Supporting People with Autism Across the Lifespan

895.58

THE NORTH DAKOTA STATEWIDE DEVELOPMENTAL DISABILITIES STAFF TRAINING PROGRAM

July, 2015
Supporting People with Autism across the Lifespan
By JoLynn Webster
Edited by Mary Mercer

This training manual was developed by the North Dakota Center for Persons with Disabilities to be used by North Dakota community provider agencies participating in the Community Staff Training Project through Minot State University. Requests for use of this publication for any other purpose should be submitted to Minot State University, NDCPD, Community Staff Training Project, Box 36, Minot, ND 58707.

Suggested citation:


Production of this publication was supported by funding from:
North Dakota Department of Human Services, Disabilities Services Division
North Dakota Center for Persons with Disabilities at Minot State University

COPYRIGHT 2015
By the NORTH DAKOTA CENTER FOR PERSONS WITH DISABILITIES
University Center of Excellence on Developmental Disabilities, Education, Research and Services at Minot State University

Acknowledgments

The North Dakota Center for Persons with Disabilities wishes to thank the North Dakota Regional Staff Trainers, Michael Marum, and Cheryl Rystedt for their contribution to the development of this training module. Thank you to Hilory Luccini for 2013 updates and Rhonda Weathers for 2015 updates.

The North Dakota Center for Persons with Disabilities is a member of the Association of University Centers on Disabilities (AUCD). AUCD is a national network of interdisciplinary centers advancing policy and practice through research, education and services for and with individuals with developmental and other disabilities, their families and communities.

This product is available in alternative format upon
# Supporting People with Autism across the Lifespan

## Table of Contents

**Chapter 1:** An Introduction to Autism ................................................................. 4  
Chapter 1: Feedback Questions ............................................................................... 19  
**Chapter 2:** Educational Support for Students with Autism ................................. 22  
Chapter 2: Feedback Questions ............................................................................... 34  
**Chapter 3:** Intervention Options for People with Autism .................................. 37  
Chapter 3: Feedback Questions ............................................................................... 49  
**Chapter 4:** “Related Service” Strategies to Support People with Autism ............ 51  
Chapter 4: Feedback Questions ............................................................................... 84  
**Chapter 5:** Support Strategies for Adults with Autism ....................................... 87  
Chapter 5: Feedback Questions ............................................................................... 110  
**Chapter 6:** Additional Support Strategies .......................................................... 114  
Chapter 6: Feedback Questions ............................................................................... 122  
**Chapter 7:** Asperger Syndrome – General Information Across the Life Span .......... 123  
Chapter 7: Feedback Questions ............................................................................... 129  
**Appendices** ......................................................................................................... 131  
Appendix A: Suggested Developmental History Questions for Parent Interviews ........ 132  
Appendix B: Additional Tips for Teaching Students with Autism ............................ 136  
Appendix C: Disability Information for Someone Who has Autism ........................ 138  
Appendix D: Emergency Forms for People with Autism .......................................... 139  
Appendix E: Additional Resources .......................................................................... 142  
Appendix F: Feedback Answer Key .......................................................................... 146  
Appendix G: Bibliography ....................................................................................... 161
Chapter One: An Introduction to Autism

Objectives:
After completing this chapter, support providers will be able to:

- Explain what is meant by the statement “the characteristics of Autism are displayed on a continuum”
- Identify the common social, communication, and behavioral symptoms of Autism
- Describe current evidence regarding the causes of Autism
- Describe best practice for diagnosing Autism
- Identify physical and medical conditions that are related to Autism
- Distinguish between specific myths and facts about Autism

What is Autism?
Under the DSM-IV, Autism Spectrum Disorders (ASD) is an “umbrella” term for a group of disorders which includes Autism, Asperger Syndrome, Rett Syndrome, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS). The focus of this module is on Autism because it is the most prevalent of the Autism Spectrum Disorders. A brief overview of Asperger Syndrome is also provided in Chapter Seven.

Under the new DSM-5 criteria, Autism is no longer an “umbrella” term as Asperger Syndrome, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder are no longer considered spectrum disorders. Under new criteria, autism is diagnosed with a severity level in both social/communication and repetitive behaviors. Severity levels range from Level 1 (Requiring support), Level 2 (Requiring substantial support), Level 3 (Requiring very substantial support).

Description of Autism
Autism is a brain-based disorder that affects skills in three overall areas: social skills and interactions, communication, and behavior.

People with Autism have a wide range of symptoms and levels of severity. Every person with Autism is unique. The way in which the common characteristics of Autism are displayed varies on a continuum from one person to another (as shown in the table below). For example, a person with Autism may be hyposensitive (not sensitive) to some sensory input (e.g., does not respond to pain) and hypersensitive (extremely sensitive) to other stimuli (e.g., noises). Other people may have excellent gross motor skills (e.g., walking) but have difficulty with fine motor activities (e.g., paper and pencil tasks). It is important to be aware of uneven patterns in these areas when developing programs for people with Autism.
Social Skills and Interactions

At birth, typically developing infants are social beings. Very early in life, these infants gaze at faces, turn their head toward voices, grab another person’s finger, coo, and smile. Most people with Autism, however, seem to have difficulty learning to participate in the give-and-take of social interactions.

Research has shown that children with Autism are usually attached to their parents. The way this attachment is expressed, however, is often not the same as it is between typically developing children and their parents. Oftentimes, children with Autism do not seek comfort from their parents when they are upset. Many parents feel that their child with Autism is not connected to them at all. These parents may experience disappointment when their son or daughter with Autism does not cuddle, interact, or play with them in typical ways.

