated benefit arrangements, using fee-for-service arrangements, using third-party administrators, using provider networks and using patient cost sharing in the form of copayments, deductibles and coinsurance.

(7) Coverage for general anesthesia for dental procedures and associated outpatient hospital or ambulatory facility charges provided by appropriately licensed health care individuals in conjunction with dental care if the covered person is:

(A) Seven years of age or younger or is developmentally disabled, and is an individual for whom a successful result cannot be expected from dental care provided under local anesthesia because of a physical, intellectual or other medically compromising condition of the individual and for whom a superior result can be expected from dental care provided under general anesthesia;

(B) A child who is twelve years of age or younger with documented phobias, or with documented mental illness, and with dental needs of such magnitude that treatment should not be delayed or deferred and for whom lack of treatment can be expected to result in infection, loss of teeth or other increased oral or dental morbidity and for whom a successful result cannot be expected from dental care provided under local anesthesia because of such condition and for whom a superior result can be expected from dental care provided under general anesthesia.

(8)(A) Coverage for diagnosis and treatment of autism spectrum disorder in individuals ages three through eighteen years. Such policy shall provide coverage for treatments that are medically necessary and ordered or prescribed by a licensed physician or licensed psychologist for an individual diagnosed with autism spectrum disorder, in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. Such coverage shall include, but not be limited to, applied behavioral analysis provided by a board certified behavior analyst or applied behavior analysis tutor who is not an parent, grandparent or sibling of individual under the supervision of a board certified behavior analyst: Provided, That the annual maximum benefit for applied behavioral analysis required by this subdivision shall be in amount not to exceed $30,000 per individual, for three consecutive years from the date of diagnosis of autism spectrum disorder. At the conclusion of the third year after a diagnosis, required coverage for applied behavior analysis shall be in an amount not to exceed $2,000 per month, until the individual reaches eighteen years of age, as long as the treatment is medically necessary and in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. This section shall not be construed as limiting, replacing or affecting any obligation to provide services to an individual under the Individuals with Disabilities Education Act, 20 U.S.C. 1400 et seq., as amended from time to time or other publicly funded programs. Nothing in this section shall be construed as requiring coverage of benefits for services that are or should be included in an individualized family service plan or individualized education program or individualized service plan or other publicly funded programs, including but not limited to reimbursement for services provided at public schools.

(B) On or before January 1 each year, the agency shall file an annual report with the joint committee on government and finance describing its implementation of the coverage provided pursuant to this subdivision. The report shall include, but shall not be limited to the number of individuals in the plan utilizing the coverage required by this subdivision, the fiscal and administrative impact of the implementation, and any recommendations the agency may have as to changes in law or policy related to the coverage provided under this subdivision. In addition, the agency shall provide such other information as may be provided by the joint committee on government and finance as it may from time to time request.

(C) For purposes of this subdivision, the term:

(i) "Applied Behavior Analysis" means the design, implementation, and evaluation of environmental modifications using behavioral stimuli and consequences, to produce socially significant improvement in human behavior, including the use of direct observation, measurement, and functional analysis of the relationship between environment and behavior.

(ii) "Applied Behavior Analysis Tutor" means an individual who has completed at least forty hours of classroom training in applied behavior analysis techniques in accordance with the Behavior Analyst Certification Board Guidelines for Responsible Conduct for Behavior Analysts, undergone a criminal background check, and

(I) Completed a minimum of twelve semester hours of college coursework in psychology, education, social work, behavioral sciences, human development or related field, and be currently enrolled in a course of study leading to an associates degree by an accredited college or university; or

(II) Completed a minimum of forty-eight semester hours of college course in an accredited college or university; or

(III) A high school diploma or GED equivalent and have completed five hundred hours of employment providing applied behavior analysis, as verified by a board certified behavior analyst.

(iii) "Autism spectrum disorder" means any pervasive developmental disorder, including autistic disorder, Asperger's Syndrome, Rett syndrome, childhood disintegrative disorder, or Pervasive Development Disorder - Not otherwise specified as, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.

(iv) "Board certified behavior analyst" means an individual who is certified by the Behavior Analyst Certification Board or certified by a similar nationally recognized organization.

(b) The agency shall make available to each eligible employee, at full cost to the employee, the opportunity to purchase optional group life and accidental death insurance as established under the rules of the agency. In addition, each employee is entitled to have his or her spouse and dependents, as defined by the rules of the agency, included in the optional coverage, at full cost to the employee, for each eligible dependent; and with full authorization to the agency to make the optional coverage available and provide an opportunity of purchase to each employee.

(c) The finance board may cause to be separately rated for claims experience purposes:

(1) All employees of the State of West Virginia;

(2) All teaching and professional employees of state public institutions of higher education and county boards of education;

(3) All nonteaching employees of the Higher Education Policy Commission, West Virginia Council for Community and Technical College Education and county boards of education; or

(4) Any other categorization which would ensure the stability of the overall program.

(d) The agency shall maintain the medical and prescription drug coverage for Medicare-eligible retirees by providing coverage through one of the existing plans or by enrolling the Medicare-eligible retired employees into a Medicare-specific plan, including, but not limited to, the Medicare/Advantage Prescription Drug Plan. In the event that a Medicare-specific plan would no longer be available or advantageous for the agency and the retirees, the retirees shall remain eligible for coverage through the agency.

