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Introduction

The following is an introduction to autism, a description of some of the treatment approaches, and local and national resources available for individuals with autism. This is not an exhaustive list; its purpose is to provide information on some of the more common aspects of autism and does not reflect an endorsement of any one particular treatment or resource.

There is no ‘one treatment fits all’ therapy, just as there is no cure for autism. There are treatment and educational approaches that may reduce some of the challenges associated with the disability. Treatment approaches will vary with each child as their individual strengths and needs are taken into consideration. It is important to research treatments and resources/providers thoroughly before implementation.

The information and resources contained in the Parent Pack are for educational and informational purposes only. Information provided in this guide should not be used as a substitute for care by a qualified professional.

Information in this book is adapted from the Nebraska Autism Parent Booklet. Our sincere gratitude to the Autism Society of Nebraska for permission to use their booklet.

CHAPTER 1

WHAT IS AUTISM?

- 1 What is Autism
 - A. Prevalence of autism
 - B. Characteristics
 - C. Co-existing conditions
 - D. Causes
 - E. Cure
- 2 Autism Fact Sheet

What Is Autism?

Autism is a life-long developmental disability that typically (see Asperger's) appears during the first three years of life. The result of a neurological disorder that affects the brain, it is four times more prevalent in boys than in girls and knows no racial, ethnic or social boundaries. Autism affects communication, social skills, pattern, range of interests and sensory responsiveness. Autism is a *spectrum* disorder, meaning the symptoms and characteristics of autism can be present in a wide variety of combinations, from mild to severe. Although autism is defined by a certain set of behaviors, children and adults with autism can exhibit any combination of the behaviors in any degree of severity.

Autism (or Autism Spectrum Disorders - ASD) falls under the category of Pervasive Developmental Disorder according to the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) and includes the following:

- Autistic Disorder: Impairments in social interaction, communication, and imaginative play prior to age 3 years. Stereotyped behaviors, interests, and activities.
- Asperger's Disorder: Characterized by impairments in social interactions and the presence of restricted interests and activities. No clinically significant general delay in language, and testing in the range of average to above average intelligence.
- Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS): A diagnosis of PDD-NOS may be made when a child does not meet the criteria for a specific diagnosis, but there is a severe and pervasive impairment in specified behaviors. Commonly referred to as atypical autism.
- Rett's Disorder: A progressive disorder. Period of normal development and followed by loss of previously acquired skills. Loss of purposeful use of the hands is replaced with repetitive hand movements beginning at the age of 1-4 years.
- Childhood Disintegrative Disorder: Characterized by normal development for at least the first two years, significant loss of previously acquired skills.

Prevalence of Autism

Autism is the third most common developmental disability, more common than Down Syndrome. According to the Autism Society of America, autism is the most common of the Pervasive Developmental Disorders, affecting an estimated 1 in 150 births (Centers for Disease Control Prevention, 2004). Roughly translated, this means as many as 1.5 million Americans today are believed to have some form of autism. This number is on the rise: based on statistics from the U.S. Department of Education and other governmental agencies, autism is growing at a rate of 10-17 percent per year. The ASA estimates that the prevalence of autism could reach 4 million Americans in the next decade.

Characteristics

As indicated above, autism is a spectrum disorder and no two children with autism will have the exact same symptoms. Below is a partial list of the characteristics of autism.

1. Social Skills

- may have difficulty with nonverbal behavior (eye contact, facial expression)
- may have problems making friends
- may have difficulty understanding another person's point of view
- may have difficulty understanding other peoples emotions or their own
- may not interact with others in a typical manner or may not be interested in people at all
- may prefer to be alone

- may be interested in people but not know how to relate to them
2. Communication
 - may be non-verbal or have a delay in talking
 - may repeat (echo) words and phrases over and over (echolalia, instant and delayed)
 - may have difficulties with 'you' and 'I'
 - may have a large vocabulary, formal speech and speak like a 'little professor'
 - may have problems with conversations
 - may have difficulty in turn taking
 - may speak too loudly or have a flat or unusual tone of voice
 - may have difficulty with metaphors and take everything literally
 - may have difficulty understanding abstract ideas
 -
 3. Play/Interests/Activities
 - may have lack of spontaneous or imaginative play
 - may not imitate others' actions
 - may not initiate pretend games
 - may have limited interests or activities
 - may do the same things repeatedly
 - may have problems breaking with routines
 - may have an unusual fascination in a subject or activity
 -
 4. Sensory
 - may have unusual responses to sound
 - may have unusual responses to smells
 - may have unusual responses to pain (may exhibit no reaction to pain)
 - may have unusual responses to touch
 - may not like to be held or cuddled, or might cuddle only when they want to
 - may engage in self-injury, such as head-banging or biting
 -
 5. Other
 - may have no sense of danger
 - may have problems generalizing information from one setting to another
 - may have poor sleeping patterns
 - may have poor eating habits
 - may have poor coordination (may have difficulty in understanding where own body is located in space in relation to surroundings)
 - may have problems with sequencing and/or organization
 - may have difficulty determining important information from irrelevant information
 - may have uneven skill development
 - may focus on details rather than the big picture or the reverse

Co-Existing Conditions

Autism can co-exist with any number of other conditions such as (but not limited to) Epilepsy, Mental Retardation, Down Syndrome, Fragile X Syndrome, Landau-Kleffner Syndrome, William's Syndrome, Tourette's Syndrome or Oppositional Defiancy Disorder.

Causes

Although much research has been devoted to finding the answer to this question, no specific cause is known. The ASA states that current research links autism to abnormalities in brain structure or function. Brain scans show differences in the shape and structure of the brain in autistic versus non-autistic children. Researchers are investigating a number of theories, including the link between heredity, genetics and medical problems. While no one gene has been identified as causing autism, in many families there appears to be a pattern of autism or related disabilities, further supporting a genetic basis to the disorder.

Is There a Cure?

The understanding of autism has grown tremendously since Dr. Leo Kanner first described it in 1943. Some of the earlier searches for "cures" now seem unrealistic in terms of today's understanding of brain-based disorders. To cure means, "to restore to health, soundness, or normality." In the medical sense, there is no cure for the neurological differences in the brain that result in autism. However, better understanding of the disorder has led to the development of better coping mechanisms and strategies for the various manifestations of the disability. Some of these symptoms may lessen as the child ages; others may disappear altogether. With appropriate intervention, many of the associated behaviors can be positively changed.

Autism Society of America: <http://www.autism-society.org/>

Mayo Clinic: <http://www.mayoclinic.com/>(autism, signs & symptoms)

Many myths about autism exist. Some are out-dated theories or ideas which current research has proven false. Others are broad generalizations about autism characteristics, which may apply to some individuals with autism, but do not apply to all individuals. Autism is a spectrum disorder, with symptoms ranging from mild to severe. Individuals vary greatly; each person with autism is unique, and a person first and foremost.

The following statements are not true:

- Individuals with autism never make eye contact; they do not look at you.
- Autism is a mental illness.
- Progress means that a person does not have autism.
- Individuals with autism do not speak.
- Autism can be outgrown.
- Individuals with autism cannot learn.
- Underneath all of the difficult behaviors is a normal person.
- Individuals with autism cannot show affection and do not respond to physical affection.
- Individuals with autism do not want friends.
- Individuals with autism do not relate to peers/adults.
- Individuals with autism are manipulative.
- Individuals with autism could talk if they wanted to.
- Individuals with autism cannot smile.
- Individuals with autism do not notice others and do not pick up cues from peers/adults.
- When a person with autism does not respond to a question/direction to which he has shown a previous correct response, he is being stubborn, non-compliant, and/or obnoxious.

Autism Fact Sheet

From the Autism Society of America

Other Names:

- Autistic Disorder
- Asperger's Disorder
- Pervasive Developmental Disorder - Not Otherwise Specified (PDD-NOS)
- Rett's Disorder
- Childhood Degenerative Disorder (CDD)

Defining Characteristics

Autism is a neurological disorder that typically appears during the first three years of life and can cause discrepancies or differences in the way information is processed. It is a spectrum disorder and can range from mild to severe. Typical characteristics are:

1. Communication - children with autism may be verbal or non-verbal. There is difficulty in the understanding and use of language. For those that do speak, many are often echolalic (will parrot or repeat what they have heard).
2. Socialization - children with autism may have difficulty in understanding and relating to people, events and objects in the environment. Unable to understand and process social cues.
3. Stimulation - may experience over/under sensitivities in the five senses, exhibit repeated body movements (hand flapping, rocking), and aggressive and/or self-injurious behaviors may be present.
4. Routines - many children with autism are resistant to changes in routines and may have a great deal of difficulty with transitions.

Incidence/Prevalence

1. Research indicates current rates are 1 in 150, currently affecting over 1 million Americans.
2. Autism is four times more prevalent in boys than girls.
3. There are no racial, ethnic or social boundaries.
4. Family income, lifestyle, and educational levels do not affect the chance of occurrence.
5. There is a 3-8% risk of recurrence in families with an affected child.

Genetics

Genetic causes are being researched at this time, but no gene(s) has/have been directly linked to autism.

Etiology:

There is no known cause for autism though there are several theories. Genetic, or a combination of genetic and environmental, factors may contribute to autism.

Physical/Motor Characteristics and Development

Physical and motor development may be delayed, normal or advanced.

Cognitive Characteristics and Development:

There is a wide range of cognitive ability from gifted to profoundly mentally retarded. Up to 75% of children with autism may have some form of mental retardation.

For infants and young children with autism, problems may occur in the following areas:

1. Child does not use normal eye gaze
2. Child does not become involved in mutual sharing of feelings
3. Child does not engage in imitative, turn-taking games
4. Child does not signal to continue an enjoyable activity or initiate joint attention
5. Child does not understand they can gain assistance from others

Older children may have difficulty with the following:

1. Social rules are learned rigidly without realizing there is a range of acceptable behavior
2. Public behavior tends to be private behavior
3. Behavior will seem incongruent or startling due to different social perspectives or viewpoints
4. Unable to manage themselves in loosely structured situations
5. Have difficulty initiating, entering, or negotiating conversations
6. Friendly social overtures, humor and jokes are misunderstood

Speech/Language Characteristics and Development:

1. Phonology - difficulty with expressive prosody (e.g., fluctuations in the vocal intensity, monotonous pitch, tonal contrasts inconsistent with the meanings expressed)
2. Morphology/Syntax - Confusions of pronominal forms (e.g., gender confusion [he for she or it], case substitution [him for he], first- and second-person singular forms [you for I or me]). Use of less complex sentences than peers.
3. Semantics - Word-finding problems. Inappropriate answers to questions.
4. Pragmatics - Limited range of communicative functions. Difficulty initiating and maintaining a conversation. Few gestures. Failure to make eye contact prior to or during communicative interactions. Preference to follow rather than lead in a conversation. Engaging of potential communication partners at a level that requires little actual sharing.

Hearing Characteristics and Development

Hearing development is typically normal, though hearing sensitivities may exist.

Implications for Educational Need

Intensive and early education is recommended for children with autism. Appropriate communication and social interactions need to be modeled and generalized to different settings and different people. Settings need to be structured, routine and allow for quiet areas when overwhelmed with stimulation. Effective intervention plans are based on cognitive/behavioral strategies and are based on three strategies:

1. Evaluate problem situations and refine the structure of environments and elements of the teaching/support plan to clarify the situation, solve problems quickly, and prevent reoccurrence.
2. Organize and structure space, time, and events (including instruction) to compensate for the deficits of autism.
3. Teach new skills to develop and expand competence and independence.

Autism Society of America: <http://www.autism-society.org/>

CHAPTER 2

DIAGNOSING AUTISM

1. Diagnosing Autism
 - A. Diagnosing Autism
 - B. Educational Vs. Medical Diagnosis
 - C. DSMV-IV, Pervasive Developmental Disorders

DIAGNOSING AUTISM

There are no medical tests for diagnosing autism. An accurate diagnosis must be based on observation of the individual's communication, behavior and developmental levels. However, because many of the behaviors associated with autism are shared by other disorders, various medical tests may be ordered to rule out or identify other possible causes of the symptoms being exhibited.

A brief observation in a single setting cannot present a true picture of an individual's abilities and behaviors. Parental (and other caregivers') input and developmental history are very important components of making an accurate diagnosis. At first glance, some individuals with autism may appear to have behavioral disorders, problems with hearing, or even odd and eccentric behavior. To complicate matters further, these conditions can co-occur with autism. However, it is important to distinguish autism from other conditions, since an accurate diagnosis and early identification can provide the basis for building an appropriate and effective educational and treatment program.

Early Diagnosis

Research indicates that early diagnosis is associated with dramatically better outcomes for individuals with autism. The earlier a child is diagnosed, the earlier the child can begin benefiting from one of the many specialized intervention approaches.

Diagnostic Tools

As part of a well-baby/well-child visit, your child's doctor should do a "developmental screening" asking specific questions about your baby's progress.

The National Institute of Child Health and Human Development (NICHD) list five behaviors that signal further evaluation is warranted:

1. Does not babble or coo by 12 months
2. Does not gesture (point, wave, grasp) by 12 months
3. Does not say single words by 16 months
4. Does not say two-word phrases on his or her own by 24 months
5. Has any loss of any language or social skills at any age

Having any of these five "red flags" does not mean your child has autism, but because the characteristics of the disorder vary so much, a child should have further evaluations by a multidisciplinary team that may include a neurologist, psychologist, developmental pediatrician, speech/language therapist, learning consultant or other professionals knowledgeable about autism.

The following lists 11 different types of screening that may be used to diagnosis autism.

1. CARS rating system (Childhood Autism Rating Scale): Developed by Eric Schopler in the early 1970s, is based on observed behavior. Using a 15-point scale, professionals evaluate a child's relationship to people, body use, adaptation to change, listening response and verbal communication.

For more information and to see a sample of the CARS see this website:

<http://home.isoa.net/%7Enitetrax/cars.htm>

2. The Checklist for Autism in Toddlers (CHAT): It was developed by Simon Baron-Cohen in

the early 1990's to see if autism could be detected in children as young as 18 months. The screening tool uses a short questionnaire with two sections, one prepared by the parents, the other by the child's family doctor or pediatrician.

3. The M-CHAT: The Modified Checklist for Autism in Toddlers is a short questionnaire which has 23 questions, using the original nine from the CHAT as its basis. Its goal is to improve the sensitivity of the CHAT and position it better for an American audience. Currently, more than 4200 children in the U.S. have been screened with the M-CHAT.

Please fill out the following about how your child usually is. Please try to answer every question. If the behavior is rare (e.g. you have seen it once or twice), please answer as if the child does not do it.

* PLEASE NOTE: The M-CHAT was not designed to be scored by the person taking it. In the validation sample, the authors of the M-CHAT scored all checklists. If parents are concerned, they should contact their child's physician.

1. Does your child enjoy being swung, bounced on your knee, etc.? Yes No
2. Does your child take an interest in other children? Yes No
3. Does your child like climbing on things, such as up stairs? Yes No
4. Does your child enjoy playing peek-a-boo/hide-and-seek? Yes No
5. Does your child ever pretend, for example, to talk on the phone or to take care of dolls, or pretend other things? Yes No
6. Does your child ever use his/her index finger to point to ask for something? Yes No
7. Does your child ever use his/her index finger to point to indicate interest in something? Yes No
8. Can your child play properly with small toys (e.g. cars or bricks) without just mouthing, fiddling, or dropping them? Yes No
9. Does your child ever bring objects over to you (parent) to show you something? Yes No
10. Does your child look you in the eye for more than a second or two? Yes No
11. Does your child ever seem oversensitive to noise? (e.g., plugging ears) Yes No
12. Does your child smile in response to your face or your smile? Yes No
13. Does your child imitate you? (e.g., If you make a face, will your child imitate it?) Yes No
14. Does your child respond to his/her name when you call? Yes No
15. If you point at a toy across the room, does your child look at it? Yes No
16. Does your child walk? Yes No
17. Does your child look at things you are looking at? Yes No
18. Does your child make unusual finger movements near his/her face? Yes No
19. Does your child try to attract your attention to his/her own activity? Yes No
20. Have you ever wondered if your child is deaf? Yes No
21. Does your child understand what people say? Yes No
22. Does your child sometimes stare at nothing or wander with no purpose? Yes No
23. Does your child look at your face to check your reaction when faced with something unfamiliar? Yes No

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4. The Screening Test for Autism in Two-Year Olds: Developed by Wendy Stone at Vanderbilt, it uses direct observations to study behavioral features in children under two. Three skills areas are identified as being indicative of autism and are the focus of the process of play, motor imitation and joint attention.

5. Autism Diagnostic Observation Schedule (ADOS): Developed by Catherine Lord, Ph.D., Michael Rutter, M.D., FRS, Pamela C. DiLavore, Ph.D., and Susan Risi, Ph.D., the ADOS is a semi-structured assessment to evaluate an individual suspected of having autism. It consists of various activities that allow the examiner to observe social and communication behaviors related to the diagnosis of pervasive developmental disorders. These activities provide interesting, standard contexts in which interaction can occur.

The ADOS consists of four modules, each requiring 35 to 40 minutes to administer. The individual being evaluated is given just one module, depending on his or her expressive language level and chronological age. Following guidance provided in the manual, the tester selects the appropriate module for each person. Module 1 is used with children who do not consistently use phrase speech, Module 2 with those who use phrase speech but are not verbally fluent, Module 3 with fluent children, and Module 4 with fluent adolescents and adults. The one group within the autism spectrum that the ADOS does not address is nonverbal adolescents and adults.

6. Autism Diagnostic Interview, Revised (ADI-R): Developed by Michael Rutter, M.D., FRS, Ann LeCouteur, M.B.B.S., and Catherine Lord, Ph.D., the ADI-R is a standardized, semi-structured diagnostic interview for use with the parents or caregivers of people suspected of having a Pervasive Developmental Disorder. This test has proven useful for formal diagnosis as well as treatment and educational planning.

To administer the ADI-R, an experienced clinical interviewer questions a parent or caretaker who is familiar with the developmental history and current behavior of the individual being evaluated. The interview can be used to assess both children and adults, as long as their mental ages are above 2 years, 0 months.

Composed of 93 items, the ADI-R focuses on three functional domains:

- Language and Communications
- Reciprocal Social Interactions
- Restricted, Repetitive and Stereotyped Behaviors and Interests

Interview questions cover eight content areas:

- Overview of the client's behavior
- The client's background, including family, education, previous diagnoses and medications
- Early development and developmental milestones
- Language acquisition and loss of language or other skills
- Current functioning in regard to language and communication
- Social development and play
- Interests and behaviors
- Clinically relevant behaviors, such as aggression, self-injury, and possible epileptic features.