People with Autism may have difficulty interpreting what others are thinking and feeling. Social cues such as facial expressions and gestures may be meaningless to them. For example, “Come here” may always mean the same thing regardless of whether the person is smiling and raising his/her hand to give a “high five” or frowning with his/her hands on her hips. In addition, people with Autism often have difficulty seeing the world from another person’s point of view. It may be hard for them to understand that their mother doesn’t want to go outside to play when she is sick or busy with a chore. People with Autism may not understand that the thoughts, feelings, and goals of other people are different from their own. The inability to interpret social cues or to understand the perspective of others makes the social world confusing.

Some people with Autism may also have difficulty regulating their emotions. These challenges may cause problems in social situations. Common self-regulation problems include:
• Disruptive and “immature” behaviors (e.g., verbal outbursts or inappropriate crying)
• Physically aggressive behaviors (e.g., breaking objects, attacking others, hurting themselves)
• “Loss of control” (especially in unfamiliar or overwhelming settings or when angry, upset, or frustrated)

It is important to remember that these behaviors are not universal for all people with Autism.

The most common social symptoms of Autism are summarized in the following table:

<table>
<thead>
<tr>
<th>Social Symptoms of Autism</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Doesn’t snuggle</td>
</tr>
<tr>
<td>• Passive acceptance of affection</td>
</tr>
<tr>
<td>• Avoids eye contact</td>
</tr>
<tr>
<td>• Doesn’t point at desired items or bring objects to show others</td>
</tr>
<tr>
<td>• Doesn’t have appropriate facial expressions</td>
</tr>
<tr>
<td>• Doesn’t use social signals (e.g., body language, facial expressions) to perceive others’ thoughts and feelings</td>
</tr>
<tr>
<td>• Indifference toward others and inability to understand the perspective of others</td>
</tr>
<tr>
<td>• Limited friendships</td>
</tr>
</tbody>
</table>

**Communication**

By age three, language development for typical children is relatively predictable. Children begin with babbling and then start saying one or two words, turning and looking when someone says his/her name, pointing at desired objects, saying “no” in response to commands. By the age of three they are combining words into simple sentences.

Although some people with Autism do not speak throughout their entire lives, many do develop some spoken language or other form of communication. Some infants, who later show signs of Autism, coo and babble at first but stop after the first few months. Some children with Autism may develop language between five and nine years of age. Some people with Autism learn to use alternative systems such as sign language or pictures to communicate.

The speech of people with Autism often seems different from typical speech. People with Autism often speak just one word at a time and are unable to combine words into meaningful sentences. Other people with Autism say the same words or phrases repeatedly. The condition in which a person with Autism repeats or “parrots” what he or she has heard before is called “echolalia.” The speech of peoples with Autism is often characterized as high-pitched and “sing-song”, or flat and robotic.
Individuals with mild symptoms of Autism may have unusually large vocabularies. However, they often have great difficulty carrying on a conversation. The "give and take" of typical conversations is often missing. Rather than conversing, the person with Autism’s conversation is more like a monologue on a favorite topic. For example, the person may talk about trains in almost every conversation. No matter where, when, or with whom the conversation takes place, trains will be the topic. Another common challenge is the inability of the person with Autism to understand body language, tone of voice, or expressions of speech during interactions. For example, a person with Autism might interpret a sarcastic comment such as “Oh, that’s just great” as meaning it really IS great.

Social interactions with others may also be challenging because the body language of people with Autism is difficult to “read”. The facial expressions and gestures of a person with Autism may not match what he/she is saying. For example, a person with Autism may be screaming “no” while smiling or laughing.

People with Autism may have difficulty letting others know what they need due to lack of meaningful gestures or speech. Oftentimes, individuals with Autism do whatever is necessary to get through to others. This may include a challenging behavior such as screaming or grabbing what they want.

The most common communication symptoms of Autism are summarized in the following table.

<table>
<thead>
<tr>
<th>Communication Symptoms of Autism</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Doesn’t reach language milestones on time (e.g., single words by 15 months; two word phrases by 24 months)</td>
</tr>
<tr>
<td>• Repeats what others say (parroting or echolalia)</td>
</tr>
<tr>
<td>• Doesn’t respond to name</td>
</tr>
<tr>
<td>• Uses pronouns (“I” and “you”) incorrectly</td>
</tr>
<tr>
<td>• Doesn’t initiate conversations</td>
</tr>
<tr>
<td>• Lack of reciprocity (turn taking)</td>
</tr>
<tr>
<td>• Doesn’t participate in pretend play or interact with others during play</td>
</tr>
<tr>
<td>• Good rote memory (e.g., numbers, songs, TV jingles, specific topics)</td>
</tr>
<tr>
<td>• Literalness</td>
</tr>
<tr>
<td>• Bluntness</td>
</tr>
<tr>
<td>• Flat intonation or sing-song tone of voice</td>
</tr>
<tr>
<td>• Lose language (regression)</td>
</tr>
<tr>
<td>• Inability to understand body language, tone of voice, or expressions of speech during interactions</td>
</tr>
<tr>
<td>• Facial expressions and gestures may not match what the person is saying</td>
</tr>
</tbody>
</table>
Behavior

Even though most people with Autism do not look physically different, they may be set apart from other people by their “odd”, repetitive behaviors. These behaviors may be subtle or extreme.