**ARTICLE 16B. WEST VIRGINIA CHILDREN'S HEALTH INSURANCE PROGRAM.**
**§5-16B-6e. Coverage for treatment of autism spectrum disorders.**

(a) To the extent that the diagnosis and treatment of autism spectrum disorders are not already covered by this agency, a policy, plan or contract subject to this section shall provide coverage for such diagnosis and treatment, for individuals ages three through eighteen years. Such policy shall provide coverage for treatments that are medically necessary and ordered or prescribed by a licensed physician or licensed psychologist for an individual diagnosed with autism spectrum disorder, in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. Such coverage shall include, but not be limited to, applied behavioral analysis provided by a board certified behavior analyst or applied behavior analysis tutor who is not a parent, grandparent or sibling of the individual under the supervision of a board certified behavior analyst: Provided, That the annual maximum benefit for applied behavioral analysis required by this subdivision shall be in amount not to exceed $30,000 per individual, for three consecutive years from the date of diagnosis of autism spectrum disorder. At the conclusion of the third year after a diagnosis, required coverage for applied behavior analysis shall be in an amount not to exceed $2,000 per month, until the individual reaches eighteen years of age, as long as the treatment is medically necessary and in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. Nothing in this section shall be construed to require or permit the agency to reduce benefits for autism spectrum disorders already provided that exceed the limits of this section. This section shall not be construed as limiting, replacing or affecting any obligation to provide services to an individual under the Individuals with Disabilities Education Act, 20 U.S.C. 1400 et seq., as amended from time to time or other publicly funded programs. Nothing in this section shall be construed as requiring coverage of benefits for services that are or should be included in an individualized family service plan or individualized education program or individualized service plan or other publicly funded programs, including but not limited to reimbursement for services provided at public schools.

(b) On or before January 1 each year, the agency shall file an annual report with the joint committee on government and finance describing its implementation of the coverage provided pursuant to this section. The report shall include, but shall not be limited to the number of individuals in the plan utilizing the coverage required by this section, the fiscal and administrative impact of the implementation, and any recommendations the agency may have as to changes in law or policy related to the coverage provided under this section. In addition, the agency shall provide such other information as may be provided by the joint committee on government and finance as it may from time to time request.

(c) For purposes of this section, the term:

(1) "Applied Behavior Analysis" means the design, implementation, and evaluation of environmental modifications using behavioral stimuli and consequences, to produce socially significant improvement in human behavior, including the use of direct observation, measurement, and functional analysis of the relationship between environment and behavior.

(2) "Applied Behavior Analysis Tutor" means an individual who has completed at least forty hours of classroom training in applied behavior analysis techniques in accordance with the Behavior Analyst Certification Board Guidelines for Responsible Conduct for Behavior Analysts, undergone a criminal background check and

(A) Completed a minimum of twelve semester hours of college coursework in psychology, education, social work, behavioral sciences, human development or related field, and be currently enrolled in a course of study leading to an associates degree by an accredited college or university; or

(B) Completed a minimum of forty-eight semester hours of college course in an accredited college or university; or

(C) A high school diploma or GED equivalent and have completed five hundred hours of employment providing applied behavior analysis, as verified by a board certified behavior analyst.

(3) "Autism spectrum disorder" means any pervasive developmental disorder, including autistic disorder, Asperger's Syndrome, Rett syndrome, childhood disintegrative disorder, or Pervasive Development Disorder - Not otherwise specified as, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.

(4) "Board certified behavior analyst" means an individual who is certified by the Behavior Analyst Certification Board or certified by a similar nationally recognized organization.

**CHAPTER 9. HUMAN SERVICES.**
**ARTICLE 5. MISCELLANEOUS PROVISIONS.**
**§9-5-21. Annual report to joint committee on government and finance regarding treatment for autism spectrum disorders provided by the Bureau for Medical Services.**

(a) On or before January 1 each year, the agency shall file an annual report with the joint committee on government and finance describing the number of enrolled individuals with autism spectrum disorder, including the fiscal and administrative impact of treatment of autism spectrum disorders, and any recommendations the agency may have as to changes in law or policy related to such disorder. In addition, the agency shall provide such other information as may be provided by the joint committee on government and finance as it may from time to time request.

(b) For purposes of this section, the term "autism spectrum disorder" means any pervasive developmental disorder, including autistic disorder, Asperger's Syndrome, Rett syndrome, childhood disintegrative disorder, or Pervasive Development Disorder - Not otherwise specified as, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.

**CHAPTER 33. INSURANCE.**
**ARTICLE 15. ACCIDENT AND SICKNESS INSURANCE.**
**§33-15-4k. Required coverage for treatment of autism spectrum disorders.**

(a) Notwithstanding any provision of any policy, provision, contract, plan or agreement applicable to this article, any entity regulated by this article shall, for policies issued or renewed on or after September 1, 2011, make available as benefits to all subscribers and members coverage for diagnosis and treatment of autism spectrum disorder in individuals ages three through eighteen years. Such policy shall provide coverage for treatments that are medically necessary and ordered or prescribed by a licensed physician or licensed psychologist for an individual diagnosed with autism spectrum disorder, in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the

individual. Such coverage shall include, but not be limited to, applied behavioral analysis provided by a board certified behavior analyst or applied behavior analysis tutor who is not a parent, grandparent or sibling the individual under the supervision of a board certified behavior analyst: Provided, That the annual maximum benefit for applied behavioral analysis required by this subdivision shall be in amount not to exceed $30,000 per individual, for three consecutive years from the date of diagnosis of autism spectrum disorder. At the conclusion of the third year after a diagnosis, required coverage for applied behavior analysis shall be in an amount not to exceed $2,000 per month, until the individual reaches eighteen years of age, as long as the treatment is medically necessary and in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. Nothing in this section shall be construed to require or permit the agency to reduce benefits for autism spectrum disorders already provided that exceed the limits of this section. This section shall not be construed as limiting, replacing or affecting any obligation to provide services to an individual under the Individuals with Disabilities Education Act, 20 U.S.C. 1400 et seq., as amended from time to time or other publicly funded programs. Nothing in this section shall be construed as requiring coverage of benefits for services that are or should be included in an individualized family service plan or individualized education program or individualized service plan or other publicly funded programs, including but not limited to reimbursement for services provided at public schools.

(b) For purposes of this section, the term:

(1) "Applied Behavior Analysis" means the design, implementation, and evaluation of environmental modifications using behavioral stimuli and consequences, to produce socially significant improvement in human behavior, including the use of direct observation, measurement, and functional analysis of the relationship between environment and behavior.