7. Social Communication Questionnaire (SCQ): Previously known as the Autism Screening Questionnaire (ASQ) and developed by Michael Rutter, M.D., FRS, Anthony Bailey, M.D., and Catherine Lord, Ph.D., this brief instrument helps evaluate communication skills and social functioning in children who may have autism or autism spectrum disorders. The questionnaire can be used to evaluate anyone over the age of 4, as long as his or her mental

age exceeds 2.0 years. It is available in two forms—Lifetime and Current—each composed of 40 yes-or-no questions. Both forms can be given directly to the parent, who can answer the questions without supervision. Forms are available in Spanish as well as English.

The Lifetime Form focuses on the child's entire developmental history, providing a Total Score that is interpreted in relation to specific cutoff points. This score identifies individuals who may have autism and should be referred for a more complete evaluation. The Current Form looks at the child's behavior over the most recent 3-month period. It produces results that can be helpful in treatment planning, educational intervention and measurement of change over time.

8. The PDD Assessment Scale/ Screening Questionnaire: This is an experimental, online screening tool, based on the DSM-IV criteria for autism. It contains 45 questions in three areas: Social Interaction Difficulties, Speech and Language Delay, Abnormal Symbolic/ Imaginary Play. The printed results may be used as a tool for discussing symptoms with a physician or other professional. The score is NOT indicative of a definitive diagnosis by itself.
<http://www.childbrain.com/pddq6.shtml>
9. Asperger Syndrome Diagnostic Scale (ASDS): Developed by Brenda Myles and Stacy Bock, the ASDS is designed to identify Asperger Syndrome in children ages 5 through 18. Parents, teachers, siblings, paraeducators, speech & language pathologists, psychologists, psychiatrists, and other professionals can answer the 50 yes/no items in 10 to 15 minutes. Designed to identify Asperger Syndrome in children ages 5 through 18, this instrument provides an AS Quotient that tells the likelihood that an individual has Asperger Syndrome.

The 50 items that comprise the ASDS were drawn from five specific areas of behavior:

- cognitive
- maladaptive
- language
- social
- sensorimotor

10. Gilliam Asperger Disorder Scale (GADS): GADS is a norm-referenced test designed to evaluate children with unique behavioral problems who may have Asperger's Disorder. Based on the most current and relevant definitions and diagnostic criteria of Asperger's Disorder, the GADS is useful for contributing valuable information toward the identification of children who have this disorder. Easily completed by a parent and professional who knows the child, the GADS provides documentation about the essential behavior characteristics of Asperger's Disorder necessary for diagnosis.

Diagnosing Autism/Asperger's in Older Children

Autism Spectrum Disorders are difficult and complex to diagnose in older children, especially when the child appears very intelligent and can speak. According to Lorna Wing, an internationally recognized researcher, children on the spectrum “share a triad of impaired social interaction, communication, and imagination, associated with a rigid, repetitive pattern of

behavior ... The triad can be recognized at all levels of intelligence and can occur alone or together with any other physical or psychological disorder.” Wing, L. (1996) Autistic Spectrum Disorder. *British Medical Journal*, 312.

To diagnose Asperger's Syndrome, a speech delay is not required, though it may be present as a problem in language development. The subtle but equally problematic characteristics of Asperger's Syndrome include:

- Social Deficits: Although these children may be very intelligent, they are socially naïve and have problems making friends and sustaining meaningful, age-appropriate friendships. This presents particular problems for school-age children, who are often the victims of bullying. They struggle with the concept of turn taking and are often unaware of the needs of other people in a conversation.
- Perseverating: Many children become experts on very narrow or specific topics (weather, trains, and sports statistics) and collect copious amounts of detailed information that they study and discuss excessively, at the expense of other age-appropriate interests.

Diagnosing Sensory Integration Dysfunction

Research clearly identifies sensory integrative problems in children with developmental or learning difficulties, including autism. Individuals with autism often seek out unusual quantities of certain types of sensations and are extremely hypersensitive to other types. Improving sensory processing leads these children to contacts that are more productive with people and environments.

Indications of Sensory Processing Problems

<i>Over-responsiveness</i>	<u>Touch</u>	<i>Under-responsiveness</i>
<p>Avoids touching certain textures Stiffens body when picked up Struggles against being held</p> <p>Avoids using hands Dislikes cuddling, being held or hugged Overly sensitive to bath temperatures Prefers to touch rather than be touched Momentary grasp of toys then quick release Approach-avoidance movements of hands and body Decreased environmental exploration with hands and feet Irritable to weight bearing on bare feet Toe walking Lack of hand to mouth play Irritable with finger feeding Excessively ticklish, irritable when touched Fearful, irritated when approached Strongly dislikes shoes or socks on or off Irritated by underwear, tags in clothes</p>		<p>Does not react to pushing or hitting Lacks awareness of being touched Unaware of cuts, bumps, bruises, pain Head banging, self biting Receptive behavior Excessive mouthing of objects</p>

Taste and Smell

Over-responsiveness

Overly sensitive to environmental smells
Reacts defensively to odors

Over-focus on house odors, restaurant odors
Restricted food preferences

Under-responsiveness

Loves hot and spicy foods
Attracted to sour foods - pickles, lemons
Explores by smelling or tasting

Movement/Vestibular

Over-responsiveness

Fearful of imposed movement

Dislikes playground equipment
Avoids changing head position in relation to gravity
Trouble learning to climb stairs or negotiate hills
Avoids leaving contact with ground
Becomes easily motion sick
Complains of nausea, headache with movement
Rocked in crib as an infant

Under-responsiveness

Spins for very long periods without dizziness
Jumps excessively on furniture/bed
Lack of judgment in space
Likes fast and rapid movement
Seeks movement experiences
Likes fast, spinning carnival rides

Muscles and Joints/Proprioception

Over-responsiveness

Irritated by having arms/legs pushed/pulled
Crept on tummy rather than hands and knees

Went from sitting to standing with little crawling
Avoids certain weight-bearing positions
Delayed self-care skills
Dislikes jumping

Under-responsiveness

Holds hands or body in strange positions
Over-focus on arms/legs pushed/pulled
Toe walking

Visual

Over-responsiveness

Excessive blinking
Likes to be in the dark
Intolerant of sunlight, brightness

Excited by visual stimuli
Gaze aversion

Under-responsiveness

Lacks visual focus
Difficulty following objects, people
Lacks conscious awareness of environment
Dull eyes, no 'sparkle'
Difficulty discriminating shapes, colors

Fleeting eye contact
Hypervigilance

Auditory

Over-responsiveness

Responds defensively to unexpected noise
Distracted by noise
Irritated by loud noises
Constant noise-making, e.g. humming, talking
Distracted by white noise, e.g., lights, fans

Under-responsiveness

Does not orient to sound
Misses some sounds
Enjoys unusual/strange noises
Delayed response to sounds

Related Behaviors

Strong need for routine
Sleep problems
High pitched vocal tone/voice
Easily frustrated during feeding

If you suspect your child has a Sensory Processing Disorder (SPD), or if he or she has already been diagnosed, you will need to begin working with an occupational therapist. These professionals can evaluate your child as well as provide treatment. In some cases, you may also work with a pediatric speech-language pathologist or a physical therapist.

Sensory Processing Disorders Network Directory Search:

<http://www.spdnetwork.org/directory/search.html>

American Occupational Therapy Association: <http://www.aota.org/>

When asking about therapists, it is very important to make sure that the therapist has training and experience working with children with sensory integration disorders.

Educational vs. Medical Diagnosis

When receiving a diagnosis you should be aware there are two types of diagnosis your child can receive: educational or medical.

What is the difference?

Educational

An educational diagnosis is given through the local school district and is concerned only with how the condition affects the child's education. The federal law regarding special education is called the Individuals with Disabilities Education Act (IDEA) and details the states' responsibilities in the education of children with special needs. It is important to remember that state law must meet the minimum standards set forth in the federal law. Services provided through the school district are free of charge to parents. The IDEA defines autism in this way:

(b) (1) "Autism" means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3, that

adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. The term does not apply if a child's educational performance is adversely affected primarily because the child has a serious emotional disturbance as defined in paragraph (b) (9) of this section. [Note: Paragraph (b) (9) defines "serious emotional disturbance." There are 13 disabilities defined in this law.]

A note following the definition section of IDEA says, "If a child manifests characteristics of the disability category 'autism' after age 3, that child still could be diagnosed as having 'autism' if the criteria in paragraph (b) (1) of this section are satisfied."

Minnesota State law definition of autism follows:

Minnesota Rules, Chapter 3525 — Adopted June 12, 2000

3525.1325 Autism Spectrum Disorders (ASD)

Subpart 1. Definition. "Autism spectrum disorders (ASD)" means a range of pervasive developmental disorders that adversely affect a pupil's functioning and result in the need for special education instruction and related services. ASD is a disability category characterized by an uneven developmental profile and a pattern of qualitative impairments in several areas of development: social interaction, communication, or restricted repetitive and stereotyped patterns of behavior, interests, and activities, with onset in childhood. Characteristics can present themselves in a wide variety of combinations from mild to severe, as well as in the number of symptoms present, for example, Autistic Disorder, Childhood Autism, Atypical Autism, Pervasive Developmental Disorder: Not Otherwise Specified, Asperger's Disorder, or other related pervasive developmental disorders.

Subpart 2. (See repealer.)

Subpart 3. Criteria. The multidisciplinary team shall determine that a pupil is eligible and in need of special education instruction and related services if the pupil demonstrates patterns of behavior consistent with those in item A and fulfills the requirements in item B.

A. An educational evaluation must address all three core features in subitems (1) to (3). For eligibility purposes, there must be documented evidence the student demonstrates the specific patterns of behavior described in at least two of these subitems, one of which must be subitem (1) The eligibility determination must be supported by information collected from multiple settings and sources.

Behavioral indicators of these core features must be atypical for the pupil's developmental level. Documentation of behavioral indicators must include the use of at least two of these

methods: structured interviews with parents, autism checklists, communication and developmental rating scales, functional behavior assessments, application of diagnostic criteria from the current *Diagnostic and Statistical Manual (DSM)*, informal and standardized evaluation instruments, or intellectual testing.

(1) Qualitative impairment in social interaction, as documented by two or more behavioral indicators, such as: limited joint attention and limited use of facial expressions directed toward others; does not show or bring things to others to indicate an interest in the activity; demonstrates difficulties in relating to people, objects, and events; a gross impairment in ability to make and keep friends; significant vulnerability and safety issues due to social naivete; may appear to prefer isolated or solitary activities; misinterprets others' behaviors and social cues.

(2) Qualitative impairment in communication, as documented by one or more behavioral indicators, such as: not using finger to point or request; using others' hand or body as a tool; showing lack of spontaneous imitation or lack of varied imaginative play; absence or delay of spoken language; limited understanding and use of nonverbal communication skills such as gestures, facial expressions, or voice tone; odd production of speech including intonation, volume, rhythm, or rate; repetitive or idiosyncratic language or inability to initiate or maintain a conversation when speech is present.

(3) Restricted, repetitive, or stereotyped patterns of behavior, interest, and activities, as documented by one or more behavioral indicators, such as: insistence on following routines or rituals; demonstrating distress or resistance to changes in activity; repetitive hand or finger mannerism; lack of true imaginative play versus reenactment; overreaction or under-reaction to sensory stimuli; rigid or rule-bound thinking; an intense, focused preoccupation with a limited range of play, interests, or conversation topics.

B. The team shall verify that an ASD adversely affects a pupil's present level of performance and that the pupil is in need of special education instruction and related services. This verification is completed through the multidisciplinary team evaluation and summarized in the pupil's evaluation report. Documentation must be supported by data from each of the following components:

(1) The evaluation must identify the pupil's present level of performance and educational needs in each of the core features identified by the team in item A. In addition, the evaluation process must give consideration to all other areas of educational concern consistent with the IEP process.

(2) The pupil's need for instruction and services must be documented and supported by evaluation and observations in two different settings, on two different days.

(3) A developmental history which summarizes developmental information and

behavior patterns.

Subpart 4. Team Membership. At least one professional with experience and expertise in the area of ASD must be included on the team determining eligibility and educational programming, due to the complexity of this disability and specialized intervention methods. The team must include a school professional knowledgeable of the range of possible special education eligibility criteria.

Subpart 5. Implementation. Pupils with various educational profiles and related clinical diagnoses may be included as eligible if they meet the criteria of ASD. However, a clinical or medical diagnosis is not required to be eligible for special education services. Due to the wide variation in characteristics and needs, pupils with different educational profiles or a specific clinical diagnosis must also be determined as eligible following the criteria in subpart 3. Following this eligibility determination process is essential to identify and document individual strengths and weaknesses and the pupil's unique educational needs so that an effective individual educational program may be planned and implemented.

Medical

A medical diagnosis is based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) published by the American Medical Association (AMA). A medical diagnosis is simply a medical determination of an existing condition. A medical diagnosis is required for medications, and may be required for private services, as well as to ensure access to state and/or county services. The purpose of the DSM is to provide clear descriptions of diagnostic categories in order to enable clinicians and researchers to diagnose, communicate about, study, and treat various disorders. DSM does not claim that the conditions described meet legal or other nonmedical criteria for what constitutes mental disease, mental disorder, or mental disability.

Under the general heading Pervasive Developmental Disorders (PDD), the *DSM-IV* (published 1994) offers the following as diagnostic criteria for Autistic Disorder:

DSM Diagnostic Criteria

299.00 Autistic Disorder

A. A total of six (or more) items from (1), (2), and (3), with at least two from (1), and one each from (2) and (3):

- (1) Qualitative impairment in social interaction, as manifested by at least two of the following:
 - (a) marked impairment in the use of multiple nonverbal behaviors, such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction
 - (b) failure to develop peer relationships appropriate to developmental level
 - (c) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest)

(d) lack of social or emotional reciprocity

(2) Qualitative impairments in communication, as manifested by at least one of the following:

- (a) delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
- (b) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
- (c) stereotyped and repetitive use of language or idiosyncratic language
- (d) lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level

(3) Restricted, repetitive, and stereotyped patterns of behavior, interests, and activities as manifested by at least one of the following:

- (a) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
- (b) apparently inflexible adherence to specific, nonfunctional routines or rituals
- (c) stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting or complex whole-body movements)
- (d) persistent preoccupation with parts of objects

B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years:

- (1) social interaction,
- (2) language as used in social communication, or
- (3) symbolic or imaginative play.

C. The disturbance is not better accounted for by Rett's disorder or childhood disintegrative disorder.

299.80 Pervasive Developmental Disorder, Not Otherwise Specified

This category should be used when there is a severe and pervasive impairment in the development of reciprocal social interaction or verbal and nonverbal communication skills, or when stereotyped behavior, interests, and activities are present, but the criteria are not met for a specific pervasive developmental disorder, schizophrenia, schizotypal personality disorder, or avoidant personality disorder. For example, this category includes "atypical autism" -- presentations that do not meet the criteria for autistic disorder because of late age of onset, atypical symptomatology, or sub threshold symptomatology, or all of these.

299.80 Asperger's Disorder

A. Qualitative impairment in social interaction, as manifested by at least two of the following:

- (1) marked impairment in the use of multiple nonverbal behaviors, such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction
- (2) failure to develop peer relationships appropriate to developmental level

- (3) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest to other people)
- (4) lack of social or emotional reciprocity

- B. Restricted, repetitive, and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:
 - (1) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
 - (2) apparently inflexible adherence to specific, nonfunctional routines or rituals
 - (3) stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements)
 - (4) persistent preoccupation with parts of objects
- C. The disturbance causes clinically significant impairment in social, occupational, or other important areas of functioning.
- D. There is no clinically significant general delay in language (e.g., single words used by age 2 years, communicative phrases used by age 3 years).
- E. There is no clinically significant delay in cognitive development or in the development of age-appropriate self-help skills, adaptive behavior (other than in social interaction), and curiosity about the environment in childhood.
- F. Criteria are not met for another specific pervasive developmental disorder or schizophrenia.

299.80 Rett's Disorder

- A. All of the following:
 - (1) apparently normal prenatal and perinatal development
 - (2) apparently normal psychomotor development through the first 5 months after birth
 - (3) normal head circumference at birth
- B. Onset of all of the following after the period of normal development:
 - (1) deceleration of head growth between ages 5 and 48 months
 - (2) loss of previously acquired purposeful hand skills between ages 5 and 30 months with the subsequent development of stereotyped hand movements (i.e., hand-wringing or hand washing)
 - (3) loss of social engagement early in the course (although often social interaction develops later)
 - (4) appearance of poorly coordinated gait or trunk movements
 - (5) severely impaired expressive and receptive language development with severe psychomotor retardation

299.10 Childhood Disintegrative Disorder

- A. Apparently normal development for at least the first 2 years after birth as manifested by the

presence of age-appropriate verbal and nonverbal communication, social relationships, play, and adaptive behavior.

B. Clinically significant loss of previously acquired skills (before age 10 years) in at least two of the following areas:

- (1) expressive or receptive language
- (2) social skills or adaptive behavior
- (3) bowel or bladder control
- (4) play
- (5) motor skills

C. Abnormalities of functioning in at least two of the following areas:

- (1) qualitative impairment in social interaction (e.g., impairment in nonverbal behaviors, failure to develop peer relationships, lack of social or emotional reciprocity)
- (2) qualitative impairments in communication (e.g., delay or lack of spoken language, inability to initiate or sustain a conversation, stereotyped and repetitive use of language, lack of varied make-believe play)
- (3) restricted, repetitive, and stereotyped patterns of behavior, interests, and activities, including motor stereotypes and mannerisms

D. The disturbance is not better accounted for by another specific pervasive developmental disorder or by schizophrenia.

Is an autism diagnosis required?

No, however obtaining services may require an evaluation to be performed. It is not uncommon for a child with autism to be given other labels, prior either to receiving the autism diagnosis or in conjunction with the autism diagnosis. Developmentally delayed, speech language impairment, behavior disorder, oppositional defiance disorder, and mentally handicapped as well as many other labels may be given to a child with autism.

A child may have co-existing conditions in addition to autism. The person giving the diagnosis may not have enough experience in identifying autism or in diagnosing autism in very young children. The symptoms may not be as obvious at a young age. Onset can occur between birth and three years of age (with the exception of Asperger's). There may also be hesitation in labeling a very young child with a diagnosis of autism.

Why is this important?