Many people with Autism need complete structure and routine in their environment. If slight changes occur in routines (e.g., changes in mealtime, dressing, taking a bath, going to school or work at a certain time, going to bed, etc.), it may be very stressful for the person and he or she may become agitated or upset.

Repetitive behaviors may also take the form of an intense obsession or preoccupation. These strong interests may be problematic because of their unusual content (e.g., interest in fans, toilets, or wheels), or because of the intensity of the interest (e.g., knowing detailed information about a television show or movie). A young child with Autism might be obsessed with a particular item (e.g., vacuum cleaners, balls, mirrors, etc.). An older individual with Autism might be preoccupied with numbers, letters, symbols, dates, or a specific topic.

The most common behavioral symptoms of Autism are summarized in the following table.

<table>
<thead>
<tr>
<th>Behavioral Symptoms of Autism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rock, spin, sway, twirl fingers, flap hands (stereotypic behaviors)</td>
</tr>
<tr>
<td>Preference for structure, routines, order and rituals</td>
</tr>
<tr>
<td>Obsession with an activity or topic</td>
</tr>
<tr>
<td>Play with parts of toys instead of whole toy (e.g., wheels on truck)</td>
</tr>
<tr>
<td>Increased tolerance of pain</td>
</tr>
<tr>
<td>Very sensitive or not sensitive at all to smells, sounds, lights, textures, and touch</td>
</tr>
<tr>
<td>Look at objects from unusual angles</td>
</tr>
<tr>
<td>Unusual or intense interests</td>
</tr>
</tbody>
</table>

Challenging behaviors can occur throughout the lifespan of an individual with Autism. The core and associated symptoms of Autism can adjust over time and as a result, many individuals with Autism experience changes at various stages of life that might result in new challenging behaviors. Autism symptoms and severity are different for each individual with Autism. One person with Autism may have very different symptoms from another individual with the same diagnosis. It has often been said, “If you know one person with Autism, you know one person with Autism” (Autism Speaks Inc., 2008).

History of Autism

Dr. Kanner was an Austrian-American psychiatrist and physician who first identified Autism in a paper (“Autistic Disturbances of Affective Contact”) which he wrote in 1943 for the “Nervous Child” Journal. Based on his observations of 11 children at Johns Hopkins Hospital, Dr. Kanner
used the word Autism from the Greek word “auto” which means “self”. In each of these 11 children, Dr. Kanner described the following common characteristics:

- Profound lack of emotional contact with others
- Intense desire for routines and sameness
- Speech abnormalities
- Fascination with the manipulation of objects
- High levels of visual-spatial skills but major learning challenges in other areas

**Causes of Autism**

In most cases of Autism, the cause is unknown. Just as there are different symptoms and levels of severity in Autism, there is probably more than one cause. According to Autism Speaks, emerging scientific evidence points to various combinations of factors which may cause Autism. These may include:

- Genetic components which cause Autism on their own
- Genetic components in combination with exposure to environmental factors
- Exposure to environmental factors during critical developmental periods (before, during, or after birth)
- Genetic disorders such as Fragile X, Tuberous Sclerosis, untreated Phenylketonuria (PKU) and Angelman’s Syndrome
- Exposure to infection (e.g., maternal rubella) or chemicals/medication (e.g., thalidomide or valproate) during pregnancy
- Issues in the immune system

While there is no definite cause (or causes) of Autism, it is NOT caused by bad parenting as originally suggested by Dr. Leo Kanner in 1943. Through his work with children at Johns Hopkins Hospital, Dr. Kanner proposed that Autism was caused by cold, unloving parents, especially mothers. Because many parents believed they were the cause of their son’s and daughter’s Autism, a generation of parents carried a burden of guilt for their children’s disability. In the 1960s and 70s the medical profession established that Autism is a biological disorder rather than a result of poor parenting.

“The best scientific evidence available to us today points toward a potential for various combinations of factors causing Autism.” (Autism Speaks Inc., 2008)

**Prevalence of Autism**

In the United States, Autism is the fastest growing developmental disability. Autism is more common than Down Syndrome, cerebral palsy, hearing loss, and visual impairment. It is also more common than childhood cancer, juvenile diabetes, and AIDS combined.
About 1 in 68 children has been identified with autism according to estimates from CDC’s Autism and Developmental Disabilities Monitoring (ADDM) Network (2014).* Although the exact reason for this increase in prevalence is not clear, the following explanations have been proposed.

- Increased publicity and awareness of Autism
- Improved screening tools and services
- Changes in how Autism has been defined and diagnosed
- Identification of more children with mild symptoms.

Individual with Autism come from all racial, ethnic, and social groups. Boys are three to four times more likely to be diagnosed with Autism than girls.

*Note: Prevalence rates change often as revisions of criteria and diagnostic tools take place. The information presented here is reflective of data available as of May, 2014 on the CDC website.

**Early Signs of Autism**

Early signs of Autism may be difficult to notice because many young children with Autism often reach developmental milestones (e.g., sitting up, crawling, and walking) on time. Delays in other areas such as communication and social skills may not be obvious, so parents may not realize that there is a problem right away.

When parents look back on their child’s development, however, they often mention that something seemed different. Parents report the following differences in their young child with Autism.

- Limited eye contact
- No interest in cuddling
- Not responding when name is called
- Not smiling in response to others
- Tuning others out
- Not pointing to desired items
- Not bringing objects to show others
- No reciprocal interactions (turn taking)
- Limited use of gestures (e.g., do not wave goodbye, do not lift arms to be picked up, do not play “patty cake”, etc.)
- Repetitive motions (e.g., hand flapping, rocking, twirling, pacing, etc.)
- No pretend play
Children with Autism may also have significant delays in language. The following differences have been reported in the language development of children with Autism.