(2) "Applied Behavior Analysis Tutor" means an individual who has completed at least forty hours of classroom training in applied behavior analysis techniques in accordance with the Behavior Analyst Certification Board Guidelines for Responsible Conduct for Behavior Analysts, undergone a criminal background check and

(A) Completed a minimum of twelve semester hours of college coursework in psychology, education, social work, behavioral sciences, human development or related field, and be currently enrolled in a course of study leading to an associates degree by an accredited college or university; or

(B) Completed a minimum of forty-eight semester hours of college course in an accredited college or university; or

(C) A high school diploma or GED equivalent and have completed five hundred hours of employment providing applied behavior analysis, as verified by a board certified behavior analyst.

(3) "Autism spectrum disorder" means any pervasive developmental disorder, including autistic disorder, Asperger's Syndrome, Rett syndrome, childhood disintegrative disorder, or Pervasive Development Disorder - Not otherwise specified as, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.

(4) "Board certified behavior analyst" means an individual who is certified by the Behavior Analyst Certification Board or certified by a similar nationally recognized organization.

**ARTICLE 16. GROUP ACCIDENT AND SICKNESS INSURANCE.**
**§33-16-3v. Required coverage for treatment of autism spectrum disorders.**

(a) Any insurer who, on or after September 1, 2011, delivers, renews or issues a policy of group accident and sickness insurance in this State under the provisions of this article, shall make available as benefits to all subscribers and members coverage for diagnosis and treatment of autism spectrum disorder in individuals ages three through eighteen years. Such policy shall provide coverage for treatments that are medically necessary and ordered or prescribed by a licensed physician or licensed psychologist for an individual diagnosed with autism spectrum disorder, in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. Such coverage shall include, but not be limited to, applied behavioral analysis provided by a board certified behavior analyst or applied behavior analysis tutor who is not a parent, grandparent or sibling of the individual under the supervision of a board certified behavior analyst: Provided, That the annual maximum benefit for applied behavioral analysis required by this subdivision shall be in amount not to exceed $30,000 per individual, for three consecutive years from the date of diagnosis of autism spectrum disorder. At the conclusion of the third year after a diagnosis, required coverage for applied behavior analysis shall be in an amount not to exceed $2,000 per month, until the individual reaches eighteen years of age, as long as the treatment is medically necessary and in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. Nothing in this section shall be construed to require or permit the agency to reduce benefits for autism spectrum disorders already provided that exceed the limits of this section. This section shall not be construed as limiting, replacing or affecting any obligation to provide services to an individual under the Individuals with Disabilities Education Act, 20 U.S.C. 1400 et seq., as amended from time to time or other publicly funded programs. Nothing in this section shall be construed as requiring coverage of benefits for services that are or should be included in an individualized family service plan or individualized education program or individualized service plan or other publicly funded programs, including but not limited to reimbursement for services provided at public schools.

(b) For purposes of this section, the term:

(1) "Applied Behavior Analysis" means the design, implementation, and evaluation of environmental modifications using behavioral stimuli and consequences, to produce socially significant improvement in human behavior, including the use of direct observation, measurement, and functional analysis of the relationship between environment and behavior.

(2) "Applied Behavior Analysis Tutor" means an individual who has completed at least forty hours of classroom training in applied behavior analysis techniques in accordance with the Behavior Analyst Certification Board Guidelines for Responsible Conduct for Behavior Analysts, undergone a criminal background check and

(A) Completed a minimum of twelve semester hours of college coursework in psychology, education, social work, behavioral sciences, human development or related field, and be currently enrolled in a course of study leading to an associates degree by an accredited college or university; or

(B) Completed a minimum of forty-eight semester hours of college course in an accredited college or university; or

(C)A high school diploma or GED equivalent and have completed five hundred hours of employment providing applied behavior analysis, as verified by a board certified behavior analyst.

(3) "Autism spectrum disorder" means any pervasive developmental disorder, including autistic disorder, Asperger's Syndrome, Rett syndrome, childhood disintegrative disorder, or Pervasive Development Disorder - Not otherwise specified as, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.

(4) "Board certified behavior analyst" means an individual who is certified by the Behavior Analyst Certification Board or certified by a similar nationally recognized organization.

## ARTICLE 24. HOSPITAL MEDICAL AND DENTAL CORPORATIONS.
### §33-24-7k. Coverage for diagnosis and treatment of autism spectrum disorders.

(a) Notwithstanding any provision of any policy, provision, contract, plan or agreement to which this article applies, any entity regulated by this article, for policies issued or renewed on or after September 1, 2011, shall provide as benefits to its subscribers and members for coverage for diagnosis and treatment of autism spectrum disorder in individuals ages three through eighteen years. Such policy shall provide coverage for treatments that are medically necessary and ordered or prescribed by a licensed physician or licensed psychologist for an individual diagnosed with autism spectrum disorder, in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. Such coverage shall include, but not be limited to, applied behavioral analysis provided by a board certified behavior analyst or applied behavior analysis tutor who is not a parent, grandparent, or sibling of the individual under the supervision of a board certified behavior analyst: Provided, That the annual maximum benefit for applied behavioral analysis required by this subdivision shall be in amount not to exceed $30,000 per individual, for three consecutive years from the date of diagnosis of autism spectrum disorder. At the conclusion of the third year after a diagnosis, required coverage for applied behavior analysis shall be in an amount not to exceed $2,000 per month, until the individual reaches eighteen years of age, as long as the treatment is medically necessary and in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. This section shall not be construed as limiting, replacing or affecting any obligation to provide services to an individual under the Individuals with Disabilities Education Act, 20 U.S.C. 1400 et seq., as amended from time to time or other publicly funded programs. Nothing in this section shall be construed as requiring coverage of benefits for services that are or should be included in an individualized family service plan or individualized education program or individualized service plan or other publicly funded programs, including but not limited to reimbursement for services provided at public schools.

(b) For purposes of this section, the term:

(1) "Applied Behavior Analysis" means the design, implementation, and evaluation of environmental modifications using behavioral stimuli and consequences, to produce socially significant improvement in human behavior, including the use of direct observation, measurement, and functional analysis of the relationship between environment and behavior.