It is important to understand how autism is diagnosed because not all professionals, in the medical or educational fields, have had training or experience in diagnosing a child with autism. Parents need to understand what autism is, how it is diagnosed and understand the special education laws to be an effective advocate for their child.

CHAPTER 3

EDUCATIONAL THERAPIES

1. Research and Guidelines Regarding Autism Therapies
2. Educational Therapies
 - A. Applied Behavior Analysis/ABA
 - B. Floortime/DIR/Greenspan
 - C. TEACCH
 - D. Picture Exchange Communication System (PECS)
 - E. Pivotal Response Training
 - F. Relationship Development Intervention/RDI
 - G. Social Stories
 - H. Power Cards
 - I. Son-Rise

Research and Guidelines Regarding Autism Therapies

The Autism Society of America's Panel of Professional Advisors has developed guidelines to evaluate theories and practices related to autism. Listed here are a few of the things to consider as you evaluate treatment options:

- Will the treatment result in harm to the child?
- How will failure of the treatment affect my child and family?
- Has the treatment been validated scientifically?
- Are there assessment procedures specified?
- How will the treatment be integrated into the child's current program? Do not become so infatuated with a given treatment that functional curriculum, vocational life, and social skills are ignored.

In addition, consider the following questions when asking about specific treatments (compiled by the National Institute of Mental Health):

- How successful has the program been for other children?
- How many children have gone on to placement in a regular school and how have they performed?
- Do staff members have training and experience in working with children and adolescents with autism?
- How are activities planned and organized?
- Are there predictable daily schedules and routines?
- How much individual attention will my child receive?
- How is progress measured?
- Will my child's behavior be closely observed and recorded?
- Will my child be given tasks and rewards that are personally motivating?
- Is the environment designed to minimize distractions?
- Will the program prepare me to continue the therapy at home?
- What is the cost, time commitment, and location of the program?

For more information:

<http://www.autism-society.org/site/PageServer?pagename=Guidelines>

Research on Autism Therapies

As you read about various autism therapies, one thing to keep in mind is the research that has been conducted on whatever therapy you intend to implement. Many books and research journals can aid you in your search. In 1999, the New York Department of Health Early Intervention Program sponsored a review of research articles by an independent panel of professionals and parents. The review, entitled "Clinical Practice Guideline: Report of the Guideline Recommendations Autism / Pervasive Developmental Disorders Assessment and Intervention for Young Children (Age 0-3 Years)" provides the pros and cons of each therapy. You can view the entire document in full at the following website:

http://www.health.state.ny.us/nysdoh/eip/autism/index.htm - Table_of_Contents

Some of the therapies that were considered in the review are as follows:

Intervention Methods

- Intensive Behavioral and Educational Intervention Programs
- Basic Principles of Specific Behavioral Intervention Techniques
- Behavioral and Educational Intervention Techniques for Maladaptive Behaviors
- Behavioral and Educational Intervention Techniques to Improve Communication
- Behavioral and Educational Intervention Techniques to Improve Social Interactions
- Parent Training as Part of Behavioral and Educational Programs
- Interventions Based on the Developmental, Individual Difference, Relationship (DIR) Model
- Sensory Integration Therapy
- Touch Therapy
- Music Therapy
- Auditory Integration Training (AIT)
- Facilitated Communication

Medication and Diet Therapies

- Psychoactive Medications
- Hormone and Immunologic Therapies
- Anti-Yeast Therapies
- Vitamin Therapies
- Diet Therapies

Educational Therapies

Applied Behavior Analysis

In simple terms, Applied Behavior Analysis (ABA) teaches complex tasks by breaking them down into bite-size pieces that can be learned more easily, with each piece building upon the previous one. Rewards, called “reinforcers,” are given for correct responses or behaviors while inappropriate responses are corrected, ignored, or redirected. Precise data on each learning trial is recorded, and adjustments in the educational program are made accordingly. ABA targets development in many areas of skills, including, but not limited to, attending, imitation, language, social, play, self-help, and academics.

Other terms, such as discrete trial training and Lovaas therapy, have been used in reference to ABA. Discrete trial training, which breaks down a task and teaches it systematically, is a subset of the ABA program that is often used. The term “Lovaas therapy” comes from Dr. O. Ivar Lovaas, whose landmark research led to the application of ABA techniques for teaching children with autism. Dr. Lovaas is not the only professional who uses ABA to address autism, but his name is probably the most recognized.

ABA is a form of behavioral therapy, which has been used to treat many disorders for years with notable success. In 1938, B.F. Skinner called this concept of changing behavior by the response of the teacher “operant conditioning.” If a reinforcer immediately followed a desired behavior, the chances of the behavior being repeated increased. If the reinforcer were taken away, the

desired behavior would eventually decrease. The same applies to negative behavior; it will increase if it is reinforced and decrease if it is ignored.

The Lovaas Institute for Early Intervention, (Los Angeles, Ca): <http://www.lovaas.com/>
Wisconsin Early Autism Project: <http://www.wiautism.com/>
Association for Behavior Analysis Homepage: <http://www.wmich.edu/aba/index.html>

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.

Right from the Start: Behavioral Intervention for Young Children With Autism: A Guide for Parents and Professionals (Topics in Autism)

Written by Sandra L. Harris and Mary Jane Weiss, this is a good beginner book for ABA Verbal Behavior Analysis (VBA) that views language as the key feature of intervention with an autism or developmental delay. Language training is incorporated into all activities and there are a large number of daily trials that include discrete trials and natural environment trials. Discrete trials are teaching activities to a child at a table setting. Natural environment trials are teaching a child in a natural setting such as: at the grocery store, while working in the kitchen, dressing for school, etc.

VBA incorporates the use of reinforcement as a means to use when teaching or using intervention with a child. You will use the reinforcer (candy, toys, whatever your child likes and wants) to begin teaching them language. This will also involve fading the reinforcer once the skill is mastered.

With Verbal Behavior Analysis, it is imperative that you establish instructional control, in other words, the likelihood that your instructions will provide a correct response from your child. If you do not have instructional control, then your child will be noncompliant or unresponsive. In order to ensure that you will have instructional control while you teach, you will need to “pair” or bond with your child. Pairing is the process where you establish yourself as the reinforcer in order to build a positive relationship and rapport with your child. It involves the association of a “neutral stimulus” (you or an instructor) with an existing reinforcer and results in the neutral stimulus being reinforcing. You need to present yourself and your words in association with the delivery of reinforcers (candy, toy) and reinforcing interaction and engagement at the child’s level. Whenever you pair, you need to make sure the reinforcers are controllable, delivered at many times, and are associated with you.

VBA also involves the use of a correction procedure. It is a systematic method of prompting and fading. It can be used in either a discrete trial or natural environment training. Rather than punishing the student for incorrectly responding, you can help them be successful by using the Correction Procedure.

VBA consists of teaching language beginning with mands (commands, demands, what do you want to elicit language), moving on to echoic, receptive, tacting (labeling objects), receptive by

function, feature, and class, and finally intraverbals (both simple and complicated). VBA tries to incorporate all aspects of language, not just the labeling capacity, including intraverbals, labeling, receptive, etc. By teaching all aspects of language, the emergence of intraverbal and expressive language is increased.

VBA utilizes many of the same elements of ABA, but emphasizes a more naturalistic acquisition of language and development of language versus merely labeling items. VBA is a behavior model that tries to teach the child to expand their language to describe things, people, events, etc. It utilizes the elements of ABA with the emphasis on a very language-oriented environment for the child.

B.F. Skinner Foundation <http://www.bfskinner.org/>
Dr. Vincent J. Carbone <http://www.drcarbone.net/>

Floortime/D.I.R./Greenspan Method

Dr. Stanley Greenspan is well known for his approach to treating children with autism and other developmental disorders. His method centers on relationships and interaction while taking into account underlying sensory issues.

In his book “The Child with Special Needs,” Dr. Greenspan specifies six functional milestones of development in this order: self-regulation and interest in the world, intimacy, two-way communication, complex communication, emotional ideas, and emotional thinking. He believes these lay a foundation for more advanced learning since they are based upon emotional interactions usually developed early in life.

Dr. Greenspan encourages the D.I.R. (Developmental, Individual-Difference, Relationship-Based) model. The primary goal of the D.I.R.-based intervention is to enable children to form a sense of themselves as intentional, interactive individuals and develop cognitive language and social capabilities from this basic sense of intentionality.

Part of this method uses “floor time,” which is an intensive, one to one experience during a 20-30 minute period when a parent gets down on the floor with their child and interacts. The focus is on relationships, since Dr. Greenspan believes that the more intellectual functions of the brain do not develop without a constant source of relating. During floor time, the adult follows the child’s interest, even if the interest is a self-stimulating behavior, in order to encourage interaction. For example, if the child spins wheels on a car, the adult may help him or spin a different wheel. The adult may limit the number of toys available so that the child has to interact to get more toys. The goal is not just to follow the lead of the child but also to help the child expand his interactions. According to Dr. Greenspan, the four goals of floor time are two-way communication, logical thought, attention and intimacy, and the expression and use of feelings and ideas.

Floortime/DIR Model <http://www.floortime.org/>

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

TEACCH was started in the early 1970's by Dr. Eric Schopler. This program uses "structured teaching" in a variety of settings. TEACCH does not have a specific technique of therapy. Proponents claim their structured teaching considers the needs of each child and develops a treatment plan using a variety of techniques. The goal is to increase the child's skills and functioning ability, not to recover from autism.

TEACCH uses an evaluation tool called the Psycho Educational Profile (PEP) in order to begin therapy at the appropriate level. TEACCH adapts the learning environment and schedule to be effective and stress free for the child; the child is provided with an environment designed to accommodate the characteristics of children with autism.

Division TEACCH Home page <http://www.unc.edu/depts/teacch>

Picture Exchange Communication System (PECS)

One of the main areas affected by autism is the ability to communicate. The Picture Exchange Communication Systems (PECS), is an augmented communication program that can be a helpful tool to initiate language, as well as to provide a way of communicating for those children that do not talk.

PECS was developed at the Delaware Autistic Program to help children and adults with autism acquire functional communication skills. PECS has received worldwide recognition for focusing on the *initiation* component of communication. It teaches individuals to exchange a picture for something they want - an item or activity. They are immediately rewarded, thus encouraging more successful exchanges. The advantage of PECS is that it is clear, intentional, and initiated by the individual.

<http://www.pecs.com/WhatsPECS.htm>

<http://www.iidc.indiana.edu/irca/communication/WhatisthePEC.html>

Pivotal Response Training (PRT)

Pivotal Response Treatment (PRT) is a naturalistic intervention model producing positive changes in critical behaviors, leading to generalized improvement in communication, social, and behavioral areas. PRT was developed by Drs. Lynn and Robert Koegel from the University of California at Santa Barbara. PRT combines Applied Behavior Analysis with current best practices. It gets better results because it is child-centered, fun, current, and faster. Because PRT works with each child's natural motivations and stresses functional communication over rote learning, this comprehensive model helps children develop skills they can really use.

<http://www.education.ucsb.edu/autism/>

<http://www.dbpeds.org/articles/detail.cfm?TextID=229>

Relationship Development Intervention/RDI

Relationship Development Intervention, created by Steven Gutstein, is modeled upon the means by which typical children become competent in the world of emotional relationships. It is an intervention approach quite different from the typical social skills programs currently available.

RDI uses information from the Relationship Development Assessment to develop clear, specific, developmentally appropriate treatment objectives and customized activities. The RDI curriculum is composed of six levels. Each of the six levels represents a dramatic developmental shift in the central focus of relationships. The six levels are Novice, Apprentice, Challenger, Voyager, Explorer, and Partner.

RDI provides a path for people on the Autism Spectrum to learn friendship, empathy and a love of sharing their world with others. Language comes alive when integrated with real emotion. People with autism and Asperger's learn to not only tolerate but also to enjoy change, transition and going with the flow. The path begins at the edge of each person's current capability and carefully, systematically teaches the skills needed for competence and fulfillment in a complex world.

Connections Center <http://www.connectionscenter.com/>
Relationship Development Center <http://www.autismrelationship.com/aboutRDI.htm>

Social Stories

Social stories, also known as Social Scripts, were developed by Carol Gray in 1991 to help a student with autism understand the rules of a game. It was further developed to address understanding subtle social rules of "typical" culture. They are also used to help explain new situations to a child to take some of the anxiety out of the unexpected. An example would be to write a social story about going to the dentist and reading it with the child prior to the first visit. Social stories can also be used to help teach "theory of mind," or the ability to take the perspective of another person.

The goals of social stories are to clarify social expectations for students with ASD, address issues from the student's perspective, redefine social misinterpretations, and provide a guide for conduct or self-management in specific social situations.

Social stories are specific to the individual and address situations that are problematic for the person. Social stories can be read to or by the person with ASD. To be most beneficial, stories should be introduced far enough in advance of the situation to allow multiple readings, especially before the situation is to occur.

The Gray Center for Social Learning and Understanding: <http://www.thegraycenter.org/>
The New Social Story Book: Illustrated Edition by Carol Gray
My Social Stories Book by Carol Gray and Abbie Leigh White

Power Cards

Power cards, and power card stories, are similar to social stories in that they help those with ASD learn appropriate behaviors in social situations. This strategy was created by Elisa Gagnon. She incorporates a child's special interest or favorite character (or "obsession" as some may call it) into a story that helps the child understand appropriate behaviors. Power card stories are meant to be fun for the child since his or her favorite character explains the importance of using the appropriate behavior and explains how to display this behavior by following the listed steps. The child can relate to their "obsession" while learning social rules.

Older children can also use a "power card," which is a short version of the story. A brief, motivational text related to a special interest or a highly admired person is combined with an illustration and made into a bookmark or business card-sized "power card" that the child can refer to whenever needed.

Power Cards - Using Special Interests to Motivate Children and Younger with Asperger Syndrome and Autism by Elisa Gagnon

Option Institute/Son-Rise Program

The Son-Rise method was developed by Barry and Samahria (Suzi) Kaufman, whose son Raun was diagnosed as autistic and mentally handicapped with an IQ level under thirty. In this program, the parents and therapists follow the lead of the child and join what he is doing, including self-stimulatory behavior, in order to show the child love and acceptance. When they receive any response from the child, they try to expand the activity and encourage more responses. The Son-Rise program believes that the best teacher is the child.

The intention is to enter and understand the child's world, to create a bonding so special and loving that the child will want to know more and learn more from us. The Son-Rise program does not record data on changes in the individual.

Option Institute Web Site <http://www.option.org/>

CHAPTER 4

MEDICAL THERAPIES

1. Nutritional/Vitamin Therapies
 - A. B6 and Magnesium
 - B. DMG/TMG
 - C. Vitamin A
 - D. Vitamin C
 - E. Zinc
 - F. Folic Acid
 - G. Calcium
 - H. Essential Fatty Acids
 - I. Melatonin
 - J. Digestive Enzymes
2. Defeat Autism Now (DAN) Protocol
3. Medications
 - A. SSRIs
 - B. Stimulants
 - C. Anticonvulsants
 - D. Antihypertensives
 - E. Antipsychotics
 - F. New Medications
4. Vaccinations
5. EEG Biofeedback

Nutritional Therapies

Nutritional supplements can be used for a variety of reasons. Many of our children have limited diets or are on special diets, so supplements can provide them with necessary vitamins, minerals, and fatty acids they may lack. Supplements can also address specific imbalances in the body to promote healing.

B6 and Magnesium

Vitamin B6 has a long history as a treatment for autism. Since the 1960's, more than 17 studies have been published supporting its benefits, although many of these studies were completed with fewer than 20 children.

B6, often combined with magnesium, may help improve language, eye contact, brain electrical activity, behaviors, and immune system function. Magnesium is needed with high doses of B6 because when taken alone, B6 may cause a deficiency in magnesium and other B vitamins. In addition, magnesium may decrease some possible side effects, such as irritability, bed-wetting, and sensitivity to sound.

DMG/TMG

DMG (dimethylglycine) is classified as a food substance rather than a vitamin. The potential benefits from DMG range from behavior changes, reduction of seizures, decreased obsessive-compulsive behaviors to improved language.

TMG is similar, but with one more methyl group. This third methyl group may assist with mood stabilization, and acts similar to the nutritional supplement SAME. Additional folic acid may be needed as some children may become more hyperactive when taking DMG.

Dimethylglycine (DMG) <http://www.autism.org/dmg.html>

Dimethylglycine (DMG) <http://www.autism.com/ari/editorials/dmg1.html>

Vitamin A

For many years, high doses of vitamin A have been used successfully to treat the measles virus. However, because vitamin A is found naturally in foods we do not often eat, like liver or cod liver oil, most people are not getting enough of this important vitamin.

Using cod liver oil, Dr. Mary Megson began vitamin A therapy with some of her patients and found some positive results. Some patients spoke more frequently and clearly; others made gains in eye contact. Some other benefits of the natural form of vitamin A include cell growth, repair of epithelial cells found in the gut wall, immune system function, and gene expression and transcription.

Vitamin A <http://www.autism.com/ari/megson.html>

Vitamin A <http://www.newsnet5.com/yourhealth/yourhealth-990812-191714.html>

Vitamin C

The benefits of vitamin C are widely known in the public and it may be of help for children with autism as well. Vitamin C is an antioxidant that helps the brain utilize oxygen. Without this vitamin, confusion and depression can develop. Vitamin C can also help support the immune system, aid in detoxification, and fight viruses and bacteria.

Zinc

Zinc promotes brain development, improved immune function, and overall health and can help reduce other out-of balance minerals.

Folic Acid

Folic acid is a nontoxic B vitamin, which has been reported as helpful in treating autism. It is widely recommended that pregnant women take extra folic acid during their pregnancy to help prevent some birth defects. It is most effective when taken with vitamins B12 and C.

Calcium

Calcium is very important in bone development and maintenance. Most people get their calcium from dairy sources. However, if your child is on a dairy or casein-free diet, it is very important that a calcium supplement be given.

Essential Fatty Acids/EFA

Fatty acids are essential to proper brain development and most of us do not get enough of them. Infant formulas are now being made that include more of these fatty acids, in particular DHA and AA. We usually need more of certain fatty acids: ALA (alpha linoleic acid), GLA (gamma linoleic acid), EPA (eicosapentaenoic acid), DHA (docosahexaenoic acid), and AA (arachidonic acid).

According to Dr. James Braly of Immuno Laboratories, fatty acid supplementation is important because they are sources of energy and they are an important ingredient of the membranes in all body tissues. A deficiency in EFA's may contribute to an increase in the permeability of the membrane of the digestive tract, leading to a leaky gut (refer to the section on the GF/CF diet for more information on "leaky gut" and autism).