- Talk very little or not at all
- Do not communicate to get another person’s attention
- Talk gibberish longer than typically developing children
- Do not engage in back and forth talk with others
- Use “pop-up” words (random words that seem to be spoken out of context)
- Repeat words from songs, nursery rhymes, TV jingles (e.g., parroting or echolalia)
- Unable to communicate basic needs even though they may be able to name colors and shapes or read words at a very young age

Regression in Developmental Milestones

It is estimated that approximately 25% of children with Autism seem to have normal development until about 18 months of age. Around 18 months, these children seem to lose skills either gradually or suddenly in the following areas:

- Communication (e.g., stop babbling or talking)
- Using gestures (e.g., stop waving, stop playing “patty cake”)
- Responding to others (e.g., stop turning head when name is called, withdrawn, no interest in surroundings)

Diagnosis of Autism

It is important for children with Autism to be identified as early as possible. Unfortunately, however, a diagnosis may be delayed because parents’ concerns are not taken seriously by professionals. Because there is no medical test for Autism, a diagnosis is usually based on behavioral observations and educational and psychological testing.

Children with autism are usually diagnosed by age three. New research, however, is documenting cases in which children with Autism are diagnosed as early as six months. (Autism Speaks Inc., 2008)

Usually, parents are the first to notice their child’s atypical behaviors and failure to achieve developmental milestones. While some parents report that their child seemed different from birth, others describe a child who appeared to be developing normally and then lost skills. Some pediatricians may initially ignore signs of Autism and recommend that parents take a “wait and see” approach in hopes that the child will “catch up”. New research, however, shows that parents are usually correct when they suspect that something is different about their child.

Autism is complex and each individual has different symptoms. Because there are no lab tests for diagnosing Autism, pediatricians must rely on information that parents provide as well as observations during “well-child” checkups.
If Autism is suspected as a cause for delays in communication and social skills, a full evaluation should be completed. This may be done by a physician or psychologist who has expertise in the area of Autism. However, best practice recommends an evaluation by a team of specialists including: a developmental pediatrician, child neurologist, child psychiatrist, speech-language pathologist, occupational and physical therapist, educator, and social worker. A diagnosis of Autism is usually obtained through one of the following ways:

- A pediatrician’s screening for developmental milestones during routine “well-child” visits which includes a detailed history, physical exam, and parent interview
- A referral to early intervention or special education services because of other developmental delays
- An evaluation by a developmental pediatrician, neurologist, psychiatrist, or psychologist
- A developmental assessment of skills by a team of specialists including an audiologist (to screen for hearing loss), speech and language therapist (to identify language skills and needs), and an occupational and physical therapist (to assess daily living skills and physical and motor skills)

An evaluation should include an Autism screening tool such as the Modified Checklist of Autism (MCHAT). In the MCHAT, parents answer a series of simple questions about their child. The parents’ answers provide a foundation for further evaluation and treatment recommendations. In addition to the MCHAT, there are other screening tools available for older children.

Information from a variety of formal and informal sources is important for a proper diagnosis of Autism. Several studies have shown that people with Autism develop differently than their typically developing peers and peers with other disabilities (e.g., mental retardation). Therefore, parental reports of differences in their child’s developmental patterns are a critical source of diagnostic information.

It may be helpful to observe parent-child interactions during play time. It may also be useful to use an interview format to collect information from the parents about their child’s early developmental history. An open-ended interview format provides information needed for the diagnosis and may be useful for building trust and rapport with the parents. A list of
recommended questions in several key areas is provided in Appendix A. Common developmental patterns which are often reported in Autism are included in italics for each question as a reference.

It is crucial to have a detailed and comprehensive diagnosis for people with Autism. An Autism diagnosis is necessary to:

- Provide information about the person’s development and behavior
- Determine the person’s strengths and challenges
- Access support services through early intervention providers or local school districts
- Identify treatment options for the person

A DIAGNOSIS PROVIDES A ROADMAP FOR INTERVENTION “Before our son was diagnosed with Autism, everyone told me I was worrying about nothing. They said he was a “late bloomer” and that he would “grow out of it”. They told me to “wait and see”. I didn’t want to just wait. Now that we know, we can help him.” (Autism Speaks, Inc., 2008)

How to get evaluated as an adult

Evaluating Autism in a previously undiagnosed adult can be challenging. There are no established diagnostic tests for Autism. However, they are currently in development.

**Conducting an adult evaluation:** Because of these limitations, the evaluation of an adult has to lean heavily on direct observation. This in the context of discussion between the clinician and the patient about current challenges in the areas of social interaction and communication, sensory issues and restricted interests or repetitive behavior.

**Why a diagnosis may be needed:** An official diagnosis can help answer questions about an individual and his/her behavior for many years. A diagnosis can be a relief and can increase self-awareness. It gives an explanation for behaviors, access to treatment and services, and connections to support groups.

**Related Conditions: Physical and Medical Issues That May Accompany Autism**

People with Autism may also have issues in the following areas:

**Sensory Integration:** Many people with Autism experience unusual responses to sensory input in areas such as hearing, vision, touch, smell, taste, movement, and position. Sensory input that seems “normal” to others can be experienced as overwhelming, confusing, painful, or unpleasant to people with Autism. Challenges with sensory integration
may result in hypersensitivity (e.g., intolerance to being touched, wearing clothes, being in a room with normal lighting, being in a kitchen with normal smells, being in a room with the radio on at normal volume, fire alarms, etc.) or hyposensitivity (e.g., constant need for sensory stimulation or unusually high tolerance to pain).