(2) "Applied Behavior Analysis Tutor" means an individual who has completed at least forty hours of classroom training in applied behavior analysis techniques in accordance with the Behavior Analyst Certification Board Guidelines for Responsible Conduct for Behavior Analysts, undergone a criminal background check and

(A) Completed a minimum of twelve semester hours of college coursework in psychology, education, social work, behavioral sciences, human development or related field, and be currently enrolled in a course of study leading to an associates degree by an accredited college or university; or

(B) Completed a minimum of forty-eight semester hours of college course in an accredited college or university; or

(C) A high school diploma or GED equivalent and have completed five hundred hours of employment providing applied behavior analysis, as verified by a board certified behavior analyst.

(3) "Autism spectrum disorder" means any pervasive developmental disorder, including autistic disorder, Asperger's Syndrome, Rett syndrome, childhood disintegrative disorder, or Pervasive Development Disorder - Not otherwise specified as, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.

(4) "Board certified behavior analyst" means an individual who is certified by the Behavior Analyst Certification Board or certified by a similar nationally recognized organization.

**ARTICLE 25A. HEALTH MAINTENANCE ORGANIZATION ACT.**
**§33-25A-8j. Coverage for diagnosis and treatment of autism spectrum disorders.**

(a) Notwithstanding any provision of any policy, provision, contract, plan or agreement to which this article applies, for policies issued or renewed on or after September 1, 2011, any entity regulated by this article shall provide as benefits to its subscribers and members for coverage for diagnosis and treatment of autism spectrum disorder in individuals ages three through eighteen years. Such policy shall provide coverage for treatments that are medically necessary and ordered or prescribed by a licensed physician or licensed psychologist for an individual diagnosed with autism spectrum disorder, in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. Such coverage shall include, but not be limited to, applied behavioral analysis provided by a board certified behavior analyst or applied behavior analysis tutor who is not a parent, grandparent, or sibling of the individual under the supervision of a board certified behavior analyst: Provided, That the annual maximum benefit for applied behavioral analysis required by this subdivision shall be in amount not to exceed $30,000 per individual, for three consecutive years from the date of diagnosis of autism spectrum disorder. At the conclusion of the third year after a diagnosis, required coverage for applied behavior analysis shall be in an amount not to exceed $2,000 per month, until the individual reaches eighteen years of age, as long as the treatment is medically necessary and in accordance with a treatment plan developed by a licensed physician or licensed psychologist pursuant to a comprehensive evaluation or reevaluation of the individual. This section shall not be construed as limiting, replacing or affecting any obligation to provide services to an individual under the Individuals with Disabilities Education Act, 20 U.S.C. 1400 et seq., as amended from time to time or other publicly funded programs. Nothing in this section shall be construed as requiring coverage of benefits for services that are or should be included in an individualized family service plan or individualized education program or individualized service plan or other publicly funded programs, including but not limited to reimbursement for services provided at public schools.

(b) For purposes of this section, the term:

(1) "Applied Behavior Analysis" means the design, implementation, and evaluation of environmental modifications using behavioral stimuli and consequences, to produce socially significant improvement in human behavior, including the use of direct observation, measurement, and functional analysis of the relationship between environment and behavior.

(2) "Applied Behavior Analysis Tutor" means an individual who has completed at least forty hours of classroom training in applied behavior analysis techniques in accordance with the Behavior Analyst Certification Board Guidelines for Responsible Conduct for Behavior Analysts, undergone a criminal background check and

(A) Completed a minimum of twelve semester hours of college coursework in psychology, education, social work, behavioral sciences, human development or related field, and be currently enrolled in a course of study leading to an associates degree by an accredited college or university; or

(B) Completed a minimum of forty-eight semester hours of college course in an accredited college or university; or

(C) A high school diploma or GED equivalent and have completed five hundred hours of employment providing applied behavior analysis, as verified by a board certified behavior analyst.

(3) "Autism spectrum disorder" means any pervasive developmental disorder, including autistic disorder, Asperger's Syndrome, Rett syndrome, childhood disintegrative disorder, or Pervasive Development Disorder - Not otherwise specified as, as defined in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association.

(4) "Board certified behavior analyst" means an individual who is certified by the Behavior Analyst Certification Board or certified by a similar nationally recognized organization.

# Appendix I

## Selected Resources

# AUTISM SPECTRUM DISORDERS:  SERVICES IN WEST VIRGINIA SCHOOLS

*Selected Resources*

Below is a selection of resources families, schools and agencies may find helpful in meeting the educational needs of students with ASDs. At the time of printing, all resource information was up-to-date. **The following resources are presented as information only. Inclusion of this information in this guidance document should not be construed as an endorsement of the resources.**

**West Virginia Specific Resources**

*Autism Spectrum Disorders*

**Autism Training Center**
WV Autism Training Center (WV-ATC)
One John Marshall Drive, Old Main 316 Huntington, WV 25755
1-800-344-5115 | wvatc@marshall.edu
The West Virginia Autism Training Center at Marshall University (WV-ATC) provides training, information and support to West Virginians with autism, their families, educators and other persons.

**Autism Services Center**
The Keith Albee Building
 929 4th Avenue, Second Floor
 Huntington, WV • 25701
 (304) 525-8014
Autism Services Center employs trained staff to provide a comprehensive array of services for individuals with developmental disabilities.

**West Virginia Autism Collaborative Community of Practice (WVACCoP)**
A statewide project which coordinates staff development and parent/community training to support services for children and youth with ASDs.
Website: http://wvde.state.wv.us/osp/autism
Email:  wvosp@access.k12.wv.us
Toll free telephone number:  1-800-642-8541

**Autism Society of West Virginia**
Find information on your local chapter events, community resources, advocacy and more statewide.