Melatonin

Many children with autism have problems sleeping. Melatonin, which is actually a hormone, not a vitamin, can be bought at most health food stores and helps regulate sleep. Our bodies produce melatonin in response to the diminished light at the end of the day until sunlight triggers it to stop. It should be taken within two hours of bedtime so it can work in conjunction with the body's natural melatonin. ***A word of caution: melatonin is a hormone; its long-term effects on puberty are not clearly known.***

Melatonin, The Sleep Master - An emerging role for this over-the-counter supplement in the treatment of autism by Jaak Panksepp, Ph.D.

<http://www.autism.org/melatonin.html>

Digestive enzymes

Digestive enzymes do just what they say they do: help the body digest foods. Some parents report that they have seen positive effects by adding these supplements to their child's diet. A few have even reported that they have been able to take their children off the GF/CF diet by using these supplements (see GF/CF diet section for more information).

Autism & Enzymes: <http://groups.yahoo.com/group/enzymesandautism/>

DAN Protocol

In 1995, one of the leading researchers into the field of autism, Dr. Bernard Rimland, brought together a group of experts to brainstorm the nutritional, genetic, and chemical factors that might be involved in autism and PDD conditions. Their sessions, refined over the years, brought about what has been popularly called the DAN Protocol.

DAN (Defeat Autism Now) is a leading research group centered at the Autism Research Institute. Two members of the original group, Dr. Sidney Baker and Dr. Jon Pangborn, were selected to write the actual protocol, using the information that had been developed. The full group then reviewed the protocol and suggested changes before it was finally published.

One of the key tenants of the DAN Protocol is returning to a healthy diet. To quote Dr. Baker, "The American diet is not fit for human consumption." Elimination of refined sugars, junk foods, artificial additives, and the other things that are common in the diet of most children in the United States does nothing to promote good health. Instead, it loads their system with unnecessary substances, some of which have been shown to be harmful.

A Gluten Free/Casein Free diet is also an important step toward implementing the DAN Protocol. This diet has been shown to have beneficial affects in children with autism and is a key component of the Protocol. These substances often are found in laboratory blood tests that are done on children with autism, as well as in urinary peptide tests. The DAN Protocol suggests specific lab testing that should be done, and provides a list of recommended laboratories to do these tests. These labs have been found to provide the best quality information about the test results and help the treating physician determine the priorities that must be addressed in each individual case. It is important to note that each child should be looked at on an individual basis, and that a "cookie cutter" approach is harmful.

Dietary supplementation is also a key ingredient of this treatment method. Many children with autism/PDD have been found to have deficiencies in various vitamins and minerals. The combination of all of the above factors have been shown to have sometimes dramatic effects on children with autism, but the people at DAN are the first to admit that it is not a "cure all" and that all improvements may not be solely the result of the protocols. Autism is a complex illness, and there are multiple factors that may influence its course.

As with any treatment, the Dan Protocol should be undertaken with medical supervision. The Protocol involves a combination of changes to the diet and implementation of vitamin

supplement therapy as a means of producing changes in autistic behaviors. These changes include the following steps, according to published information.

1. Eliminate dairy products.
2. Eliminate cereal grain products.
3. Eliminate junk foods and other food products that contain refined sugars.
4. Supplement the diet with the vitamin and mineral therapy.

<http://www.autism.com/ari/danlist.html>

Medication Options

Medications will not cure autism. Doctors may prescribe medications to treat the symptoms and behaviors common to the disorder.

Antidepressants/SSRIs

Selective Serotonin Reuptake Inhibitors (SSRIs) may be helpful in reducing the depression, obsessive and compulsive activity, rigidity, anxiety, and irritability that are often a part of autism. Response to the medications varies, but in general, antidepressant medications reduces the frequency and severity of self-stimulation behavior and tantrums. There is also some indication that antidepressant drugs increase an autistic child's ability to maintain eye contact. Common SSRIs are Zoloft, Prozac, Paxil, Celexa, and Luvox. Anafranil, which is a tricyclic antidepressant, has also been shown to be helpful in these areas. These medications may also cause agitation in addition to their typical side effects of stomach upset, headaches, and nausea or sleep problems, so be sure the doctor starts your child on them slowly.

Stimulants

Since many children with autism have attention and/or hyperactivity problems, stimulants may be a medication option to treat these problems. The medication can improve focus and attention, and control impulsive self-stimulation and obsessive-compulsive disorder. The way in which these medications work is that they appear to normalize biochemistry in the parts of the brain involved in ADHD. Specifically, they enhance nerve-to-nerve communication by making more neurotransmitters available to boost the "signal" between neurons. The neurotransmitters that are released more effectively when a child takes stimulants are dopamine, and to a lesser extent, norepinephrine.

The most widely known stimulant for ADHD and ADHD-type symptoms is Ritalin. Other medications in this class that are commonly used include Concerta, Dexedrine and Adderall. Some of the more common side effects of the stimulants are appetite suppression and sleep disturbances. Sadness or irritability as well as a worsening of the ADHD symptoms during wear off (called a rebound effect) can also occur.

Anticonvulsants

These medications are most commonly used to treat seizures that occur in some children with autism. Anticonvulsants may also act as a mood stabilizer; these medications help control volatile emotional and behavioral swings, over-activity and aggressiveness by reducing abnormal

firing of nerve impulses in the limbic regions (the emotional center) of the brain. Tegretol, Depakote, Neurontin and Topamax are some of the medications in this class.

Antihypertensives

While these medications are used to treat high blood pressure in adults, they can also be helpful in treating certain behaviors associated with autism. They are increasingly reported to be useful in treating aggression, self-injurious behaviors, tics, ADHD-type symptoms and sleep problems. These medications work by dampening one of the major chemical transmitter systems in the brain, the adrenergic nervous system. A common side effect of these medications is sedation, which may be helpful if the child also struggles with sleep problems. Common Antihypertensives include Clonidine, Tenex and Propranolol.

Antipsychotics

The older antipsychotics, also known as major tranquilizers or neuroleptics, are mainly used to treat severely disruptive, aggressive and psychotic behavior. They may also cause very significant side effects.

The newer medications in this class, called atypical antipsychotics, are increasingly being used as first-line drugs of choice since their side effects are much less common. Like the older antipsychotics, they affect the dopamine system but appear to influence different subsets of dopamine and serotonin receptors. These newer drugs are being used for marked mood swings, tics and aggression. Risperdal, Clozaril, Zyprexa and Seroquel are some of these newer atypical antipsychotics.

New medications

One such medication new to the treatment of ADHD and ADHD-type symptoms is the non-stimulant medication, Strattera. It works by affecting the levels of norepinephrine in the brain. Side effects may include sedation and a lack of appetite.

Drug companies are always creating more medications, so there will always be something new that may help treat some of the symptoms of autism. As with any medication, proceed with caution and the guidance of a knowledgeable professional.

Medication and Autism PDD from eMedicine by James Robert Brasic, MD

<http://www.emedicine.com/PED/topic180.htm>

Medication - Pediatric Psychopharmacology Autism - general information about drugs used to treat autism. <http://www.vh.org/Providers/Conferences/CPS/41.html>

Vaccinations

For many decades, vaccinations have been an accepted part of childhood. Their benefits have been long documented, protecting many from serious diseases and death. The other side of the issue is the potential side effects. Aware of the damages caused by vaccines, Congress passed the National Childhood Vaccine Injury Act of 1986 and directed the U.S. Department of Health and Human Services to administer the Vaccine Injury Compensation Program, which financially

compensates vaccine-injured people after cases are heard in the U.S. Court of Claims in Washington D.C.

Each vaccine may cause a variety of reactions, but two immunizations have drawn the most attention for children with autism: MMR (measles, mumps, rubella) and DaPT (diphtheria, acellular pertussis, tetanus).

Controversy over the MMR shot escalated in 1998 when Dr. Andrew Wakefield and associates published research in which autistic symptoms were linked with the MMR vaccine. Dr. Wakefield identified associated gastrointestinal disease and developmental regression in a group of previously normal children. In most cases, the onset of symptoms was after the measles, mumps, and rubella immunization was received.

A reaction to the DaPT immunization may be encephalitis (brain inflammation). This reaction is thought to be related to the pertussis portion of the vaccine, in particular in the older version. The version that is now being administered is its newer, acellular form that is believed to be better tolerated.

The subject of vaccinations is one of concern and controversy. Discuss your concerns with your child's doctor, inform yourself as much as possible, and be aware of the risks and benefits of your options.

Allied Vaccine Group: <http://www.vaccine.org/>

Current Vaccine Information: <http://www.cdc.gov/nip/vacsafe/concerns/thimerosal/faqs-thimerosal.htm>

Immunization Safety Review Committee:

<http://www.iom.edu/IOM/IOMHome.nsf/Pages/immunization+safety+review>

Vaccination Position Statement of the Autism Society of Minnesota

Founded in 1971, The Autism Society of Minnesota is an organization of 1400 members throughout Minnesota, committed to enhancing the lives of individuals with autism spectrum disorders and their families. AuSM acknowledges community concern regarding a link between childhood vaccinations and autism, specifically the view that childhood vaccines containing the preservative thimerosal cause autism in some children.

Autism spectrum disorders are very complex. Research suggests that ASD is a disorder of the developing brain with multiple causes. There are two sides to the controversy regarding the link between autism and vaccination.

- Research supports the view that toxic substances like mercury can damage the brain.
- Research to date does not clearly support the link between vaccines and autism.
- Research in public health supports the view that the decline in infant mortality is because of vaccinations.

The Autism Society of Minnesota believes members should consider both sides of this issue. AuSM strongly encourages members to consult with a child's medical doctor and consider

requesting vaccines that are free of thimerosal. As a service to its members, AuSM has books and periodicals on this topic in the library.

Board of Directors

January 2006

EEG Biofeedback

EEG Biofeedback is a learning strategy that enables a person to alter their brain waves. When information about a person's own brain wave characteristics is made available to him, he can learn to change it. Consider this exercise for the brain.

EEG Biofeedback is used for many conditions and disabilities in which the brain is not working as well as it might. These include Attention Deficit Hyperactivity Disorder (ADHD), conduct problems, specific learning disabilities, sleep problems, teeth grinding, chronic pain such as headaches or stomach pain, or pediatric migraines. Training is also helpful with the control of mood disorders such as anxiety and depression, as well as for more severe conditions such as medically uncontrolled seizures, minor traumatic brain injury, or cerebral palsy.

Biofeedback <http://www.eegspectrum.com/Applications/Autism/EEGandAutism>

Biofeedback <http://www.biomental.com/>

CHAPTER 5

ADDITIONAL THERAPIES

1. Dietary Interventions
 - A. GF/CF diet
 - B. Feingold diet
 - C. Ketogenic diet
 - D. Anti-yeast diet
 - E. Rotation diet
2. Occupational Therapy
3. Sensory Integration
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7. Vision Therapies
 - A. a. Irlen Lenses
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8. Animal Therapies
 - A. Hippotherapy
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Dietary Interventions

Some children with autism have allergies, seizures, trouble digesting certain foods, and problems with yeast overgrowth in their systems. By removing the offending items from the diet, many of these children may begin to feel and act well as their bodies begin to heal. The following diets may help a child with some of these problems.

GF/CF diet

In a healthy body, the digestive tract takes complex foods and breaks them down into substances the body can absorb and utilize. As the food travels through the gastrointestinal system, the enzymes in the digestive juices convert the food into a simpler form. Food starts out similar to a long chain of paper clips. Through digestion, they are unhooked and left as single paper clips, which is the form needed by the intestines to absorb and deliver nutrients to the body. During digestion, protein, which is made up of building blocks called amino acids, is broken down into the single amino acids.

Many children with autism have trouble digesting certain proteins called gluten, which is found in wheat, barley, oats, and rye, and casein, which is found in dairy and many baked products. Gluten and casein contain certain combinations of amino acids that are very difficult for the body's digestive system to break down into single amino acids. Structures remain in the form of a chain of several amino acids called peptides. These peptides may then seep out of the intestine and into the bloodstream. The term "leaky gut" is used to describe this condition where the intestinal wall cannot keep the contents of the intestine separate from the bloodstream. In a healthy gut, a few peptides may escape, but they are recognized as foreign and the body's immune system deals with them. However, in a leaky gut many peptides enter the bloodstream and can cause harm.

The peptides left over after digestion of casein and gluten react at certain sites in the brain called opined receptors, sites where opiate drugs like morphine and heroin act. Therefore, if these peptides do not break down into amino acids and escape the intestine, when they reach the brain they act like these drugs.

In addition, when there is a leaky gut, proteins from other foods may be absorbed through the intestinal wall. If this happens, the body's immune system may kick in. An allergic reaction may occur within a minute to hours after the offense. Symptoms may include vomiting, diarrhea, skin rashes, headaches, or a runny nose. Food sensitivities may create a variety of other symptoms, from stomachaches, appearing "spaced out," excessive whining and crying, sleep problems, hyperactivity, aggression, sound sensitivity, fatigue, and intestinal problems.

Understanding and Implementing a Gluten & Casein Free Diet by Lisa S. Lewis.

<http://www.princeton.edu/~serge/ll/gfpak.htm>

Feingold's diet

Dr. Ben Feingold's book "Why Your Child is Hyperactive" suggests that hyperactivity is caused by dyes, artificial colorings, preservatives, and other additives in food. He recommends removing salicylates from the diet since they are peptidase inhibitors. Salicylates are found

naturally in some fruits and vegetables, including tomatoes, cucumbers, apples, apricots, berries, cherries, grapes, oranges, plums, tangerines and almonds.

The Feingold Association advocates a two-stage approach. In stage one, remove dyes, additives, preservatives and all items with salicylates. After four to six weeks reintroduce, one at a time, each food containing salicylates to determine if there is a reaction. If there is no reaction, bring that food back into your child's diet. The dyes, additives, and preservatives should not be brought back into the diet at all.

Ketogenic diet

The Ketogenic diet is designed for those who suffer from seizures. This diet began many years ago when doctors at Johns Hopkins Hospital gave patients high fat, low-protein and low-carbohydrate food in order to control the seizures. Fat is the focus of this diet because when the body burns fat, it creates ketone bodies, which are suspected to inhibit seizures. In 1996 Dr. John Freeman, Millicent Kelly and Jennifer Freeman published a book titled "The Epilepsy Diet Treatment: An Introduction to the Ketogenic Diet" that brought this diet into more public exposure.

This diet should be followed with the close supervision of a neurologist. The diet needs to be tailored for each child and carefully monitored.

Anti-yeast diet

Dr. Bruce Semon, a child psychiatrist, nutritionist and father of a son with autism, wrote a book entitled "Feast without Yeast." Through treating his son and many others, he has come to believe that Candida yeast overgrowth can be effectively treated. Along with antifungal medication, Dr. Semon recommends a four-stage diet. Dr. Semon's book gives a detailed description and understanding of each stage, along with more than two hundred recipes.

Rotation diet

As the name suggests, foods that are not a problem for a child are rotated on a specific cycle, commonly every fourth day. Rotating the staples in a diet may help prevent the body from reacting to these products and developing antibodies to them.

Dietary Control of Autism - Diets, Allergies, Foods, and Supplements, Food Additive Database

Occupational Therapy

Occupational therapy is a health service that is concerned with an individual's ability to participate in desired daily life tasks, or "occupations," which give one's life meaning. If a person's ability to perform these tasks, which include caring for one's self and others, working, going to school, playing, and living independently, is impacted by an illness, disease, and/or disability, occupational therapy can be important.

Following an evaluation of the child's functioning in various age-appropriate performance areas, or life tasks, occupational therapy intervention is targeted towards those areas that are interfering with the child's ability to function. Some tasks that may be targeted include writing, improving

hand-eye coordination, buttoning a shirt, tying one's shoes, getting dressed, feeding oneself, as well as other identified tasks. Intervention with children is often in the form of play activities specifically geared to facilitate and support the child's self-help, play and learning skills.

Occupational therapy intervention with persons with autism often includes a sensory-integrative approach, which focuses on providing controlled sensory input during specific activities (see section on sensory integration). Other therapeutic approaches are also used as part of the intervention with the ultimate goal of assisting the individual to participate in important daily life tasks and activities as independently as possible.

Occupational Therapy and Autistic Children: <http://www.autism.ca/occther.htm>
The American Occupational Therapy Association: <http://www.aota.org/index.asp>

Sensory Integration

*Also see Chapter 2: "Diagnosing Sensory Integration Disorder"

Sensory integration is the process by which the brain integrates various sensory messages, including sight, hearing, smell, taste, touch, and a sense of movement and position in order to form coherent information on which the person can act. The process of normal sensory integration may be absent or malfunctioning in some individuals, especially in persons with autism. This process is important in the successful accomplishment of life tasks.

What are some signs of Sensory Integration Dysfunction?

Children with sensory seeking patterns may be excessively hyperactive, (constantly jumping, for example,) unaware of touch or pain, engage in unsafe behaviors, such as climbing too high, or enjoy sounds that are too loud. Those with sensory avoiding behaviors may respond to being touched with aggression or withdrawal, be overly cautious or afraid to try new things, uncomfortable in loud or busy environments, or overly sensitive to smells. With children who have dyspraxia, some behaviors that can be observed are difficulty with fine- and gross-motor skills, clumsy and awkward movements, and trouble with balance.

How is Sensory Integration Dysfunction diagnosed?

Sensory Dysfunction is usually diagnosed by an occupational therapist or by a physical therapist. The primary standardized assessment tool for children ages 4 through 8 who may have learning, behavioral or developmental delays is the Sensory Integration and Praxis Test, which can be administered by a therapist who is SIPT certified. Therapists also use clinical observation and parent-teacher interviews to assess sensory integration dysfunction.

Sensory integration therapy is child-centered. The therapist empowers the child to organize his or her senses. Some positive effects include a greater regulation of the individual's activity level, greater tolerance of sounds, smells, and touch, an increased willingness to try new activities, increased social participation, and increased independence in self-care activities, increased attention, and increased coordination during activities. Professionals trained in the area of sensory integration include physicians, physical, speech and occupational therapists. However, most professionals trained in this area are occupational therapists. Using the sensory

integration technique, occupational therapists promote functional independence through the purposeful activity of play.

<http://www.sinetwork.org/>

<http://www.sensorynation.com/what.html>

<http://mywebpages.comcast.net/momtofive/SIDWEBPAGE2.htm>

Kranowitz, C. S. (1998). *The Out of Sync Child*. Perigee Book: New York.