**Anxiety:** Recent studies indicate 30% of people with Autism struggle with Anxiety disorder such as social phobia, separation anxiety panic disorder, and specific phobias. (Autism Speaks Inc., 2015) Understanding emotions can be difficult for people with Autism. Anxiety can affect both the mind and the body, and produce a range of symptoms.

<table>
<thead>
<tr>
<th>PSYCHOLOGICAL SYMPTOMS</th>
<th>PHYSICAL SYMPTOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easily losing patience</td>
<td>Excessive thirst</td>
</tr>
<tr>
<td>Difficulty concentrating</td>
<td>Stomach upsets, Loose bowel movements</td>
</tr>
<tr>
<td>Thinking constantly about the worse outcome</td>
<td>Periods of having gas</td>
</tr>
<tr>
<td>Difficulty sleeping</td>
<td>Frequent urinating</td>
</tr>
<tr>
<td>Depression</td>
<td>Periods of intensely pounding heart</td>
</tr>
<tr>
<td>Becoming preoccupied with or obsessive about one subject</td>
<td>Muscle aches, headaches, dizziness</td>
</tr>
</tbody>
</table>


**Seizure Disorders:** It is estimated that as many as 39% of people with Autism also have a seizure disorder called epilepsy (Autism Speaks Inc., 2008). The seizures that are associated with Autism usually start in early childhood or adolescence but they may occur at any time during the person’s lifespan. There are three different types of seizures which a person with Autism may experience. These include:

- Grand mal (tonic-clonic)
- Petit mal (absence)
- Subclinical (only apparent in an electroencephalogram)

People with epilepsy are usually treated with seizure medications to minimize or eliminate occurrences. See the *Seizures* training manual in the North Dakota Community Staff Training Curriculum for more information.

**Genetic Disorders:** A small percentage of people with Autism may also have another condition such as Fragile X Syndrome, Angelman’s Syndrome, Tuberous Sclerosis, or Chromosome 15 Duplication Syndrome.
If a person with Autism has a family history or physical traits associated with these disorders, the family should be referred to a developmental pediatrician, geneticist, and/or neurologist for evaluation.

**Gastrointestinal Disorders:** Many parents, support staff and healthcare providers report gastrointestinal problems such as gastritis, chronic constipation or diarrhea, colitis, celiac disease, recurrent vomiting, abdominal pain and esophagitis in people with Autism. Changes in behavior may occur in people with Autism because of the pain associated with gastrointestinal conditions. These may include an increase in behaviors such as rocking, aggression, or self-injury. People with Autism may not have the communication skills to tell someone about the pain which they are experiencing. If a person with Autism has symptoms related to gastrointestinal disorders, a physician or gastroenterologist should be consulted for testing and development of a treatment plan.

**Sleep Dysfunction:** It is very common for people with Autism to have sleep problems. Sometimes sleep issues are caused by medical conditions such as obstructive sleep apnea or gastroesophageal reflux. In these cases, addressing the medical issue may solve the person’s sleep problems. If sleep problems are not caused by a medical condition, behavioral interventions may be helpful. These may include limiting the person’s amount of sleep during the day and establishing regular routines at bedtime.

**Eating Issues:** Pica is a disorder that involves eating things that are not food. Although typically developing children between 18 and 24 months old eat non-food items, they usually outgrow this behavior. In people with Autism, however, this behavior persists past the age of two and they continue to eat items such as soil, feces, clay, chalk, paint chips, paper, and raw food ingredients. People with Autism may also have a tendency to overeat or to have definite preferences for certain foods (e.g., only eat foods of a particular texture).

**Prognosis for People with Autism**

Experts in the field of Autism disagree about whether or not it is possible for a person to “recover from” or be “cured of” Autism. Even though there is no known cure for Autism, many (if not all) people with Autism will benefit from effective intervention. Growing evidence indicates that a small minority of people with Autism progress to the point where they no longer meet the criteria for a diagnosis.

There are several theories which have been suggested to explain the recovery of some people with Autism. These include:

- The person was misdiagnosed in the first place
• The person had a type of Autism that resolves on its own with maturity
• The person benefited from successful interventions

It has also been suggested that some people with Autism reach “best outcome” status. These people score within the normal range on tests for IQ, language, and adaptive behavior, but have mild symptoms on some diagnostic evaluations. Other people who “recover” from Autism are later diagnosed with ADHD, anxiety, or Asperger Syndrome.

Currently, there is no way to predict which people will have the best outcomes based on genetic, medical, or developmental factors. Although “recovery” from Autism is usually associated with intensive early intervention, it is difficult to know which type of intervention, how much, or whether the progress can be totally credited to the intervention.

**Myths and Facts about Autism**

It is important for support providers to be aware of the myths often associated with Autism so that these myths can be countered with accurate information. Some of the most prevalent myths about Autism are described in this section.

*Myth: Parents cause their son/daughter to have Autism.*

*Fact:* This myth was promoted by professionals who proposed that Autism was caused by mothers who were cold and aloof. In reality, there is no scientific evidence to support this belief. In fact, there is no specific known cause for Autism. Current research indicates that Autism is probably caused by a combination of various environmental and genetic factors.