**Autism Society River Cities Chapter**
PO Box 1296
Huntington, West Virginia 25714-1296
(304) 710-9202
autismsocietyrivercities@gmail.com

**Autism Society of West Virginia Chapter**
PO Box 7
Huntington, West Virginia 25706
(304) 272-9834
jfair3@comcast.net

**<u>AS-WV, Northern Autism Community Chapter</u>**
Serving Hancock, Brooke, Ohio, Marshall and Wetzel counties
277 Bennett Dr
Weirton, West Virginia 26047
(304) 564-4067
kdrandolph2@yahoo.com

**Autism Society of America – WV Chapter**
ASA-WV
PO Box 7
Huntington, WV 25706-0007
Kim Farley, ASA-WV President
The Autism Society of America - West Virginia (ASA-WV) is a chapter of the [Autism Society of America](#),
which was founded in 1965 by a small group of parents working on a volunteer basis out of their homes.
Over the last 35 years, the Society has developed into the leading source of information and referral on
autism.

**Team Autism**
WV Team Autism is a collaborative of West Virginians from across the state who meet quarterly to work
together to share information, provide support, bridge gaps in services and implement progressive services
with positive outcomes.
http://sites.google.com/site/wvteamautism/

**Center for Excellence in Disabilities (CED)**
For nearly 30 years, the Center has worked with consumers, state, local and federal agencies to realize
opportunities and tackle and overcome challenges for people with developmental and other disabilities of
all ages. CED is West Virginia's only federally designated Center for Excellence in Disabilities providing
resources and supports in all fifty-five counties of the state.

**Center for Excellence in Disabilities**
West Virginia University
959 Hartman Run Road
Morgantown, WV 26505
Phone: 304-293-4692
(888) 829-9426 or TTY: (800) 518-1448
Email: cedcontact@hsc.wvu.edu
http://www.cedwvu.org/

# AUTISM SPECTRUM DISORDERS:  SERVICES
# IN WEST VIRGINIA SCHOOLS
*Selected Resources*

**Education & Early Intervention**
**WV Birth to Three**
Telephone: (304) 356-4365
350 Capitol Street, Room 427
In WV: (800) 642-8522
Charleston, WV 25301-3714
Fax: (304) 558-2183
E-mail: dhhrwvbtt@wv.gov
http://www.wvdhhr.org/birth23/
WV Birth to Three directs the coordination of the statewide system of early intervention services for families
with children age birth to three that have developmental delays.

**Office of Special Programs**
West Virginia Department of Education
1900 Kanawha Boulevard East
Charleston, WV 25305
In WV:  1-800-642-8541
304-558-2696
Fax:  304-588-3741
wvosp@access.k12.wv.us
**http://wvde.state.wv.us/osp/**


**Family Support**

**Association-Retarded Citizens**
523 24Th St
Dunbar, WV 25064
304-768-2345
The ARC promotes the education, health, self-sufficiency, self-advocacy, inclusion and choices of
individuals with developmental disabilities and their families.

**WV Parent Training and Information**
371 Broaddus Avenue
Clarksburg, WV 26301
Tel: (304) 624-1436
In WV:  1-800-281-1436
Fax: (304) 624-1438
http://wvpti.org

WVPTI provides training, technical assistance, information and referral to parents and other professionals
on appropriate educational services for students with special needs.

**WV Developmental Disabilities Council**
110 Stockton Street
Charleston, WV 25387
304-558-0416 (Voice)
304-558-2376 (TDD)
304-558-0941 (Fax)
http://www.ddc.wv.gov
dhhrwvddc@wv.gov
Working to assure that West Virginians with developmental disabilities receive the services, supports and other forms of assistance they need to exercise self-determination and achieve independence, productivity, integration and inclusion in the community.

**Division of Vocational Rehabilitation (DVR)**
West Virginia Division of Rehabilitation Services
State Capitol
P. O. Box 50890
Charleston, WV 25305-0890
In WV:  1-800-642-8207 (voice/TDD).
 In the Kanawha Valley, call 304-766-4600.
http://www.wvdrs.org/index.cfm
DRS is a statewide employment resource for businesses and people with disabilities. The mission of DVR is to enable individuals with disabilities to obtain and keep employment. This site provides links to supported employment, transition from school-to-work and independent living.

**National and State Internet Resources**

Asperger's Syndrome
Online Asperger Syndrome and Support (OASIS)
www.udel.edu/bkirby/asperger

OASIS provides information and support on Asperger's Syndrome.
Tony Attwood
http://www.tonyattwood.com.au
This web site contains resources and information on Asperger's Syndrome.
Autism Spectrum Disorders National Guidelines and Publications

Iowa
http://www.medicine.uiowa.edu/autismservices/bestpractices/index.htm
The Regional Autism Services Program at the University of Iowa has created guidelines for best practices in assessment and educational programming for students with autism.

**National Academy of Sciences**
http://www.nap.edu/books/0309072697/html/
The federal Office of Special Education Programs (OSEP), Research to Practice Division funded the National Academy of Sciences to study educational interventions for children with autism. The book, *Educating Children with Autism*, published by the National Academy press, is available at this website.

**National Institute on Mental Health**
http://www.nimh.nih.gov/health/publications/autism/complete-publication.shtml
The National Institute on Mental Health: Autism is an on-line autism publication, including a definition of ASDs and information on national resources and supports.

**Nebraska**
http://www.nde.state.ne.us/SPED/PDF/schsupport/asd.pdf
Nebraska's web site features two documents on autism: *Special Education Verification and Effective Instructional Practices for Children with Autism Spectrum Disorders* and *Autism Verification Criteria.*

**New York**
http://www.vesid.nysed.gov/specialed/autism/home.html
New York has posted a number of resources on educating students with ASDs, including a general brochure, Effective Practice Guidelines and Autism Program
Quality Indicators.

**Ohio**
http://www.ocali.org/family/fs_res_guide.php
Ohio Center for Autism and Low Incidence has published the *Ohio's Parent Guide to Autism Spectrum Disorders*, which provides an overview of the world of ASDs, interventions, resources and services

**Oregon**
www.ode.state.or.us/groups/supportstaff/specializedservices/autism/autismtap.pdf
Oregon has prepared a technical assistance paper for ASD entitled *Autism Spectrum Disorder Evaluation, Eligibility and IEP Development*.