Cohn, E. S. (2001). Parent perspectives of occupational therapy using a sensory integration approach. *American Journal of Occupational Therapy*, 55, 285-294.

Linderman, T. M., & Stewart, K. B. (1999). Sensory integrative-based occupational therapy and functional outcomes in young children with pervasive developmental disorders: A single subject study. *American Journal of Occupational Therapy*, 53, 207-213.

VandenBerg, N. L. (2001). The use of a weighted vest to increase on-task behavior in children with attention difficulties. *American Journal of Occupational Therapy*, 55, 621-628.

Speech Therapy

Most children who have been diagnosed with autism or other disorders on the autism spectrum have speech and/or language difficulties as well as poor social skills. One of the common identifying factors for the diagnosis of autism is the lack of normal development of speech followed by the loss of speech skills, or the lack of or delay in development of speech. The speech-language pathologist (SLP) is a skilled professional that can address the following areas of concern:

1. Receptive language: the ability to comprehend what is seen, heard, touched, tasted, smelled, etc. This includes identifying objects, actions, adjectives, prepositions, people, etc.
2. Expressive Language: the ability to label what is seen, heard, touched, tasted, smelled, etc. This also includes sentence structure, verb tenses, regular/irregular plurals, length of utterance, etc.
3. Articulation: includes developing sound production, correcting errors in production, increasing/decreasing rate, increasing/decreasing volume, and improving intonation.
4. Oral-Motor Skills: includes improving range, rate, complexity, strength, and coordination of motor movements. May also include massage of cheeks, lips, and gums, brushing teeth, and decreasing teeth grinding.
5. Feeding and Swallowing: includes ability to close lips, manipulate food with tongue, age-appropriate chewing pattern, and safe swallowing. Other areas that can be addressed include oral-desensitization to different tastes, textures, smells, temperatures, and consistencies of foods.
6. Social skills/Play skills: includes appropriate social language, ability to read facial expressions, ability to understand social cues/body language, and age-appropriate play skills such as sharing, turn taking, playing independently or with others.
7. Cognition: includes problems solving, reading comprehension, academic skills, and

answering various “wh” questions.

8. Augmentative Communication: includes assessing ability to use high-tech and low-tech devices, and teaching the use of the system selected. The most common communication options are:

- a. Sign-language: use of signs alone or paired with speech
- b. Picture Exchange Communication System (PECS): involves using picture symbols to communicate wants/needs, label, etc. The child goes through a learning process that teaches initiation of communication, and then expands to the use of sentences. Many children who use PECS develop some verbal skills and may graduate to speech as the primary form of communication.
- c. Facilitation: involves holding the child’s hand or having the child hold the facilitator’s hand to help the child write messages. This method has been proven to work in a few case studies; however, its validity has not been scientifically tested on a larger scale.
- d. Communication board: can be made with pictures or objects that the child points to or removes from the board to communicate wants/needs.
- e. Communication devices: there is a wide range of devices available that are capable of putting together longer messages and operating electronic devices in the environment such as the TV, lights, etc. The SLP can assess the child’s abilities to use high-tech devices and make recommendations about the type of device best suited for the child’s individual needs.
- f. Total communication: involves using all methods of communication a child possesses. The child is encouraged to use the words/phrases that he/she is capable of producing and supplementing communication with signs, symbols, etc. for what he/she cannot communicate verbally.

The Speech Language Pathologist is a valuable member of the treatment team for children with autism. Therapy done with the SLP and Occupational Therapist working together has proven to be highly beneficial since the calming/sensory input provided by the OT usually increases the child’s ability to focus on a task. In addition, the Occupational Therapist is often the person most qualified to identify and treat various feeding and swallowing issues that may also be impeding speech.

Physical Therapy

Physical therapy helps to restore function, improve mobility, relieve pain, and prevent or limit permanent physical disabilities of patients suffering from injuries, disease, or a disability. Physical therapy targets gross motor skills, as opposed to occupational therapy that usually targets more fine motor skills.

An evaluation may consist of testing and measuring a person’s strength, range of motion, balance and coordination, posture, muscle performance, respiration and motor function. Treatment often includes specific exercises for flexibility, strength, endurance, balance and coordination. Treatment goals for children may include working on balance, climbing/descending stairs independently, catching a ball or learning to jump.

Physical therapy may also work closely with occupational therapy, sensory integration, and/or speech therapy to help maximize the effects of each therapy.

Listening/Auditory Therapies

Tomatis Method

Created by Dr. Alfred Tomatis in the 1960's, this method consists of treating patients with "filtered" sounds of music, Gregorian chants, and voices, through an electronic device, in hopes of retraining the ear. The Tomatis Method is somewhat lengthy, since it sometimes lasts 100-150 hours or more, extending over weeks, months, or years.

Auditory Integration Therapy (AIT)

AIT was developed by Dr. Guy Berard. He trained under Dr. Tomatis and then created a simpler, more cost-effective treatment. AIT was designed to normalize hearing and the many ways the brain processes auditory information. Distortions in hearing can sometimes be a significant contributing factor in the behaviors and responses of children on the Autism Spectrum. In addition, many children with autism are also hypersensitive to certain frequencies of sound.

Patients listen to filtered music for a total of ten hours over a ten-day period, known as an "ear retraining program," which retrains the auditory system. AIT consists of twenty, half-hour listening sessions, usually two sessions a day over ten days. Before treatment begins, the therapist tests and charts the child's hearing on an audiogram to determine if any frequencies are uncomfortable or painful for the child. If so, those frequencies are filtered out through the AIT device. The AIT device not only filters out disturbing frequencies, it randomly modulates the music, dampening either high or low frequencies. During the listening sessions, the child is free to move about as he or she chooses. This is advantageous, as many practitioners combine the AIT sessions with intensive sensory integration therapy sessions.

There are many benefits to AIT, and families report seeing increased focus, attention, and improved social skills and general social awareness. In addition, families notice less abrupt, startling reactions to loud and unfamiliar sounds. These results are usually permanent.

<http://www.drguyberard.com/>The website for Dr. Guy Berard, additional information, and links to trained/approved practitioners in the USA are available, as well as comments regarding recent research regarding AIT.

<http://www.auditoryintegration.com/> Additional information, research and links

EASe, Sonas, and Samonas

Several compact discs are now available to allow listening therapy to take place in the home or school with the use of high quality headphones and an ordinary CD player. Programs include EASe (Electronic Auditory Stimulation effect), Sonas, and Samonas, which can be purchased with the headphones, through clinicians trained in listening therapy. It is strongly recommended to have a therapist guide your program since your child may need a combination of CDs based on his or her issues. Eventual outcomes are dependent upon the child's' ability to follow through with the program as prescribed.

Interactive Metronome

Interactive Metronome is an advanced brain-based treatment program designed to promote and enhance brain performance for persons with autism, ADD/ADHD, and for those who wish to increase attention and focus. This is accomplished by using innovative neurosensory and neuromotor exercises developed to improve the brain's inherent ability to repair or remodel itself through a process called neuroplasticity. The IM program provides a structured, goal-oriented process that challenges the patient to synchronize a range of hand and foot exercises to a precise computer-generated reference tone heard through headphones. The patient attempts to match the rhythmic beat with repetitive motor actions.

A patented audio or audio and visual guidance system provides immediate feedback measured in milliseconds, and a score is provided. Over the course of the treatment, patients learn to focus and attend for longer periods, increase physical endurance and stamina, filter out internal and external distractions, improve ability to monitor mental and physical actions as they are occurring, and progressively improve performance. This program requires a minimum age, as well as an ability to follow directions and comply with the program.

<http://www.interactivemetronome.com/im/index.asp>

Fast ForWord

The Fast ForWord Family of Programs develops the critical thinking, listening, and reading skills that are necessary for success in the classroom, the workplace and in everyday life. Based on over twenty-five years of brain research, Scientific Learning's interactive, adaptive programs use patented technology to target the language and reading skills widely recognized as the keys to all learning.

The programs are CD-ROM and Internet-based. Children who have trouble understanding and using oral language or who have reading difficulties are most likely to benefit from these programs. Using game-like exercises, Fast ForWord uses four training principles, frequency, intensity, adaptivity, and motivation, to help children improve their language skills. These principles are applied in a cross-training format that allows children to work on multiple complementary language skills. In all, the exercises provide training on over forty different language structures to help the child gain higher-level language skills. Fast ForWord exercises use enhanced sounds and provide more time between certain sounds to help children improve oral language comprehension. As the child progresses in the program, the sounds adapt to the child's skill level by becoming increasingly like normal speech.

Fast Forward is an intense program. The seven interactive exercises in Fast ForWord are rotated so that five are played each day. Each game requires twenty minutes, for a total of one hundred minutes a day, five days per week. Most children complete the entire program in four to eight weeks, although some may take longer.

<http://www.scilearn.com/>

Earobics

The Earobics Auditory Development and Phonics Program is designed for children with a developmental age of four to seven years, and Earobics Step 2 is designed for children who are developmentally between seven and ten years of age.

The program consists of six listening games with up to 114 levels, which increase in difficulty as the child improves. This program includes skill development in auditory memory, phonemic synthesis, sound segmentation, auditory and phonemic identification, sound-symbol correspondence, rhyming and phonological awareness. Like Fast ForWord, this CD-ROM program uses computer-modified speech to help the child distinguish sounds that may be difficult at first. It is less intense, and less expensive, than the Fast ForWord programs.

<http://www.earobics.com/>

Vision Therapies

Some children may have vision problems that cause them to have a different perception of the world. Currently there are three main approaches to treating vision disorders: Irlen lenses, ambient or prism lenses, and visual training.

Irlen lenses

These lenses are named after Helen Irlen, who discovered a visual perception problem related to light sensitivity. This perception disorder is known as Scotopic Sensitivity Syndrome (SSS), or Irlen Syndrome. Some symptoms include light sensitivity, poor depth perception, attention problems, contrast and color sensitivity, problems seeing groups of objects, and distortions.

The theory behind this intervention is that certain light frequencies can be disturbing or overstimulating. Specially tinted lenses for glasses, which come in a thousand different colors, filter out some of the frequencies to protect the individual from unpleasant input. If the individual cannot tolerate the overabundance of visual input, filtering out some frequencies may allow the brain to process the remaining visual information more easily.

Ambient or prism lenses

Besides Irlen lenses, some people have found that ambient, or prism, lenses can help with visual distortions. Melvin Kaplan, O.D., from the Center for Visual Management, states that abnormalities of ambient vision are often found in children with autism. Ambient vision is involved in spatial organization, related to body posture, locomotion and the perception of self-motion. These types of lenses can enhance depth perception as well as assist in centering the vision.

Vision exercises

Dr. Kaplan also suggests specific vision exercises. Vision exercises may help retrain the visual system, helping the brain to understand and function with the altered visual input.

Irlen Syndrome/Scotopic Sensitivity Syndrome: <http://www.planet.eon.net/~judypool/irlen.htm>
Vision Therapy: http://www.latitudes.org/amb_lens

Animal Therapies

Hippotherapy and Therapeutic Horseback Riding

Hippotherapy, or the practice of using a horse as a therapy tool, was first applied by the Greeks to help rehabilitate war injuries. In recent history, Hippotherapy came to the attention of the world in 1952 at the Helsinki Olympics when Liz Hartel told the world that horseback riding had helped her recover from polio after winning the silver medal. In the 1960's, horses were incorporated into physical therapy programs in Germany, Switzerland and Austria. In the 1970's, a team of American speech, physical and occupational therapists went to Germany to learn about Hippotherapy. This was the beginning of the American Hippotherapy Association. Hippotherapy can help people with physical and emotional disabilities.

For those with physical handicaps, the motion of the horse simulates walking and increases balance and coordination. For those with emotional problems, grooming the horse brings an opportunity for self-evaluation. For children with autism, connecting with a horse is a way to help keep them involved in the world. Therapy can also take place while riding on a trail; therapists can set up reading and phonics exercises along the way, as well as work on sequencing needs and fine-motor skills.

North American Riding for the Handicapped Association, Inc. (NARHA) <http://www.narha.org/Hippotherapy> <http://members.aol.com/vincicarets/hippotherapy.htm>
American Hippotherapy Association <http://www.americanequestrian.com/hippotherapy>

Pet Assisted Therapy/Service Dogs

Service animals

Service animals are legally defined (Americans With Disabilities Act, 1990) and are trained to meet the disability-related needs of their handlers who have disabilities. Federal laws protect the rights of individuals with disabilities to be accompanied by their service animals in public places. Service animals are not considered pets.

Therapy animals

Therapy animals are not legally defined by federal law, though some states have laws defining them. They are usually the personal pets of their handlers, and work with their handlers to provide services to others. They provide people contact with animals, but are not limited to working with people who have disabilities. Federal laws have no provisions for people to be accompanied by therapy animals in places of public accommodation that have "no pets" policies. Therapy animals usually *are not service animals*.

Companion animal

Companion animal is not legally defined, but is accepted as another term for pet.

Social/therapy animals

Social or therapy animals likewise have no legal definition. They often are animals that did not complete service animal training due to health, disposition, trainability, or other factors, and are

made available as pets for people who have disabilities. These animals might or might not meet the definition of service animals.

National Service Dogs has been training Labrador and Golden Retrievers to assist the parents of children with autism since 1995. A National Service Dog can accompany a family into malls, restaurants, hotels, and schools to assist with a child who becomes overstimulated, overwhelmed or unresponsive in public places. The child and dog are connected via a leash. The dog responds to commands by parents, including using all of its strength to slow down or stop a child. The children are taught that they are responsible for the care of their new dog and some children develop a strong connection with the dog. Anecdotal evidence suggests some children may use the dogs as a source of comfort when they are upset while others may be less aggressive after the introduction of the dog.

<http://www.nsd.on.ca/autism.htm>

<http://www.northstardogs.com/autism.shtml>

CHAPTER 6

ALTERNATIVE THERAPIES

1. Anti-yeast Therapy
2. IVIG Therapy
3. Transfer Therapy

Anti-Yeast Therapy

In a healthy gut, bacteria, yeast, and other fungi exist together and aid in digestion. When a person takes an antibiotic to fight infection, the balance can be disrupted. With the good bacteria gone, yeast becomes more abundant, resulting in a yeast infection and releasing more toxins into the body that may damage the nervous and immune systems. Common types of yeast infections include thrush, vaginal and intestinal.

Dr. William Crook, author of *The Yeast Connection*, believes that yeast overgrowth produces a vicious cycle in children. First antibiotics are taken for ear and other infections, which in turn weakens the immune system. A weakened immune system sets up the child for more infections and the cycle continues. This cycle of antibiotics allows for extensive yeast overgrowth. Dr. William Shaw, author of *Biological Treatments for Autism and PDD*, describes the yeast problem in detail. He points out that the yeast in the gut produces enzymes that actually break down the lining of the intestinal wall, which can lead to a leaky gut. To test for a yeast overgrowth, contact your doctor or one of the laboratories that does this testing. Usually a urine and/or stool sample is needed for this testing.

IVIG Therapy

IVIG therapy is a blood product that is extensively tested for several viruses and purified by physical and chemical processing of the blood. It is used as a replacement therapy for immune deficiency syndromes and as an immuno-modulatory therapy for autoimmune and immuno-inflammatory disorders. This therapy may have an anti-inflammatory effect on the brain, or it may suppress the manufacture of antibodies that attack the CNS myelin.

Transfer Factor

One way to help enhance the immune system is through antigen-specific transfer factors. This therapy collects specific transfer factors from appropriate donors and gives them to the patient. For example, if a person needs to fight measles, then anti-measles transfer factors are collected and given to that person so his body will have help in “learning” to fight the measles virus. To determine which viruses are causing problems, blood tests by a qualified professional is needed. Discuss this with your doctor or contact Kirkman Laboratories to find a qualified professional.

CHAPTER 7
IEPs, IFSPs, STATE & FEDERAL LAW

1. IEPs/IFSPs/State & Federal Law
 - A. Federal & State Special Education Law
 - B. IFSP & IEP
 - C. Special Education & the IEP in Minnesot
 - D. The IEP: What do we do if it is not working?

Federal Law

The Individuals with Disabilities Education Act (IDEA) requires public schools to provide a free and appropriate public education to school aged children ages 3-21 regardless of disability. Infants and toddlers with disabilities (birth-2) and their families receive early intervention services under IDEA Part C. Children and youth (ages 3-21) receive special education and related services under IDEA Part B. IDEA governs how states and public agencies provide early intervention, special education, and related services to more than 6.5 million eligible infants, toddlers, children, and youth with disabilities. Federal law provides funds to states that maintain certain standards in their education of children with disabilities.

<http://idea.ed.gov/>

Minnesota Law

Minnesota Department of Education
Chapter 3525
Rules for Children with a Disability:

<http://www.revisor.leg.state.mn.us/arule/3525/>

IFSP and IEP

IFSP

The Individual Family Service Plan (IFSP) is a written plan providing early intervention services to a child with a disability, ages birth through three years. When an infant or toddler needs special education and related services, an IFSP is developed for the child and the family. According to IDEA, the IFSP shall be in writing and contain statements of:

1. The child's present levels of physical development, cognitive development, communication development, social or emotional development, and adaptive development
2. The family's resources, priorities, and concerns relating to enhancing the development of the child with a disability
3. The major outcomes to be achieved for the child and the family; the criteria, procedures, and timelines used to determine progress; and whether modifications or revisions of the outcomes or services are necessary
4. Specific early intervention services necessary to meet the unique needs of the child and the family, including the frequency, intensity, and the method of delivery
5. The natural environments in which services will be provided, including justification of the extent, if any, to which the services will not be provided in a natural environment
6. The projected dates for initiation of services and their anticipated duration
7. The name of the service provider who will be responsible for implementing the plan and coordinating with other agencies and persons
8. Steps to support the child's transition to preschool or other appropriate services

9. The location of the services
10. Whether modifications or revisions of the outcomes or services are necessary

IEP

An Individual Education Plan (IEP) is the written statement for a child with verified disabilities that is developed and implemented for children 3 - 21 years of age, which specifies the special education and related services necessary to assure that child a free, appropriate public education. Parents shall receive a copy of the IEP.