*Myth: All people with Autism are alike.*

*Fact:* While there are some core characteristics of Autism (e.g., difficulties in the areas of social interactions, communication, and stereotypical behaviors), the ways in which these characteristics are displayed varies from one individual to another.

*Myth: People can be cured of Autism.*

*Fact:* Autism is a lifelong condition. There is currently no known cure. As the person is supported and learns coping strategies, the visible characteristics of Autism may become less apparent. However, difficulties in areas such as social interactions, communication, and behaviors typically remain at some level throughout the life of the person with Autism.
Myth: People can turn their Autism “on” and “off”.

Fact: Autism is a pervasive (all-encompassing) condition which means it affects all areas of a person’s life. People do not have Autism some of the time and not at other times. People with Autism always have Autism. They cannot turn their Autism “on” and “off” to control or manipulate others. During some situations, the characteristics of Autism may be more pronounced (e.g., when the person is experiencing stress, anxiety, confusion). At other times, the same individual with Autism may exhibit behaviors that are typical for their age. This does not mean that the person has stopped having Autism.

Myth: People with Autism never make eye contact.

Fact: Some people with Autism do avoid eye contact. Others use eye contact in atypical ways. People with Autism may stare for extended periods of time or they may avoid eye contact during conversations. Some people with Autism have difficulty responding to more than one type of sensory input during interactions. For example, if a person is expected to make eye contact during a conversation, he or she may be unable to listen to the speaker at the same time.

Myth: People with Autism have to be in separate “Autism” programs.

Fact: All people with Autism are different and program decisions must be made on a person basis. Using a single intervention to meet the needs of all children and adults with Autism in a separate classroom or program is based on the erroneous assumption that all people with Autism have the same needs and goals. Federal education regulations indicate a clear preference for services and supports that are individualized based on the student’s needs and in the most inclusive setting appropriate for the child.

For adults with Autism, decisions about employment and living arrangements must also individualized. People with Autism do not all have the same job and living preferences. It is not appropriate to place all people in the same residential or employment setting based on their Autism label. Decisions must be made based on the individual strengths and preferences of people with Autism so that they have opportunities to participate, interact, and communicate in real world settings.

Myth: People with Autism prefer to be alone and without friends.

Fact: Just like anyone else, people with Autism have individual preferences about how and with whom they want to spend their free time. Some prefer to be alone. Others enjoy companionship but have difficulty interacting with others. For some people with Autism, lack of friendships can be a source of frustration and depression.
**Myth:** Autism is a hopeless condition.

**Fact:** Although Autism is a complex disorder, all people with Autism can learn skills for living, working, and playing in the community. A successful future for people with Autism is based on accurate information, early intervention, effective educational programming, and sufficient supports for adult living. People with Autism can live satisfying and productive lives with appropriate education, decisions based on individual preferences, adequate supports, and access to community opportunities.

**Considering Culture in Autism Spectrum Disorders.** Having an understanding of cultural values, beliefs, and practices related to disability is essential for professionals and agencies/organizations that provide services and supports for individuals with Autism. Several reviews indicate a range of issues that should be considered when addressing culture in the provision of services for people with Autism and families. An understanding of how culture determines each of the following is important (Bernier, Mao, & Yen, 2010; Mandall & Novak, 2005; Dyches, Wilder, Sudweeks, Obiakor, & Algozzine, 2004).

- Family expectations of typical child development
- General beliefs about disability causes, including Autism
- Choices about diagnosis and intervention for Autism
- Social support for families of children with Autism

For more information on Autism and Culture, refer to the *LEND Brief: ASD and Culture* Spring 2015 by the MN LEND Program Leadership Education in Neurodevelopmental & Related Disabilities available online [https://lend.umn.edu/docs/ASD_and_Culture_FINAL.pdf]
Chapter 1: Feedback Questions

1. What are the three severity levels within the Autism diagnoses in the DSM-5?

2. What is meant by the statement that “the characteristics of Autism are displayed on a continuum”?

3. List at least five common social symptoms of Autism.

4. Research has shown that children with Autism usually _________ (are OR are not) attached to their parents.

5. List at least ten common communication symptoms of Autism.

6. List at least seven common behavioral symptoms of Autism.

7. In most cases of Autism, the cause is __________.

8. __________ is the fastest growing developmental disability.

9. Approximately __________ of children with Autism seem to have normal development until about 18 months of age. Around 18 months, these children seem to lose skills.

10. It is important for children with Autism to be identified __________.

11. What two factors delay the diagnosis of Autism?

12. What four steps are included in the recommended process for diagnosing Autism?
13. Children with Autism are usually diagnosed by age ________. New research, however, is documenting cases in which children with Autism are diagnosed as early as ________ months.

14. Are boys or girls more likely to be diagnosed with Autism?

15. Can Autism be diagnosed with a lab test?

16. What is different about how many people with Autism experience sensory input?

17. Challenges with sensory integration may result in being either ________ sensitive to certain sensory input than most people to being _______sensitive than typical children or adults.

18. What are six physical and medical conditions that are related to Autism?

19. Children typically don’t continue to eat non-food items past the age of ___________.

20. List four possible explanations for the increased rate of Autism in America.

21. List three areas in which children with Autism may regress around 18 months of age.

22. Indicate if the following statements are Myth or Fact:
   a. _________ Parents cause their son/daughter to have Autism.
   b. _________ Current research indicates that Autism is probably caused by a combination of factors.
   c. _________ All people with Autism are exactly alike.
   d. _________ The ways in which Autism characteristics are displayed varies from one individual to another.
   e. _________ People can be cured of Autism.
   f. _________ Autism is a lifelong condition.
   g. _________ People can turn their Autism “on” and “off”.