**Diagnosis and Assessment Information**

**American Academy of Pediatrics**
http://aappolicy.aappublications.org/cgi/content/full/pediatrics;107/5/1221
The Pediatrician's Role in the Diagnosis and Management of Autistic Spectrum Disorder in Children is a policy statement to help the pediatrician recognize the early symptoms of autism and participate in its diagnosis and management. This statement and the accompanying technical report serves to familiarize the pediatrician with currently accepted criteria defining the spectrum of autism, strategies used in making a diagnosis and conventional and alternative interventions.

**First Signs**
http://firstsigns.org/
Through statewide initiatives, the goals of First Signs are to provide all pediatricians and family practitioners with free information about screening for autism and other developmental disorders and to inform parents about the key social, emotional and communication milestones. This website provides information and free downloads of screening tools for autism and other developmental disorders.

**Educational Approaches**

**The Alert Program**
http://www.alertprogram.com/
The Alert Program is used to help teach self-regulation awareness. The website provides information on the program's steps for teaching self-regulation awareness, workshop opportunities and ordering information.

**The Association for Behavior Analysis**
www.abainternational.org
The Association for Behavior Analysis is dedicated to promoting the experimental, theoretical and applied analysis of behavior. It encompasses contemporary scientific and social issues, theoretical advances and the dissemination of professional and public information.

**Division TEACCH**
www.teacch.com
University of North Carolina-Chapel Hill structured teaching program. TEACCH stands for the Treatment and Education of Autistic and Related Communication Handicapped Children.

**Do2Learn**
www.doToLearn.com
The Do2Learn website provides free printable learning tools, including picture cards, organizational tools and information.

**Floortime-Stanley Greenspan**
http://stanleygreenspan.com/
Stanley Greenspan is a practicing child psychiatrist, chairman of the Interdisciplinary Council on Developmental and Learning Disorders and the founder and former president of the ZERO TO THREE: National Center for Infants, Toddlers and Families. This website provides information on Stanley Greenspan's research, treatment, intervention model (Floortime), publications and presentations.

**Picture Exchange Communication System-Pyramid Educational Consulting Services**

http://www.pecs.com/

The Picture Exchange Communication System is an augmentative alternative training package that allows students and adults with autism and other communication deficits to initiate communication. This website provides information on the services, training and products offered by Pyramid Educational Consulting Services, including information on Picture Exchange Communication System.

**The SCERTS Model-Barry Prizant**

http://www.barryprizant.com/

Dr. Barry M. Prizant is a clinical scholar, researcher and consultant to families of young students with Autistic Spectrum Disorders (ASD) and related communication disabilities. This web site provides information on services provided by Dr. Prizant and his colleagues, including information on the SCERTS model: A Comprehensive Approach for Enhancing Communication and Socioemotional Abilities for Young Children with Autism Spectrum Disorder.

**Sensory Integration-The Ayers Clinic**

http://www.siglobalnetwork.org/

The concept of sensory integration comes from a body of work developed by A. Jean Ayres, PhD, OTR, which assessed how sensory processing and motor planning disorders interfere with daily life function and learning. This website provides information on the research of Dr. Ayres, the services provided by the Ayers Clinic, as well as resources and information on Sensory Integration Theory.

**Social Stories-Carol Gray**

http://www.thegraycenter.org/

Carol Gray is the original author of Social Stories. This website provides information on ASDs and the Gray Center. It is also provides information on Social Stories, Carol Gray's conferences and resources.

**Social Thinking-Michelle Winner Garcia**

http://www.socialthinking.com/

Michelle Garcia Winner, M.A., C.C.C. is a speech-language pathologist who addresses the educational and life-planning needs of individuals with ASDs. She specializes in social thinking and perspective-taking therapy and education for professionals, educators, students and adults with high-end ASDs and their families. This website provides information on her services and training.

# Appendix J

## Autism Internet Modules

**Visual Strategies-Linda Hodgdon**

http://www.usevisualstrategies.com/
Linda Hodgdon is an autism specialist and speech language pathologist. This website provides information on utilizing visual strategies for students with ASDs and includes free printable pictures. The site also provides information on Linda Hodgdon's materials, workshops and services.

**Organizations & Centers**

Autism Research Institute (ARI)
www.autism.com/ari/
ARI is devoted to conducting research and to disseminating the results of research, including the causes of autism and methods of preventing, diagnosing and treating autism and other severe behavioral disorders in students.

Autism Speaks
http://www.autismspeaks.org
Autism Speaks is an organization dedicated to funding global biomedical research into the causes, prevention, treatments and cure for autism; to raising public awareness about autism and its effects on individuals, families and society; and to bringing hope to all who deal with the hardships of this disorder.

Autism Society of America (ASA)
www.autism-society.org
ASA is a national support network for individuals with autism and their families. Links are available on autism, advocacy, public awareness, research and educational opportunities.

Indiana Resource Center on Autism
http://www.iidc.indiana.edu/irca
The Indiana Resource Center for Autism staff conduct outreach training and consultations, engage in research and develop and disseminate information focused on building the capacity of local communities, organizations, agencies and families to support studetns and adults across the autism spectrum in typical work, school, home and community settings.

**Spanish Language**

Asociacion Nuevo Horizonte
http://www.autismo.com/
Directorio de recursos relacionados con el autismo, articulos, congresos, y tablon de mensajes.

Autismo
http://www.geocities.com/Athens/Troy/8638/
Enlaces a sitios relacionados a este sindrome.

Autismo.com
http://www.autisme.com/
Definicion, tratamientos, biblografia, y organizaciones en Espana.