The IEP shall include:

1. A statement of the child's present level(s) of development or educational performance
2. A statement of the annual goals describing anticipated behavior to be achieved based on the child's present level of development or educational performance
3. A statement of the measurable short-term instructional objectives
4. A statement of the specific special education and related services to be provided to the child
5. A description of the extent to which the child will participate in the regular education program
6. The projected date(s) for the initiation of services and anticipated duration of service(s)
7. Appropriate objective criteria, evaluation procedures, and schedules for determining, on at least an annual basis, the achievement of the instructional short-term objectives
8. A list of individuals responsible for implementing the IEP
9. The amount of time per day, days per week, and the number of months of service to be delivered to children below age five

Special Education and the IEP in Minnesota (A Guide for Parents)

1. What Are The Laws?

- A. Federal Law: the Individuals with Disabilities Education Act (IDEA) says that all children, no matter what their disability, have the right to a Free, Appropriate, Public Education (FAPE).
- B. Minnesota Rule #3525, based on Minnesota law and in compliance with the Federal Law, explains how Special Education services are provided for children in Minnesota.

2. Who Gets Special Education Services?

- A. There are lists of disabilities in federal and state law. Children who have one or more of these disabilities are eligible to receive special education.
- B. Minnesota's categorical disability areas are:
 - Autism Spectrum Disorders
 - Blind–Visually Impaired
 - Deaf-Blind
 - Deaf and Hard of Hearing
 - Developmental Cognitive Disabilities
 - Developmental Delay
 - Emotional or Behavioral Disorders
 - Other Health Disabilities *
 - Specific Learning Disabilities
 - Speech or Language Impairments
 - Traumatic Brain Injury

*NOTE: By Minnesota definition, “Other Health Disability” refers to a wide range of chronic or acute health conditions that may be either congenital or acquired. A student with such a condition may be considered for special education under the Other Health Disabilities (OHD) category.

For examples, please see:

http://education.state.mn.us/mde/Learning_Support/Special_Education/Categorical_Disability_Information/Other_Health_Disabilities/Disability_Fact_Sheets/index.html

- C. Minnesota special education law allows children who have disabilities to receive special education services from birth until the end of the school year in which their twenty-first birthday occurs.

3. What Should I Do If I Think My Child Needs Special Education Services?

- A. You should speak to your child's doctor, social worker, classroom teacher and/or the principal about your child's problems and ask for a special education evaluation. Tell them:
 - 1. What problems your child is having
 - 2. That you think your child might need special education

If the decision is to evaluate your child, the school district will do an evaluation

If the school decides your child does not need an evaluation, they must explain to you in writing why they do not think your child needs to be evaluated.

If you disagree with the school district's decision, you can request mediation at no cost to you. An impartial mediator will help both parties reach an agreement. You may want to file a complaint with the State Department of Education or you can ask for a due process hearing where a state-appointed, impartial hearing officer will decide if your child should be evaluated. Due process may have some cost to you, as you may want to involve an attorney. (For more information, please see the "mediation" section at the end of this chapter.)

4. What Happens When The School Wants To Evaluate My Child?

- A. The school must notify you in writing that they want to do an evaluation of your child. The notice must tell you about:
 - 1. Your legal rights
 - 2. Why the evaluation is needed
 - 3. The kind of tests that will be given
 - 4. When the testing will be scheduled, how long it will take ,and how long it will take to get the results
- B. Whenever the school evaluates or reevaluates your child, you must be given written permission for the evaluation. You may say:
 - 1. Yes, the school may do the evaluation
 - 2. No, the school may not do the evaluation. If you say no, you should talk to the school about your reasons for not wanting your child to be evaluated. If you say no, the school may request mediation or due process.
- C. The school district must evaluate your child:
 - 1. Before they can provide special education services
 - 2. When your child is receiving special education services, evaluations must be reviewed or redone every three years.

Testing can be done anytime you or the school thinks it is necessary. The decision to retest or review test information will be made by you and the other members of the Multidisciplinary Team (MDT). Multidisciplinary means that each of the team members has different kinds of information about your child that will be shared with each other. Some members of the MDT have tested or will be the ones testing your child.

5. What Kind of Information Should You Share With the People Who Test Your Child?

You know your child better than anyone. It is important that you share what you know about your child with the people who will do the testing. Share information about:

- A. Problems with the pregnancy or birth
- B. When your child walked, talked, etc
- C. Your child's personality
- D. How your child gets along at home
- E. How you feel your child has done in school so far

- F. Any medical condition your child has
 - G. Any medication your child is taking
 - H. Reports from outside check-ups such as vision, hearing, or other medical exams
 - I. What you know about how your child learns
 - J. Things your child does well
 - K. Things your child has trouble with
 - L. Anything else about your child that you feel is important
- 6. What Should You Learn From The Multidisciplinary Team Report?**
- A. Whether or not your child has a disability and why or why not special education services are needed
 - B. An explanation of the tests and the results
 - C. How your child is doing with schoolwork
 - D. Things your child can do compared to other children the same age
 - E. The things your child does well
 - F. The kind of assistance your child might need in school to help with learning
- 7. What Happens After The Testing Has Been Done?**
- A. The people who did the testing will go over the tests with you and the other members of the MDT and explain what the results mean
 - B. To be sure that you understand what the tests say, ask yourself these questions
 - 1. Do I understand what my child's disability is and why my child needs special education services?
 - 2. Do I understand why my child is having problems?
 - 3. Was my child tested in all suspected, or identified, areas of disability?
 - 4. Does the information make sense?
 - 5. Does it sound like the things I know and understand about my child?
 - C. As a member of the MDT you will be asked to indicate in writing whether you agree with the information you have received. If you disagree, you must state your reasons in writing. If you disagree and you think there might have been a problem with the testing, you can ask the school district to do a new test or ask to have someone else test your child. This is called an independent educational evaluation. When you ask for additional testing, your request should always be in writing.
- 8. What Is the Individual Education Program (IEP) Conference or Meeting?**
- A. If your child has a disability and needs special education, there will be a meeting with the people who will work with your child. This is called an Individual Education Program meeting or conference. Sometimes it is called an Individual Education Plan. The IEP meeting or conference is where the plan for your child's special education program will be written for the whole year.
 - B. If your child has a disability, the IEP meeting must be held within 30 days after the evaluation. The school district will contact you to set up a meeting at a time convenient for you and for the school. You, possibly your child, and individuals from school are the ones will meet. Some of the IEP team members may be the same as members of the MDT.

- C. Your child's special education teacher will probably be the one to schedule future IEP meetings and other meetings for your child. There must be at least one IEP meeting every school year. Any member of the IEP team can call a meeting at any time to discuss or review the IEP or to propose changes. All meetings must be scheduled at a time that is convenient for everyone on the team.
- D. The IEP will say what kind of special education services your child will receive. The IEP is written especially for your child by a team of people who know your child well and is a written plan for teaching your child.

9. Who Must Come To The IEP Meeting?

- A. An administrator or someone else who is able to authorize the special education program your child needs.
- B. Your child's teachers. The special education teacher and a regular education teacher who teaches your child, or who may teach your child in the future.
- C. You, the parent (s).
- D. Your child, if it is appropriate.
- E. If your child attends a nonpublic school, someone from that school.
- F. A member of the team that most recently evaluated your child, other than the team members mentioned above.
- G. You or the school can invite others who know about your child and your child's needs. This may be a professional or it may be a friend or family member.

10. How Should I Get Ready For the IEP Meeting?

- A. You will be contacted about a date and time for the meeting, usually in a letter. The time of the meeting must work for you and the school. If the times does not work for you, call the school and ask to have the conference time changed.
- B. Planning before the conference will help you remember all of the important things you have to talk about.
- C. Go over your child's last IEP and test results. Make a list of questions, things you are concerned about and things that seem to be working well. Take this list with you to the conference.
- D. Make sure you understand any new information you have before you go to the conference. This is especially important if your child has been tested recently.
- E. Ask who will be at the conference so you will be able to have your questions ready for those who will be there. If there is someone you need to talk to, ask that they come to the conference.
- F. It might be helpful for you to invite someone who knows your child well, such as a friend or relative, to go to the meeting with you.

11. What Should Be Written In An IEP?

The IEP must include:

- A. A statement of your child's present level of educational performance:
 - 1. Results of the most recent tests
 - 2. The things the child can do well
 - 3. The parent's concerns for the child's education
 - 4. The effect the disability has on how the child can learn in regular education classes

5. For a child in preschool, the effect of the disability on the child's ability to do the things other children do

B. Consideration of special factors

All of the following factors must be discussed. If your child has trouble learning because of one or more factor, it must be written in the IEP as to how the school, in a positive way, will help your child overcome the problem(s) and how learning will be made easier for your child and teaching made easier for the teacher:

1. Behavior problems that keep your child from learning. There is additional information on behavior, expulsion, and suspension.
2. A need for Braille if your child is blind or visually impaired
3. Communication difficulties
4. A need for special equipment, sometimes calls assistive technology
5. A need to learn English

C. A statement of goals, including benchmarks or short-term objectives:

1. Goals describe what a child will be able to do at a future date, such as "Sara will learn to dress herself." This statement tells all the IEP team members what your child is trying to learn to do. Not all goals may be completed in a year. Some goals will be carried over to the next IEP.
2. Goals should be positive. For example, "Juan will ask for help when he needs it", not "Juan will stop crying when he is frustrated."
3. The IEP should tell how you will know if your child has reached the goals that have been written.
4. Objectives are short-term steps made to reach a goal.
5. Objectives can be things your child needs to know, or skills they need in order to reach a goal. For example, "Sara will button her blouse," is a step toward helping Sara learn to dress herself.
6. Progress toward the goals and objectives should be reported to you at least as often as all of the children in the school district receive report cards.

D. A statement of services, when will the services begin, how often will your child receive the service, for how much time and where will the service be provided for your child. The services your child might receive are:

1. Special education services
2. Related Services
 - a. Transportation
 - b. Speech-language pathology
 - c. Audiology services
 - d. Psychological services
 - e. Physical & occupational therapy
 - f. Recreation, including therapeutic recreation
 - g. Early identification and disability assessment
 - h. Counseling services, including rehabilitation counseling
 - i. Medical services for diagnostic or evaluation purposes
 - j. School health services, social work services in schools, parent counseling and training, and orientation and mobility services

3. Supplementary aids and services
 4. Program modifications
 5. Supports for the teachers and others at schools
 6. Positive Behavior Intervention plan if necessary
- E. If your child is not participating in a regular classroom, is not being included in the general curriculum, or is not a part of other school activities, there must be a written explanation agreed upon by the IEP team. This statement would include information as to how much time your student is spending with non-disabled students and if not, an explanation as to why your child is not being included with the other students in the school.
- F. Your child will be tested when all of the other students in the district are tested. The IEP team will decide whether your child will be tested in the same manner as the other students in the school, with modifications, or will be given an alternate assessment that will best measure your child's knowledge and progress. A description of how the team reached the decision it did must be written in the IEP.
- G. If your child is 14 there must be a statement of transition service needs (moving from school to adult living). This statement may also be developed at before age 14. The statement will be a part of the IEP, and will talk about your child's abilities, needs, and dreams as an adult.

At age 15, your child must have a written statement of transition services needed. The IEP will outline the school program that will prepare your child for meaningful and productive adulthood. The statement of transition services within the IEP will include:

1. Instruction
2. Community Experiences outside of work
3. Work Experiences
4. Daily Living Skills
5. Vocational Assessment

If your student is going to need services from agencies that service adults with disabilities, those agencies should be a part of the planning process. The person who schedules the team meetings should invite representatives from the agencies that might be providing services after graduation. You can invite someone who might be helpful or is providing a service for your son or daughter after high school.

Depending on your student's needs and how old the student must be to be eligible for adult services, the IEP team should consider the appropriate age for graduation. Some special education students are ready for work or higher education at 18 or 19. Some will need to stay in school until they are 21.

- H. What Should The IEP Tell You?

1. Who will teach your child, and what kind of teachers and therapists will be working with your child?
2. When will the school program begin and how long will it last?
3. What will be taught and what things will your child be working on during the year? These are the goals.
4. Why these goals were chosen. Does the IEP have a section that explains what your child is doing now, (the present level of performance)? Was this information used to plan the goals?
5. How your child will work toward the goals. What small steps will your child take to meet the goals? These are the objectives or benchmarks.
6. Where your child will be taught - in what school and in what kind of classroom.
7. How much time your child is spending with children who do not have disabilities. If your child is not going to be in class with non-disabled children, did the team agree and is there a written explanation as to why your child is not being included with non-disabled children?
8. How much your child is being included in the general curriculum, what is being taught that other students are being taught, and what activities such as field trips, sports events, school assemblies, etc., are being provided.
9. How your child is being tested in district or state assessments.
10. The suggestions that were made by the team to help your child at school and at home.
11. All of this determines placement. Placement is a decision made by the team, based upon your child's educational needs. Placement may be decided at the IEP meeting or at another meeting of the IEP team. Placement is the program, not a place.

I. How To Judge The IEP

1. Is it written in clear, understandable words?
2. Do you understand what your child will be working on during the school year?
3. Do you understand the reasons why these things will be taught to your child?
4. Do you understand how you will be able to tell if your child is doing better or reaching the goals?
5. Is the IEP written especially for your child or does it look like everyone else's in your child's class?

What Options Do You Have if the IEP Isn't Working?

STEP ONE:

Why isn't the IEP working? There are really only TWO reasons. The plan is no longer appropriate for your child, or the IEP is appropriate but isn't being implemented.

If you think the plan is no longer appropriate, write down a "strengths/needs" list, and then prioritize a list of the goals you feel the child should accomplish. Look at the current IEP. Have

the goals been accomplished? Are they too easy? Too hard? Do they offer “educational benefit”? Are they specifically designed for your child? Are social, communication, pre-vocational and behavior needs being positively addressed? Write down your questions and the things you feel are important to include in a new plan. Then, go to step two.

If you think the IEP isn't being implemented, review it and write down specific information like the amount of time the child should be receiving special education and related services, the modifications that should be made in general education classes, and the goals to be accomplished. Then, list your questions. Ask who is working on these, how the skills are being developed and reinforced, what modifications are working or not working, etc. Go to step two.

STEP TWO:

Talk to the special education teacher(s). Call ahead. Be positive. Schedule enough time for a comfortable discussion. If you're concerned about implementation, talk about what is being done at the school level to implement the various components of the IEP. Ask what still needs to be done. When will the changes be implemented and by whom? Take notes, and when you get home, follow up with a brief letter thanking the teacher for the meeting and summarizing what he/she said. Put a copy in your file.

STEP THREE:

If the teacher cannot or will not help you find out what you need to know, talk to the principal or the next person in line administratively. Send a copy of the prior correspondence. In your letter, outline your concerns, review the answer provided by the school staff, and ask for a written response within an acceptable period. If you were pleased with the response, thank the staff for their corporation.

STEP FOUR:

Review and change the IEP as often as needed. It must be done at least once a year, but additional meetings can be held if you or your child's teacher feels that the IEP is no longer appropriate. The IEP can be amended or rewritten by the IEP team (of which you are a part) at any time.

STEP FIVE:

Make sure you understand and use the appeal process and use it to work your way “up the chain of command” for your particular district. After working with the teacher(s) and the principal to try to resolve your concerns, and after carefully creating a “paper trail” of documentation, if your concerns are not resolved, appeal the issues to the next level. Many schools have a district special education administrator, a district assistant superintendent, or a district superintendent. It is often effective to appeal to these “higher-ups” after documenting all your efforts with others. At each step, if you feel your issues are still unresolved, write a letter summarizing what has occurred so far, with whom you have already worked, and the reasons for your on-going concerns. Keep going “up” until you feel your concerns have been addressed. Technically, up to this point, what you have been doing is called “informal dispute resolution.”

STEP SIX: Formal Resolution

Formal dispute resolution should be reserved for a “last resort.” In fact, to effectively claim some legal rights under IDEA and 504 (such as those associated with attorney fees), you will

want to have documentation that you have effectively “exhausted your administrative remedies” prior to pursuing formal resolution.

Options	What to expect from and how to access options
Facilitated IEP Team Meeting	A facilitated IEP team meeting is similar to a regular IEP team meeting. The difference is the presence of a state provided neutral facilitator who promotes effective communication and assists in developing an IEP. The use of a state provided facilitator must be agreed to by both parties. The facilitator is provided at no cost to either party. The facilitator cannot be called to testify and the facilitator’s records cannot be used in a due process hearing. To have a facilitator assigned, parties may contact the Minnesota Special Education Mediation Service toll-free at 1-866-466-7367.
Mediation	Mediation is a process for resolving disagreements between parents and school staff over eligibility of special education, evaluation, manifestation determination, a program that meets the child’s needs, or the provision of a free appropriate public education to a child with a disability. A neutral mediator helps the parties clearly communicate their concerns, find common ground, identify possible solutions, and reach a mutually agreeable resolution. The mediator does not make a decision resolving the disagreement. Mediation is voluntary for both parties and must be held in a timely manner and in a convenient location for both the family and the school. If the student is younger than three years of age, the mediation process must be completed within 30 calendar days after the written request is received by the Minnesota Special Education Mediation Service. A district cannot require a parent to participate in mediation by proceeding with a complaint or hearing. The fact that mediation was attempted can be disclosed at a due process hearing. Mediation may result in an agreement which cannot be shared at a hearing unless the parties agree to share it or one of the parties believes the agreement is not being followed. All discussions occurring during the mediation are confidential and cannot be shared in a due process hearing unless the parties agree, in writing, to share them, or a party to a hearing believes the other misrepresented information. If there is a dispute over implementing a mediated agreement the parties may go back to mediation. If a hearing has been requested and the parties want to mediate, MDE will provide a mediator within three business days following a request for a mediator. To arrange a mediation, parties must contact the Minnesota Special Education Mediation Service toll-free at 1-866-466-7367.
Conciliation Conference	A conciliation conference is a discussion between the parents and school staff, often following an IEP team meeting that did not result in an agreed upon IEP. Parents always have a right to try to conciliate a disagreement with the school district. Parents cannot be required to conciliate. The fact that conciliation was attempted can be disclosed at a due process hearing, although discussions occurring in conference cannot. If parents want to conciliate they must ask the district for a conciliation conference and it must be held within 10 calendar days. Following a conciliation, the district must prepare a memorandum, within five business days, that discusses their final proposed offer of services. That memorandum can be used in any subsequent proceeding.