20
During some situations, the characteristics of Autism may be more pronounced (e.g., when the person is experiencing stress, anxiety, confusion). At other times, the same individual with Autism may exhibit behaviors that are typical for their age.

People with Autism never make eye contact.

Some people with Autism avoid eye contact. Others use eye contact in atypical ways.

People with Autism have to be in separate “Autism” programs.

It is not appropriate to place all people in the same residential or employment setting based on their Autism diagnosis.

People with Autism prefer to be alone and without friends.

People with Autism have individual preferences about how and with whom they want to spend their free time.

Autism is a hopeless condition.

People with Autism can learn skills for living, working, and playing in the community.

People with Autism can live satisfying and productive lives.

Many (if not all) people with Autism will benefit from effective intervention.
Chapter Two: Educational Supports for Students with Autism

**Purpose:** This chapter addresses issues which are relevant for preschool and school age children with Autism. Many of these issues remain relevant across the lifespan and can be used effectively when supporting adults with Autism in a variety of support settings including employment, supported living, and community-based recreation activities.

**Objectives:**

After completing this chapter, support providers will be able to:

- Explain “least restrictive environment” as it pertains to children with Autism
- List common learning characteristics of people with Autism
- Explain why it is important to provide instruction in natural settings
- List suggestions for helping adolescents and adults with Autism who have difficulty learning
- List suggestions for maximizing the benefits of inclusion
- Describe benefits of friendships for people with and without Autism
- Describe how to support a person with Autism to develop friendships with people without disabilities
- Identify natural activities in which a person could practice learning goals
- Break a complex task into teachable steps in a task analysis

**Individuals with Disabilities Education Act**

The Individuals with Disabilities Act (IDEA) mandates that all states provide eligible children with a free and appropriate public education that meets their unique needs. The IDEA specifies that a child is entitled to receive early intervention or special education services if he or she meets the state definition of “disability.” Autism is specifically mentioned in the IDEA as a condition that constitutes a disability. Therefore, if a child has been diagnosed with Autism and the disability significantly impacts educational performance, he or she may be entitled to the educational services which are mandated by IDEA.

**Free and Appropriate Public Education (FAPE)**

Children with Autism are entitled to a free and appropriate education – one that is individualized to meet the child’s unique needs. Unfortunately, deciding what is appropriate for a specific student with Autism is not always easy. Identifying which services and interventions are most appropriate for a student with Autism requires a team of people.
**Least Restrictive Environment (LRE)**

Students and adults with Autism are entitled to services which are provided in the least restrictive environment. For school age children, this means that the child should be placed in the setting in which he or she has the most opportunities to participate in the general education curriculum and to interact with students who do not have Autism. If possible, students with Autism should be integrated into regular education classes with accommodations and support. A team approach must be taken to determine the least restrictive environment for each student with Autism.

**Early Intervention**

Instead of taking a “wait and see” approach until a child enters school at age four or five, an early intervention program should be implemented as soon as a diagnosis of Autism is made. Intensive early intervention is critical for young children (birth to three years) (Autism Society of America, 2000). Effective early intervention programs are characterized by the following principles:

- Active participation of the child for at least 25 hours a week
- Low student-to-teacher ratio to allow individualized instruction
- Opportunities for interactions with students without disabilities
- Ongoing documentation and monitoring of progress
- Consistent structure with predictable routines, visual schedules, and clear physical boundaries
- Opportunities to apply learned skills in new situations to promote generalization and maintenance (practicing crossing the streets in many parts of the community; at corners with traffic lights; stop signs; and neither)
- Inclusion of a family support component

Early intervention services may be provided to the child and his or her entire family. Early intervention services for a child with Autism may include Applied Behavior Analysis, speech and language instruction, occupational therapy, physical therapy, and psychological evaluation. Early intervention services may also include training to teach the family how to use the strategies at home and counseling to support family members.

Each young child with Autism has individual needs despite their common diagnostic label. Because of their uniqueness, it is important for support staff to provide early intervention services that address each child’s individual strengths and needs. The early intervention services must also match the preferences and needs of the child’s family.
There are several guidelines that should be followed in selecting and designing effective early intervention programs for children with Autism. Programs should:

- Consider the developmental level and specific needs of each child
- Use visual cues, routines, schedules, and predictability
- Use strategies such as teaching in the natural environment and incidental learning approaches
- Implement systematic instructional procedures based on Applied Behavior Analysis (e.g., discrete trial training) (See Chapter Three)
- Coordinate transitions between service providers (e.g., birth to three programs, preschool, and kindergarten programs)
- Use functional behavior assessments and positive behavior supports (See Chapter Four)
- Involve families in training and support activities

Early intervention offers the following benefits for children with Autism and their families:

- Provides the child with instruction that focuses on his or her strengths to build new skills, improve behavior, and address areas of weakness
- Presents information to help understand the child’s needs and behaviors
- Offers resources, training, and support to enable families to teach and play with their child more effectively
- Improves outcomes for children with Autism

**Educational Interventions**

The IDEA requires states to provide special education services to children with Autism beginning at the age of four. Special education services are provided by local school districts. The focus of special education services is teaching knowledge and skills to assist students in gaining independence and personal responsibility. Education includes academic learning, socialization, adaptive skills, communication, reduction of challenging behaviors, and generalization of skills across a variety of environments.