# Appendix K

## Autism Teacher Training Modules

**Autism Internet Modules** at http://www.autisminternetmodules.org/user_mod.php

- Antecedent-Based Interventions (ABI)
- Assessment for Identification
- Computer-Aided Instruction
- Differential Reinforcement
- Discrete Trial Training
- Extinction
- Functional Communication Training
- Home Base
- Naturalistic Intervention
- Overview of Social Skills Functioning and Programming
- Parent-Implemented Intervention
- Peer-Mediated Instruction and Intervention (PMII)
- Picture Exchange Communication System (PECS)
- Pivotal Response Training (PRT)
- Preparing Individuals for Employment
- Prompting
- Reinforcement
- Response Interruption/Redirection
- Restricted Patterns of Behavior, Interests and Activities
- Rules and Routines
- Self-Management
- Sensory Differences
- Social Narratives
- Social Supports for Transition-Aged Individuals
- Speech Generating Devices (SGD)
- Structured Teaching
- Structured Work Systems and Activity Organization
- Supporting Successful Completion of Homework
- Task Analysis
- The Incredible 5-Point Scale
- Time Delay
- Transitioning Between Activities
- Visual Supports

# Appendix L

## Education Best Practices
## Guidelines Checklist

The National Professional Development Center on Autism Spectrum Disorders http://autismpdc.fpg.unc.edu/

**Teacher Training Topics**

- Teaching Children with Autism in the Natural Environment: Practical Strategies for Public School Classrooms
- Introduction to Applied Behavior Analysis and Teaching Verbal Behavior in the Classroom
- Establishing Instructional Control by Building Rapport and Teaching Functional Communication
- DEVELOPING AN EFFECTIVE ABA CLASSROOM: Assessment, Teaching and Organizational Strategies
- Managing Problem Behaviors in School and Home Settings
- Advanced ABA Programming for Children with Autism
- Direct Instruction: Teaching Children with Autism to Read
- Designing a Language Curriculum and Intervention Program for Children with Autism Using the VB-MAPP - The Verbal Behavior Milestones Assessment and Placement Program
- Developing Component Skills for Conversational Language: Identification by Function, Feature and Class
- Establishing and Maintaining a Behaviorally Sound Home Environment for Children with Autism in Early Intervention
- Establishing and Maintaining Instructional Control with Children with Autism in Early Intervention
- Including Students on the Autism Spectrum: Strategies for Success
- Teaching Functional Communication Skills to Children with Autism in Early Intervention
- Teaching Social Skills to Students with Autism
- Utilizing Research-based Teaching Procedures to Improve the Quality of Life for Persons with Developmental Disabilities

# AUTISM SPECTRUM DISORDERS: SERVICES IN WEST VIRGINIA SCHOOLS
*Education Best Practices Guidelines Checklist*

The following guidelines can be used by both parents and educators to address the unique needs of students with autism. This list is not intended to be included in every plan for every child. It is intended to be a starting point for discussion by the planning team when designing an individualized plan.

| Student Planning Goal/Objective | Now | Not Now |
|---|---|---|
| **1: Extended Educational Programming** | | |
| Extended Day and Extended School Year. (Note – these are distinct and need to be clearly defined.)<br><br>1.   Duration and programming to be based on individual needs.<br><br>2.   Extended day should be different from In-Home Training.<br><br>3.   Determine eligibility criteria based not solely on likely regression, but also on a needs assessment of the following areas: behavior, social skills, communication, academics and self help skills.<br><br>4.   Should be available to all eligible students; not to be determined by district availability funds/staff.<br><br>5.   To include variety of structural programs/settings.<br><br>6.   Services should be linked to IEP objectives and goals. | | |

| Student Planning Goal/Objective | Now | Not Now |
|---|---|---|
| **2: Daily Schedules Reflecting Minimal Unstructured Time** | | |
| Individualized daily schedule reflecting minimal unstructured time and active engagement in learning activities to the maximum extent possible.<br><br>1.   Flexibility within routines to adapt to individual skill level.<br><br>2.   Learning activities should be based on IEP goals and objectives and related   educational activities.<br><br>3.   Engagement time may include lunch, snack and recess.<br><br>4.   Consideration should be given to aiding students with changes in routine schedules such as, field trips, substitute teachers and pep rallies. | | |
| **Student Planning Goal/Objective** | **Now** | **Not Now** |

| **3: In-Home and Community-Based Training** | | |
|---|---|---|
| Include training and IEP goals and objectives to assist in acquisition and generalization to the home and community setting (appropriate social interaction skills including social and behavioral skills) based on needs assessment. (NOTE: Define In-Home and Community-Based training.)<br><br>1. Strategies to facilitate maintenance and generalization (home to school, home to community, school to home, school to community).<br><br>2. Consideration should be given to guidelines for qualifications of the In-Home trainer. | | |

| **Student Planning Goal/Objective** | **Now** | **Not Now** |
|---|---|---|
| **4: Positive Behavior Support Strategies** | | |
| Positive Behavior Supports include Functional Behavioral Assessment (FBA), antecedent manipulation, teaching replacement behaviors, reinforcement strategies, data based decisions.<br><br>Behavior Intervention Plan developed and maintained based on a Functional Behavioral Assessment using current data collection of target behaviors.<br><br>1. Considerations and guidelines should be written for the person who is performing FBA.<br><br>2. Behavioral programming is structured across school, home and community-based settings. | | |

| **Student Planning Goal/Objective** | **Now** | **Not Now** |
|---|---|---|
| **5: Futures Planning for Integrated Living, Work, Community and Educational Environments** | | |
| Considered for all students with ASD, at any age<br><br>1. Consider skills necessary to function in all environments post graduation.<br><br>2. Consider skills necessary to function in all environments.<br><br>3. Consider skills necessary to function in all environments for current year. | | |

| Student Planning Goal/Objective | Now | Not Now |
|---|---|---|
| **6: Parent/Family Education, Training and Support** | | |
| Parent/family education, training and support are designed to provide the parent/family with skills/techniques needed in order to help their child become successful in the home/community settings.<br><br>Parent training is provided by qualified personnel with experience in autism and my include but is not limited to: information regarding parent support groups, workshops, videos, conferences, direct consultation, materials, separate and distinct from in-home training to increase the parent's knowledge of specific teaching and management techniques, curriculum information, provide information related to the child's disability and available resources and facilitate parental carryover of in-home training.<br><br>Strategies can include behavior management, setting a structured home environment or communication training.  Parents are active participants in promoting the continuity of intervention across all settings based on IEP. | | |