Complaint	<p>Anyone can file a signed written complaint with MDE alleging a school district is violating, or has violated, special education law. The complaint must include a description of what the district is doing wrong or failing to do and the facts upon which the allegation is based. A complaint may be filed regarding an issue that arose within the past year. A longer period may be reasonable, as determined by MDE on a case by case basis, if the complaint is seeking compensatory education for an alleged violation occurring within the past three years, or if an alleged violation is continuing. An attorney is not required to file a complaint and attorney fees are not recoverable for the work done in a complaint. The complaint will be resolved by MDE within 60 days of its filing in most cases. A complaint decision may be used in a due process hearing. If a hearing officer has already decided issues raised in a complaint, the hearing decision is binding. A complaint investigation will not proceed on any issues that are also pending before a hearing officer. When MDE resolves a complaint and finds a violation, MDE may require the district to do any number of things including, but not limited to: awarding compensatory education or other corrective action appropriate to the needs of the child and providing for the appropriate future provision of services for all children with disabilities. If a complainant or district is not satisfied with a complaint decision by MDE, they may appeal that decision to the Minnesota Court of Appeals within 60 days. For more information on filing a complaint with MDE, contact 651-582-8689.</p>
Due Process Hearing	<p>Parents and districts have the right to a due process hearing before a hearing officer appointed by MDE when there is a disagreement over the identification, evaluation, educational placement, manifestation determination, interim alternative educational placement, or the provision of free appropriate public education (FAPE) to a child with a disability. The parties may be prohibited from a hearing on claims which are determined to be too old by the hearing officer. The hearing will be conducted by an impartial hearing officer in the district responsible for ensuring a free appropriate public education for the child. Parties have the right to be accompanied by a lawyer and individuals with special knowledge or training with respect to the problems of children with disabilities. Parties may present evidence and confront, cross-examine, and compel the attendance of witnesses. The hearing officer will manage the introduction of evidence and may prohibit certain kinds of evidence including that which is irrelevant, immaterial, or unnecessarily repetitious. Parties may prohibit the introduction of any evidence not disclosed at least five business days before the evidentiary portion of the hearing. A decision must be issued by the hearing officer, and mailed to the parties, within 45 days of the request for hearing. This timeline may be extended by the hearing officer for up to 30 days if requested by a party for good cause. A longer extension may be obtained if both parties and the hearing officer agree or if an independent educational evaluation is to occur. Complaints about the implementation of a hearing officer's decision can be made to MDE. A final decision may be appealed to Federal District Court or to the Minnesota Court of Appeals. An appeal to the Minnesota Court of Appeals must be filed within 60 days of a party's receipt of the decision. If a hearing officer finds that a student has been denied a FAPE, the hearing officer may require the district to do any number of things designed to put the student in the place the</p>

	student would have been if the denial of FAPE had not occurred. This includes, but is not limited to: changes in the IEP, compensatory education and services, and reimbursement or future payment for services not provided by the school district. A parent may seek to have the cost of their lawyer reimbursed by the district by filing a claim in federal district court. The court may award attorneys' fees if the court determines the parents prevailed at the due process hearing.
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From <http://education.state.mn.us/mdeprod/groups/Compliance/documents/FAQ/002143.pdf>

CHAPTER 8
MINNESOTA STATE RESOURCES

1. State Agencies and Organizations
2. Minnesota County Contacts

State Agencies and Organizations

The Autism Society of Minnesota publishes a Resource Directory, an extensive listing of professional services and providers in Minnesota and Western Wisconsin who work with individuals and families on the autism spectrum. Please see the Resource Directory for a more complete listing of resources. The Resource Directory is available in PDF format at <http://www.ausm.org/>

Autism Society of Minnesota

2380 Wycliff Street, Suite 102
St. Paul, MN 55114
Phone: 651-647-1083
Fax: 651-642-1230
<http://www.ausm.org/>

The Arc of Minnesota

Advocacy and support for people with developmental disabilities and their families
Toll Free: 1-800-582-5256
<http://www.arcminnesota.com/>

ARC of the Greater Twin Cities
1526 E. 122nd St.
Burnsville, MN 55337
Phone: 952-890-3057

4301 Highway 7, Suite 140
Minneapolis, MN 55416
Phone: 952-920-0855

770 Transfer Road, Suite 26
St. Paul, MN 55114
Phone: 651-523-0823

ARC Headwaters
1819 Bemidji Ave.
Bemidji, MN 56601
Phone 218-759-0097
Toll Free: 800-450-7338

ARC Northland
424 W. Superior St., Suite 201
Duluth, MN 58802
Phone: 218-726-4725
Toll Free: 800-317-6475

ARC of Southeastern Minnesota
2200 Second St. SW, Suite 101
Rochester, MN 55902
Phone: 507-287-2032
Toll Free: 800-732-8520

Institute on Community Integration

The ICI believes that all persons with developmental and other disabilities should live as valued members of local communities. We seek to make this possible through improving the services and social supports available to individuals with disabilities and their families. The Institute carries out this mission through research, professional training, technical assistance, and publishing activities.

University of Minnesota
102 Pattee Hall, 150 Pillsbury Drive SE
Minneapolis, MN 55455
Phone: 612-624-6300
Fax: 612-624-9344
<http://www.ici.umn.edu/default.html>

Minnesota Association for Children's Mental Health (MACMH)

Advocacy and education for parents and family members with children with mental health issues. Assists in the organizing of support groups for parents and provides technical assistance, provides presentations on various mental health topics and organizes an annual conference on children's mental health.

1821 University Avenue West, N-184
St. Paul, Minnesota 55104
Phone: 651-644-7333
Fax: 800-528-4511
<http://www.macmh.org/>

Minnesota Children with Special Health Needs (MCSHN)

Minnesota Children with Special Health Needs (MCSHN) provides leadership through partnerships with families and other key stakeholders to improve the access and quality of all systems affecting children and youth with special health care needs and their families.

717 Delaware Street SE. P.O. Box 9441
Minneapolis, MN 55440-9441
Phone: 612-676-5150
Fax: 800-728-5420
mcsn@kids.health.state.mn.us
<http://www.health.state.mn.us/divs/fh/mcsn/mcsn.html>

Minnesota Disability Law Center

430 First Avenue North, Suite 300

Minneapolis, MN 55401-1780

Phone: 612-332-1441

TDD 612-332-4688

Toll Free: 800-292-4150

<http://www.mnlegalservices.org/mdlc>

Minnesota Department of Education: Special Education Division

1500 Highway 36 West

Roseville, MN 55113-4266

Phone: 651-582-8200

<http://www.education.state.mn.us/>

Special Education link:

http://education.state.mn.us/mde/Learning_Support/Special_Education/index.html

Autism Spectrum Disorders page:

http://education.state.mn.us/mde/Learning_Support/Special_Education/Categorical_Disability_Information/Autism_Spectrum_Disorders/index.html

Minnesota Department of Health

<http://www.health.state.mn.us/>

The Minnesota Department of Health currently has four locations in the Minneapolis/Saint Paul Metropolitan Area and seven district Offices in Greater Minnesota.

Minnesota Department of Human Services

Main phone number for information: (651) 431-2000

Frequently called phone numbers:

Children and Family Services: (651) 431-3836

Children’s Mental Health (651) 431-2321

Consumer Support Grants (651) 431-2600

Disability Services Division (651) 431-2400

Toll-free line: (800) 747-5484

Health Care Programs: (651) 431-2478

Infants/Toddlers w/Disabilities (651) 431-2622

Medical Assistance (651) 431-2670

Toll-free line: (800) 657-3739

County Contacts

All phone numbers are for the main social services contact listing, except where otherwise noted. All listings were current as of January 2007.

Aitkin phone: 218-927-3744

e-mail: achhs@co.aitkin.mn.us

Anoka phone: 763-422-7180

Anoka Early Intervention Agency: 763-323-5437

Becker phone: 218-847-5628

Beltrami phone: 218-333-8300

Benton phone: 320-968-5087

Big Stone phone: 320-839-2555

Blue Earth phone: 507-304-4319

Brown phone: 507-354-8246 or 1-800-450-8246

email: socialservice@co.brown.mn.us

Carlton phone: 218-879-4511

or toll-free: 888-818-4511

Carver phone: 952-556-3217

Cass phone: 218-547-1340

Chippewa phone: 320-269-6401

Chisago phone: 651-213-0324

Clay phone: 218-299-5200

Clearwater phone: 218-694-6512

Cook phone: 218-387-3620

Cottonwood phone: 507-831-1891

Crow Wing phone: 218-824-1140

Dakota phone: 651-554-6000

email: socialservice@co.dakota.mn.us

Dodge phone: 507-635-6170

Douglas phone: 320-762-3827

Faribault phone: 507-526-3265

Fillmore phone: 507-765-3304

Freeborn phone: 507-377-5480

Goodhue phone: 651-385-6100

Grant phone: 218-685-4417

Hennepin phone: 612-348-4111 (intake)

Houston phone: 507-725-5811

Hubbard phone: 218-732-1451

Isanti phone: 763-689-1711

Itasca phone: 218-327-2941

Meeker phone: 320-693-5300

Mille Lacs phone: 320-983-8208

or toll-free: 888-270-8208

Morrison phone: 320-632-2951

or toll-free: 800-269-1464

Mower phone: 507-437-9729

Murray phone: 507-836-6144

Nicollet phone: 507-387-4556 (Northern Mankato); or 507-931-6800 (St. Peter)

Nobles phone: 507-372-2157

Norman phone: 218-784-5400

Olmsted phone: 507-285-8115

Otter Tail phone: 218-998-8150

Pine phone: 320-245-3053

Pipestone phone: 507-825-6720

Polk phone: 218-281-3127

Pope phone: 320-634-5750

Ramsey phone: 651-266-4500 (intake)

Red Lake phone: 218-253-4131

Redwood phone: 507-637-4050

Renville phone: 320-523-2202

Rice phone: 507-332-6115 (Faribault); 507-645-4723 (Northfield); 507-744-5185 (Lonsdale)

Rock phone: 507-283-5070

email: rockfsa@co.rock.mn.us

Scott phone: 952-445-7750

Sherburne phone: 763-241-2600

or toll-free 1-800-433-5239

Sibley phone: 507-237-4000 (Social Services) or 507-237-4035 (Early Intervention)

St. Louis phone: 218-749-7179 (Virginia)

or 218-733-2709 (Duluth)

Stearns phone: 320-656-6000

email: HSInfo@co.stearns.mn.us

Steele phone: 507-444-7500

Stevens phone: 320-589-7400 (general) or 320-

<u>Jackson</u> phone: 507 847-4000 <u>Kanabec</u> phone: 320-679-6356 <u>Kandiyohi</u> phone: 320-231-7800 <u>Koochiching</u> phone: 218 283-7009 <u>Lac qui Parle</u> phone: 320-598-7594 <u>Lake</u> phone: 218-834-8400 or toll-free 800-450-8832 <u>Lake of the Woods</u> phone: 218-634-2642 Le Sueur phone: 507-357-8288 <u>Lincoln</u> phone: 507-537-6709 or toll-free 888-837-6713 <u>Lyon</u> phone: 800-657-3760 <u>Martin</u> phone: 507-238-4757 <u>McLeod</u> phone: 320-864-5551 or 320-864-1373	589-7425 (Children with Special Health Needs) <u>Swift</u> phone: 320-843-3160 <u>Todd</u> phone: 320-732-4500 (Long Prairie) or 218-894-3983 (Staples) <u>Wabasha</u> phone: 651-565-3351 <u>Wadena</u> phone: 218-631-7605 <u>Waseca</u> phone: 507-835-0560 <u>Washington</u> phone: 651-430-6455 (intake) <u>Watonwan</u> phone: 507-375-3294 <u>Wilkin</u> phone: 218-643-7161 <u>Winona</u> phone: 507-457-6200 <u>Wright</u> phone: 763-682-7400 or toll-free 800-362-3667 x7400 <u>Yellow Medicine</u> phone: 320-564-2211 (Granit Falls) or 507-223-5078 (Canby)
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Minnesota Governor’s Council on Developmental Disabilities

370 Centennial Office Building
658 Cedar St.
St. Paul, MN 55155
Phone: 651-296-4018
TTY: 800-627-3529
Toll Free: 877-348-0505
Admin.dd@state.mn.us
<http://www.mnddc.org/>

Regional Low Incidence Projects

The Minnesota Low Incidence Projects includes Regional Low Incidence Projects in eleven regions of the state. These agencies address identified gaps and needs in special education programs and related services for students identified with any Low Incidence disability. Coordination of these activities is accomplished through planning and collaboration between Regional Low Incidence Facilitators listed below that cover all eleven regions of the state:

Regional Offices	Facilitator	Contact Information
Region 1 & 2 Warren/Bemidji	Brenda Ackerson	(218) 745-5628, x 248 backers@wao.k12.mn.us
Region 3 Mountain Iron	Phyllis Hauck	(218) 748-7606 phauck@nesc.k12.mn.us
Region 4 Fergus Falls	Dennis Ceminski	(218) 739-3273 ceminski@lscs.org
Region 5 & 7	Earl Mergens	(218) 894-5462

Staples		earlm@ncscmn.org
Region 6 & 8 Marshall	Bob Braun	(507) 537-2252 bob.braun@swsc.org
Region 9 Mankato	Linda Watson	(507) 389-2123 lwatson@mncsc.org
Region 10 Rochester	Jean Davis	(507) 287-1346 jedavis@rochester.k12.mn.us
Region 11 Twin Cities Metro (Minneapolis/St. Paul)	Ingrid Aasan-Reed	(612) 638-1517 ingrid.aasan-reed@metrocsu.org

CHAPTER 9
NATIONAL ORGANIZATIONS

1. Federal or Federally Funded Agencies
2. National Organizations

Federal or Federally Funded Agencies

Administration for Children and Families:

Administration on Developmental Disabilities Commissioner
U.S. Department of Health and Human Services Commissioner
Administration on Developmental Disabilities
Administration for Children and Families

This administration provides information on programs, policies, and activities related to partnerships with state governments, local communities, and the private sector that are assigned to help assist people with developmental disabilities reach their maximum potential through increased independence, productivity, and community integration.

U.S. Department of Health and Human Services Mail Stop: HHH 300-F
370 L'Enfant Promenade, S.W.

Washington, D.C. 20447

Phone: 202-690-6590

<http://www.acf.dhhs.gov/programs/add>

Americans with Disabilities Act (ADA)

The ADA, which was signed into law on July 26, 1999, prohibits discrimination based on disability in employment, programs, and services provided by state and local governments, goods and services provided by companies, and in commercial facilities.

U.S. Department of Justice

950 Pennsylvania Avenue, NW

Civil Rights Division

Disability Rights Section - NYAV

Washington, D.C. 20530

Phone: 800-514-0301

TTY: 800-514-0383

Fax 202-307-1197

www.usdoj.gov/crt/ada/adahom1.htm

Department of Education, U.S.

Various offices of interest to families of individuals with disabilities, such as the Office of Special Education Programs (see below) and the Office of Special Education and Rehabilitation Services (see below), fall under the auspices of the U.S. Department of Education.

400 Maryland Ave., SW

Washington, DC 20202-0498

Phone: 202-401-2000

Toll Free: 800-USA-LEARN

TTY: 202-401-1032

<http://www.ed.gov/>

ERIC Clearinghouse on Disabilities & Gifted Education

1110 N Glebe Rd.
Arlington, VA 22201-5704
Phone: 703-264-9475
Toll Free: 800-328-0272
ericec@cec.sped.org,
<http://www.ericec.org/>

North American Riding for the Handicapped Association (NARHA)

This is the premier site for information on equine-assisted activities. NARHA is a national non-profit organization that promotes the benefit of the horse for individuals with physical, emotional and learning disabilities.
<http://www.narha.org/>

National Council on Disability

1331 F St. NW, Suite 850 Washington, DC 20004
Phone: 202-272-2004
Fax: 202-272-2022
TTY: 202-272-2074
sbrown@ncd.gov
<http://www.ncd.gov/>

Office of Special Education and Rehabilitative Services (OSERS)

U.S. Department of Education 330 C St., S.W.
Washington, D.C. 20202
Phone: 202-205-5465
Fax: 202-205-9252
<http://www.ed.gov/about/offices/list/osers/index.html>

Office of Special Education Programs (OSEP)

400 Maryland Ave. SW
Washington, DC 20202
Phone: 202-205-5507
<http://www.ed.gov/>

National Organizations

Association of University Centers on Disabilities (formerly American Association of University Affiliated Programs)

A non-profit organization that promotes and supports the national network of university centers on disabilities, which includes University Centers for Excellence in Developmental Disabilities Education, Research, and Service (UCEDD), Leadership Education in Neurodevelopmental and

Related Disabilities (LEND) Programs and Developmental Disabilities Research Centers (DDRC).

1010 Wayne Avenue, Suite 920

Silver Spring, MD 20910

Phone: 301-588-8252

Fax: 301-588-2842

<http://www.aucd.org/>

American Association on Mental Retardation

444 N Capitol St. NW #846

Washington, DC 20001

Phone: 202-387-1968

Toll Free: 800-424-3688

Fax: 202-387-2193

<http://www.aamr.org/>

American Speech-Language-Hearing Association

A national organization of professional speech and language pathologists. They also offer a national directory of practitioners by zip code.

10801 Rockville Pike

Rockville, MD 20852-3279

Phone: 301-897-5700

Toll Free: 800-638-8255

TTY: 301-897-0157

<http://www.asha.org/>

Arc of the U.S.

Arc advocates for the rights and full participation of all children and adults with intellectual and developmental disabilities.

1010 Wayne Ave. #650

Silver Springs, MD 20910

Phone: 301-565-3842

Toll Free: 800-433-5255

info@thearc.org

<http://www.thearc.org/>

Asperger Syndrome Education Network, Inc. (ASPEN)

ASPEN of America was formed to increase the awareness of, and provide support for, individuals affected Asperger Syndrome (AS) and High Functioning Autism. They offer a newsletter by subscription.

Phone: 904-745-6741

aspen@cybermax.net or

<http://www.asperger.org/>

Association for Science in Autism Treatment

The goal of ASAT is to disseminate accurate, scientifically sound information about autism and treatments for autism, and to improve access to effective, science-based treatments for people.

<http://www.asatonline.org/>

(The) Autism Network for Hearing and Visually Impaired Persons

c/o Dolores and Alan Bartel

7510 Oceanfront Avenue

Virginia Beach, Virginia 23451

Phone: 804-428-9036

Autism Network International (ANI)

Organization run by and for individuals with autism.

PO Box 448

Syracuse, NY 13210-0448

<http://ani.autistics.org/>

Autism Research Institute

ARI is primarily devoted to conducting research. ARI provides research-based information to parents and professionals throughout the world. Newsletters available for subscription.

4182 Adams Avenue

San Diego, California 92116

Phone: 619-281-7165

<http://www.autismwebsite.com/ari/index.htm>

Autism Society of America, Inc.