| Student Planning Goal/Objective | Now | Not Now |
|---|---|---|
| **7: Staff-to-Student Ratio** | | |
| Staff-to-student ratio appropriate to indentified activities and as needed to achieve progress on social, behavioral and/or academic IEP goals and objectives.  The team may determine ratios based on Policy 2419 and should consider:<br><br>1.  Level of learning (acquisition, fluency, maintenance, generalization).<br><br>2.  Priority given to work towards individual independence by fading dependence on 1:1 ratios.<br><br>3.  Developmental level of student.<br><br>4.  Behaviors needs.<br><br>5.  Accommodations across all settings.<br><br>6.  Transitions with the school day.<br><br>7.  Teaching activities. | | |

# Appendix M

## Assistive Technology

| Student Planning Goal/Objective | Now | Not Now |
|---|---|---|
| **8: Teaching Strategies** | | |
| Teaching strategies shall be based on peer reviewed and empirically validated evidence-based practices/methodologies for students with autism. At this time the science heavily favors, but is not limited to those based on the science of applied behavior analysis, defined as the application of behavioral principles for the benefit of the learner and includes simultaneous evaluation of the effect of these applications. The following instructional strategies should be considered: <ul><li>Discrete-trial training</li><li>Visual supports</li><li>Structured learning</li><li>Augmentative and Alternative Communication</li><li>Social skills training</li></ul> Implementation of the instructional strategies should be reflected in the IEP. The following will be considered: <ul><li>How will this strategy be implemented?</li><li>When and by whom?</li></ul> | | |

| Student Planning Goal/Objective | Now | Not Now |
|---|---|---|
| **9: Communication** | | |
| Communication intervention, which considers language forms and functions that enhance effective performance across settings. Strategies may include, but are not limited to: <ul><li>Augmentative and Alternative Communication</li><li>Milieu, incidental, or naturalistic teaching</li><li>Verbal Behavior</li><li>Pragmatics</li><li>Conversation skills</li></ul> | | |

| Student Planning Goal/Objective | Now | Not Now |
|---|---|---|
| **1O: Social Skills Support** | | |
| Consideration will be given to the following areas:<br><br>1. Appropriate social skills assessment and curriculum.<br><br>2. Instruction provided by highly qualified service providers.<br><br>3. Use of trained peer facilitators such as, but not limited to, circle of friends.<br><br>4. Strategies may include but are not limited to video modeling, scripts, training, social stories and role playing.<br><br>5. Support to be provided across all settings. | | |

| Student Planning Goal/Objective | Now | Not Now |
|---|---|---|
| **11: Professional Educator/Staff** | | |
| Professional development will be provided for all personnel who work with the student to assure the correct implementation of the techniques and strategies as determined by the IEP. | | |

This checklist was developed through the work of the Texas Autism Rule Study Committee, a committee comprised of parents, autism providers (Board Certified Behavior Analysts), school principals and Texas education agency representatives. It was shared through the efforts and courtesy of the committee and Arzu Forough (2007).

Assistive technologies are applications (either hardware or software) designed specifically to assist individuals with disabilities to overcome barriers. In compliance with IDEA, schools are responsible for determining what assistive technology(ies) is/are appropriate for an individual with a disability in order that the individual may receive a free and appropriate public education in the least restrictive environment.

Assistive technology is defined as…"any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified or customized, that is used to increase, maintain or improve functional capabilities of individuals with disabilities" (IDEA, 2004). In addition, assistive technology services must be provided in order that the individual with a disability is able to successfully select, acquire and use an assistive technology device.

Caution should be taken not to limit the consideration of assistive technology to expressive communication only. While augmentative communication devices can support a significant "breakthrough" for some individuals with ASD, there are many other ways in which to use technology within an educational program for individuals

with ASD.  These are categorized in several categories.

**"No" Tech Tools**
- No tangible items or material is involved
- Clear physical and visual boundaries
- Elimination of extraneous visual stimulation
- Proximity of staff to individual

**Low Tech Tools**
These require the individual or staff person to utilize an item that typically is not electronic or battery operated. These items are typically low-cost and easy to use.
- Dry Erase Boards
- Clipboards
- Three-ring binders
- Picture Symbol Cards
- Choice Voice (no voice output)
- Ear Plugs
- Use of a pointer
- Visual Schedules and Routines

**Mid-Tech Tools**
These include battery-operated devices or simple electronic devices requiring limited advancements in technology:
- Tape recorded
- Timers
- Calculator
- Head Phones
- Assistive Listening Devices
- Portable Word Processor
- Simple Voice Output Devices

**High Tech Tools**
These complex, typically high cost devices require some training for effective use.
- Computer Software and Adaptive Computer Hardware
- Video Cameras
- Complex Voice Output devices
- PDA, i-Pod, i-Pad

The Office of Special Programs (OSP) is interested in your ideas about Guidelines for Best Practices, Autism

# Feedback Questionnaire

Spectrum Disorders: Services in West Virginia Schools. Your input is valuable to the agency's commitment to continuous improvement in the products produced for school personnel and families of children receiving early intervention and special education services. Please take a few minutes to respond to the following questions.

What chapters or sections were helpful to you and why?

What chapters or sections were confusing or did not help you and why?

Do you have suggestions for improving the guidance document? If so, please list your ideas.

The questionnaire can be returned by:

- Mail to - Office of Special Programs
Autism Guidance Document Questionnaire;
1900 Kanawha Boulevard, East
Building 6 Room 304,
Charleston, WV  25305-0330
- Fax at (304) 558-3741; or
Email at wvosp@access.k12.wv.us.

## THANK YOU.

# Notes

West Virginia Department of Education

# Notes