The Autism Society of America was founded in 1965 and today has over 50,000 members working in over 200 chapters nationwide. ASA is dedicated to increasing public awareness about autism and the day-to-day issues faced by individuals with autism, their families, and the professionals with whom they interact. The Society and its chapters share a common mission of providing information and education, supporting research and advocating for programs and services for the autism population. Website also offers information in Spanish.

7910 Woodmont Ave. #300

Bethesda, MD 208143015

Phone 301-657-0881

Toll Free: 800-328-8476 *or* 800-3-AUTISM

Fax: 301-657-0869

<http://www.autism-society.org/>

Autism Speaks

Autism Speaks is a grass-roots organization of families, physicians, and concerned citizens dedicated to funding 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 bring hope to all who deal with the hardships of the disorder. Autism Speaks, Cure Autism Now (CAN) and NAAR (National Alliance for Autism Research) merged in late 2006.

2 Park Avenue

11th Floor

New York, NY 10016

Phone: 212-252-8584

Fax: 212-252-8676

<http://www.autismspeaks.org/>

ARCH (Access to Respite Care and Help)

ARCH develops and produces programs and strategies, including training, technical assistance, and public awareness, that will enhance the development of all children and their families.

Young children who live in poverty, those with disabilities, and those at risk for abuse and neglect are of principal concern to project staff.

Chapel Hill Training-Outreach Project, Inc.

800 Eastowne Drive, Ste. 105

Chapel Hill, NC 27514

Phone: 919-490-4477 ext. 222

mathers@chtop.org

<http://www.chtop.com/>

Center for Law and Education

43 Winter St. 8th Floor

Boston, MA 02108

Phone: 617-451-0855

Fax: 617-451-0857

cle@cleweb.org

<http://www.cleweb.org/>

Center for the Study of Autism

The Center for the Study of Autism (CSA) is located in the Salem/Portland, Oregon area. The Center provides information about autism to parents and professionals, and conducts research on the efficacy of various therapeutic interventions. Most of the research is in collaboration with the Autism Research Institute in San Diego, California.

P.O. Box 4538

Salem, Oregon 97302

Phone: 503-692-3104

<http://www.autism.org/>

Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD)

8181 Professional Place #201

Landover, MD 20785

Phone: 301-306-7070, 301-306-7090
Fax: 800-233-4050
national@chadd.org
<http://www.chadd.org/>

Consortium for Appropriate Dispute Resolution in Special Education

PO Box 51360
Eugene, OR 97405-0906
Phone: 541-686-5060
Fax: 541-686-5063
cadre@directionservice.org
<http://www.directionservice.org/cadre>

Consortium for Citizens with Disabilities

Coalition of 100 national disability organizations working to advocate public policy.
22 Cedar Lane
Vienna, VA 22182
Phone: 703-208-7489
info@c-c-d.org
<http://www.c-c-d.org/>

Council for Exceptional Children (CEC)

1110 N Glebe Rd. #300
Arlington, VA 22201-5704
Phone: 703-620-3660
Toll Free: 800-224-6830
TTY: 703-264-9446
Fax: 703-264-9494
service@cec.sped.org
<http://www.cec.com/>

Disability Rights Education and Defense Fund (DREDF)

National law and policy center dedicated to protecting and advancing the civil rights of people with disabilities.
1629 K St. NW #802
Washington, DC 20006
Phone: 202-986-0375
Fax: 202-775-7465
dredf@dredf.org
<http://www.dredf.org/>

Families and Advocates Partnership for Education (FAPE)

PACER Center

8161 Normandale Blvd.
Minneapolis, MN 55437
Phone: 952-838-9000
Toll Free (in MN only) 800-53-PACER
Fax: 952-838-0199
<http://www.fape.org/>

FAAAS, Inc. (Families of Adults Afflicted with Asperger's Syndrome)

Our mission is to give support to the family members of adult individuals afflicted with Asperger's Syndrome. It is the spouses, siblings and children of those afflicted with Asperger's Syndrome whom we are trying to reach. Especially those whose relative has not been correctly diagnosed with Asperger's Syndrome until well into their adulthood.

PO Box 514
Centerville, MA 02632
<http://www.faaas.org/>

Federation for Children with Special Needs

The Federation provides information, support, and assistance to parents of children with disabilities, their professional partners, and their communities, and is committed to quality education, healthcare for all, and protecting the rights of children.

1135 Tremont St., Ste. 420
Boston, MA 02120
Phone: 617-236-7210
Fax: 617-572-2094
Email: fcsninfo@fcsn.org
<http://www.fcsn.org/>

Institute for the Study of Developmental Disabilities

Provides information and publications on various issues concerning autism.

2853 East 10th Street
Bloomington, IN 47408-2601
Phone: 818-855-6508
<http://www.iidc.indiana.edu/irca/fmain1.html>

Learning Disabilities Association of America

4156 Library Rd.
Pittsburgh, PA 15234-1349
Phone: 412-341-1515
Fax: 412-344-0224
ldanat1@usaor.net
<http://www.ldaamerica.org/>

Lovaas Institute for Early Intervention

The Lovaas Institute for Early Intervention is a research-based program that specializes in teaching children with autism, pervasive developmental disorders, and related developmental disabilities. The program provides services nationwide.

2925 Dean Parkway, Suite 300
Minneapolis, MN 55416 (612) 925-8365
<http://www.lovaas.com>

MAAP (More Advanced Individuals with Autism, Aspergers, and PDD)

P.O. Box #524
Crown Point, Indiana 46307
Phone: 219-662-1311
www.maapservices.org

National Alliance for the Mentally Ill

Colonial Place Three
2107 Wilson Blvd. #300
Arlington, VA 22201
Phone: 703-524-7600
Toll Free: 800-950-6264
Fax: 703-524-9094
www.nami.org

National Association for the Education of African American Children with Learning Disabilities

PO Box 09521
Columbus, OH 43209
Phone: 614-237-6021
Fax: 614-238-0929
www.aacld.org

National Association of Protection and Advocacy Systems, Inc.

900 2nd St. NE #211
Washington, DC 20002
Phone: 202-408-9514
Fax: 202-408-9520
TTY: 202-408-9521
www.napas.org

National Attention Deficit Disorder Association (ADDA)

1788 Second Street, Suite 200

Highland Park, IL 60035

Phone: 847-432-2332

mail@add.org

www.add.org

National Autism Hotline / Autism Services Center

605 Ninth Street

Prichard Building, PO Box 507

Huntington, West Virginia 25710-0507

Phone: 304-525-8014

National Center for Learning Disabilities

381 Park Ave. South Suite 1401

New York, NY 10016

Phone: 888-575-7373

Fax: 212-545-7510

www.nclld.org

National Dissemination Center for Children and Youth with Disabilities (NICHCY)

PO Box 1492

Washington, DC 20013-1492

Phone: 202-884-8200

nichcy@aed.org

www.nichcy.org

National Mental Health Association

2001 N. Beauregard Street-12th Floor

Alexandria, VA 22311

Phone: 703-684-7722

Toll Free: 800-969-6642

infoctr@nmha.org

www.nmha.org

National Organization on Disability

NOD is committed to expanding the participation of people with disabilities in their own communities. NOD also provides referrals to various resources, such as independent living centers, disability research, and rehabilitation organizations.

910 16th St., N.W., Ste. 600

Washington, DC 20006

Phone: 202-293-5960

Fax: 202-293-7999

TDD: 202-293-5968

ability@nod.org

www.nod.org

National Parent to Parent Support and Information System, Inc.

NPPSIS is a non-profit organization established to support, strengthen, and empower families through one-to-one parent contacts.

PO Box 907

Blue Ridge, GA 30513

Phone: 800-651-1151

Fax: 706-632-8830

judd103w@wonder.em.cec.gov

www.iser.com/NPPSIS-GA.html

O.A.S.I.S. (Online Asperger's Syndrome Information and Support)

www.udel.edu/bkirby/asperger

PACER Center, Inc. (Parent Advocacy Coalition for Educational Rights)

The federal governments designated national coordinating office of parent training and information center for families of children with disabilities.

8161 Normandale Blvd.

Minneapolis, MN 55437-1044

Phone: 952-838-9000

Toll Free: 800-537-2237

Fax: 952-838-0199

TTY: 952-838-0190

pacer@pacer.org

www.pacer.org

TEACCH (Treatment and Education of Autistic and Related Communication Handicapped Children and Adults)

A comprehensive community-based program for persons with autism. Through regional centers, TEACCH provides diagnostic evaluation, individualized treatment, parent and professional training, and consultation.

Division TEACCH, CB #7180

310 Medical School Wing E

Chapel Hill, NC 27599-7189

Phone: 919-966-2174

Contact: Eric Schopler, Ph.D., Director

www.teacch.com

Unlocking Autism

Unlocking Autism was founded primarily for increasing awareness about the disorder, through fundraising and education.

P.O. Box 237

Walker, Louisiana 70785

Phone: 225-665-7270

www.unlockingautism.org

VSA Arts

Creating a society where people with disabilities can learn through, participate in, and enjoy the arts.

1300 Connecticut Ave. NW #700

Washington, DC 20036

Phone: 202-628-2800

TTY: 202-737-0645

www.vsarts.org

CHAPTER 10
SPECIAL EDUCATION ABBREVIATIONS AND DEFINITIONS

1. Special Education Abbreviations & Definitions

AB: Adaptive Behavior: The ability to adjust to new environments, tasks, objects, and people and to apply new skills to those new situations.

ABA: Applied Behavior Analysis: A method of teaching designed to analyze and change behavior in a precisely measurable and accountable manner. Also called behavior modification.

ADA: Americans with Disabilities Act: A civil rights law passed in 1990 that does not allow discrimination against people with disabilities in employment, public service, and public accommodations.

Adaptive Development: Development of the child in comparison to other children the same age. This might include the child's ability to dress him/herself, feed him/herself, toilet training, how he/she plays with other children, how he/she plays along, understanding dangers in crossing the street, how he/she behaves if mother leaves the room, etc.

ADD: Attention Deficit Disorder

ADHD: Attention Deficit Hyperactivity Disorder

ADOS: Autism Diagnostic Observation Scale

Advocate: Someone who takes action to help someone else (as in "educational advocate"); also, to take action on someone's behalf.

Age norms: The average performance of an individual in various age groups.

AIT: Auditory Integration Training: Developed by Dr. Guy Berard, an Ear, Nose and Throat physician, to rehabilitate disorders of the auditory system.

Annual goals: Yearly goals documented in the Individualized Education Plan.

AOS: Apraxia of Speech: An oral motor disorder characterized by disordered speech.

APE: Adaptive Physical Education: A related service; an individual program of developmental activities, games, sports and rhythms suited to the interests, capacities, and limitations of students with disabilities who may not safely or successfully engage in unrestricted participation in the vigorous activities of the general physical education program.

Aphasia: Loss of ability to use or understand words.

Apraxia: A neurologically-based disorder that occurs in adults, often (but not exclusively) because of stroke. The person has difficult sequencing movements in the service of a goal. e.g., he may have the ability to raise his arm and to wave his hand, but not when he consciously intends to do so. Apraxia may be specific to speech (e.g., "Apraxia of speech") or to the movement of other body parts (e.g., "limb Apraxia").

Articulation disorders: Difficulty with the production of speech sounds.

AS: Asperger's Syndrome

ASA: Autism Society of America

ASD: Autism Spectrum Disorders

Assessment: A collecting and bringing together of information about a child's needs, this may include social, psychological, and educational evaluations used to determine services.

Assessment Plan: The description of the battery of tests (psychological, achievement, language, etc.) to be used in a particular student's assessment.

Assessment Team: A team of people from different backgrounds who observe and test a child to determine his or her strengths and weaknesses.

AT: Assistive Technology

Auditory discrimination: The ability to detect differences in sounds.

Auditory Processing: The ability to understand and use information that is heard, both words as well as other non-verbal sounds.

Augmentative communication: Special devices that provide an alternative for spoken language.

Autistic Spectrum Disorders: Term that encompasses autism and similar disorders. More specifically, the following five disorders listed in DSM-IV: *Autistic Disorder, Asperger's Disorder, PDD-NOS, Childhood Disintegrative Disorder, and Rett's Disorder.*

Baseline - the current level the child is functioning at before instruction.

CAPD: Central Auditory Processing Disorder: Difficulty understanding and/or processing spoken language, in the absence of hearing loss.

Cognitive: A term that describes the process people use for remembering, reasoning, understanding, and using judgment; in special education terms, a cognitive disability refers to difficulty in learning.

D/APE: Developmental/Adapted Physical Education

DAS: Developmental Apraxia of Speech: An oral motor disorder characterized by disordered speech. Children who have Apraxia of speech due to an unknown cause are referred to as having "developmental Apraxia of speech."

DSM-III, DSM-III-R, & DSM-IV: Diagnostic and Statistical Manual: A manual published by the American Psychiatric Association (APA), which describes all of the diagnostic criteria and the systematic descriptions of various mental disorders.

DTT: Discrete Trial Training: (Note: it has also been referred to as "Discrete Trial Therapy" and "Discrete Trial Teaching"). Term has been applied to Lovaas's ABA-based method for treating children with autism, and been used as a term for the "drilling" aspect of ABA. The term is also often used in a less specific way, as a synonym for ABA.

Dyspraxia: Term for a neurological symptom: a problem with "praxis," i.e. planning, initiating, sequencing, and carrying out volitional movements.

Dysfluency: A break in the smooth flow of speech, stuttering.

Dyslexia: Learning disability, which impairs the child's reading ability.

Echolalia: Repeating back something said to you. Delayed Echolalia is repeating it later. Both behaviors are found in many individuals with autism. Functional echolalia is using a quoted phrase in a way that has shared meaning, for example, a child who sings the Barney jingle to ask for a Barney videotape, or says "Get your shoes and socks" to ask to go outside.

ECSE: Early Childhood Special Education

EEG: Electroencephalogram: A test consisting of recording brainwaves as picked up by electrodes. It is used to identify seizures. It is also used to differentiate LKS from other disorders in with autistic symptoms.

Early Intervention Services: Programs or services designed to identify and treat a developmental problem as early as possible, before age 3 (services for 3-5 year olds are referred to as preschool services).

FAPE: Free Appropriate Public Education: A requirement that all school-aged children (up to age 21) despite having a disability, be provided services in the public school system.

FBA: Functional Behavioral Assessment

GF or g/f: Gluten Free

GF/CF: Gluten-Free/Casein-Free diet (wheat and dairy).

Gross motor - relating to the use of the large muscles of the body.

Hyperlexia: Ability to read at an early age, but often without linking the words to what the words mean.

IDEA: Individuals with Disabilities Education Act: Federal legislation (Public Law 105-17) passed in 1997 as a reauthorization of the Education of the Handicapped Act (EHZ) passed in

1975. Provides mandate and some funding for certain services for students who have disabilities.

IEP: Individualized Education Plan: A yearly education plan written by teachers, therapists, psychologists, etc. and the child's parents for school age children with disabilities for someone who needs special education. The IEP addresses the student's needs and the educational supports and services required to meet those needs.

IFSP: Individualized Family Service Plan an education plan written by teachers, therapists, psychologists, and the child's parents for children through the age of 3 with a disability.

Interdisciplinary team: Various individuals from different disciplines that assess children's needs (speech therapist, occupational therapist, nurse, psychologist, etc.).

Language impairment: Difficulty understanding and/or using language.

LD: Learning Disabled

Learning disability: A child with average or above average potential has difficulty learning in one or more areas (such as reading or math) and exhibits a severe discrepancy between their ability and achievement.

LRE: Least Restrictive Environment: A child should be educated in the least restrictive environment for his or her disability *and* which meets his or her needs. An educational setting, which gives students with disabilities a place to learn to the best of their ability and have contact with children without disabilities.

Neurologist: A physician specializing in medical problems associated with the brain and spinal cord.

OCD: Obsessive Compulsive Disorder

ODD: Oppositional Defiant Disorder

OT: Occupational Therapy or Occupational Therapist. A therapist that focuses on daily living skills, sensory integration, and fine motor skills. An Occupational therapist would provide Sensory Integration Therapy.

PDD: Pervasive Developmental Disorder. A group of developmental disabilities, which are neurological, and usually of an unknown origin. Characteristics include reduced ability to understand language, to communicate, and interact with others, and a limited variety of activities and interests. Types of pervasive development disorder include autism, Rett's Syndrome, and Asperger's Syndrome.

Perseveration: Obsessive-like continued immediate repetition of a behavior.

PT: Physical Therapy/Therapist: Provides evaluation and treatment of physical disabilities to help the person improve the use of bones, muscles, joints, and nerves through exercise and massage.

Receptive language: The understanding of spoken and written communication as well as gestures.

Related services: Other support services that a child with disabilities requires such as transportation, occupational, physical and speech pathology services, interpreters, and medical services, etc.

Reinforcement: Providing a pleasant consequence (positive reinforcement) or removing an unpleasant consequence (negative reinforcement) after a behavior in order to increase or maintain that behavior.

Related Services: Transportation and developmental, corrective, and other support services that a child with disabilities requires in order to benefit from education; examples of related services include: speech pathology and audiology, psychological services, physical and occupational therapy, recreation, counseling services, interpreters for the hearing impaired, and medical services for diagnostic and evaluation purposes.

Respite care: Skilled adult or child care and supervision that can be provided in your home or the home of a care-provider. Respite care may be available for several hours per week or for overnight stays.

Sensorimotor: Pertaining to brain activity other than automatic functions (respiration, circulation, sleep) or cognition. Sensorimotor activity includes voluntary movement and senses like sight touch and hearing.

SI: Sensory Integration: The way in which the brain and the body interpret sensory information.

SI: Speech Impairment

SID: Sensory Integration Dysfunction

SLI: Speech Language Impairment

SLP or S-LP: Speech-Language Pathologist: A person qualified who improves and/or corrects communication problems.

SSDI: Social Security Disability Insurance: This money has been paid into the Social Security system through payroll deductions on earnings. Disabled workers are entitled to these benefits. People who become disabled before the age of 22 may collect SSDI under a parent's account, if the parent is retired, disabled, or deceased.

SSI: Supplemental Security Income: This is available for low-income people who are disabled, blind, or aged. SSI is based on need and income, not past earnings paid into the system.

Tactile: Relating to touch

Tactile defensiveness: Child overreacts or avoids any kind of touch.

Transition: Schools are responsible to provide transition services to assist a child with disabilities to successfully access the adult world, through work experiences and/or through postsecondary options and related. Transition services must be individually tailored to the child's needs and skills.

Visual discrimination: Ability to detect differences in objects, forms, letters or words.

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