The document that describes a student’s needs and how these needs will be met is the Individualized Education Plan (IEP). Like the IFSP in early intervention programs, the IEP describes the child’s strengths and needs, outlines goals and objectives, and explains how these can be met within the context of the school system.

Despite their uniqueness, people with Autism may have similar learning characteristics. Individuals who support students and adults with Autism should have basic information about these characteristics and their impact on learning. It is important to remember, however, that while these learning characteristics are common, they are not true for every individual with Autism.
- Exceptional skills (sometimes referred to as “splinter skills”) in specific areas (e.g., very good in math but can’t read)
- Very good rote memory skills (learning steps that are repeated the same way)
- Difficulty with activities that require comprehension (understanding)
- Difficulty with changes in routine or environment (e.g., transitions across activities, settings, and people)
- Difficulty tuning in to important cues in the environment (e.g., recess bell, traffic noise, people’s expressions)
- Difficulty tuning out noises or activity that are not important
- Difficulty with unstructured time or excessive waiting
- Difficulty generalizing skills from one environment/situation to another (e.g., learning to use toilet paper at home, but not be able to use it correctly at school or at a restaurant)
- Delays in processing information (takes a long time for the person to understand what is said or asked of him or her)
- Delays in responding to requests or instructions (there may be significant wait time from the time an instruction is given until the child acts on the instruction)

People with Autism learn best when information is presented based on their personal learning styles. Many people with Autism process information better when it is presented visually. For example at work, the person could follow a picture sequence of steps to clean a motel room better than verbal prompts from a job coach. Other people with Autism learn by watching others perform the task (modeling) or with the assistance of physical prompts. Providing concrete examples (e.g., show an apple when you say “apple”) and opportunities for hands-on activities are also effective learning approaches. Detailed information about visual approaches for supporting people with Autism will be provided in Chapter Four (“Related Service” Strategies to Support Individuals with Autism).

Educational programs for individuals with Autism should include the following components:

- Functional communication in naturally occurring learning situations
- Social skills (e.g., joint attention, imitation, reciprocal (give-and-take interactions)
- Functional adaptive skills (skills a person needs to live, work, and play in his community)
- Positive behavioral supports
- Cognitive skills (e.g., taking the perspective of another, problem solving, academics for school age children)

Standardized tests aren’t the best measure of potential. Testing can provide useful information about how a person with Autism learns and identify challenging areas. Tests are not, however, a reliable predictor of future success. Many adults with Autism, who were labeled “low
functioning” as students, are now working and living in a variety of settings. They are active members of their communities with appropriate supports. When a person with Autism is labeled “low functioning” his or her potential may be limited if the vision that others have for that person is limited by the test results.

People with Autism who have severe cognitive limitations generally have greater difficulty with social and academic skills. These people may engage in stereotypical behaviors such as spinning, rocking, or hand flapping and often exhibit more challenging behaviors (e.g., aggression, self-injury, etc.). This may be because they have fewer ways of communicating with others and have not learned more appropriate ways to cope with daily stressors and demands. If a person doesn’t have another way to communicate, he/she may use aggressive or violent behavior to let others know what they need. Teaching plans for specific students must be developed on an individual basis. There is no such thing as one program for all people with Autism who are labeled low functioning versus all people who are labeled high functioning. No single approach fits all students with Autism who are perceived to be functioning at the same level.

**Functional Curriculum**

A functional curriculum may be most appropriate for people who have greater difficulty learning. A functional curriculum focuses on learning activities that the person will need to live, work, and recreate in his or her community, rather than focusing on academic skills.

When choosing which skills to teach, a good starting point is to meet with the person and his/her family members to identify daily activities in which the person would like to participate. For many activities, it may be appropriate to write a task analysis. A task analysis is a breakdown of an activity into smaller steps. After a person learns all of the steps, he or she will be able to complete the activity. A sample task analysis is provided for putting on a jacket.

**Steps for Putting on a Jacket with a Zipper**

1. Hold the jacket by the back of the neckline with one hand so that the inside of the jacket is facing the person
2. Extend one arm
3. Locate the correct sleeve opening of the jacket
4. Place the correct arm into the sleeve of the open front jacket
5. Reach for the open jacket behind the body with the other arm
6. Locate empty sleeve
7. Insert the arm into empty sleeve of jacket
8. Pull collar of jacket up
9. Straighten jacket
10. Bring edges of garment together
11. Move zipper glide to bottom of jacket
12. Grasp jacket and glide in left hand and secure glide to bottom
13. Grasp shaft of zipper
14. Place shaft in zipper glide
15. Grasp bottom of zipper
16. Grasp pull tab of open-end zipper
17. Pull tab of zipper to top of zipper
18. Secure pull tab by pressing it down against zipper

For younger students, community life skills may be taught in the context of the school environment. The following goals could be implemented to teach the grocery shopping activity in the school setting:

- During lunch time in the cafeteria, Sara will request two items using a communication board.
- During art class, Alex will cut coupons from the local grocery store ads.
- During math class, Annie will identify the amount needed for 10 food items using the next dollar strategy.
- During break time between classes, Seth will greet two classmates in the hallway by pointing to “Hello, how are you?” on his communication board.
- During writing class, Christy will use a sample to write five words for a grocery list.

As students get older, instruction should occur in the actual setting in which the activity occurs. This is often referred to as the “natural” setting. For example, grocery shopping should be taught in a grocery store. Simulations and mock settings do not prepare students with Autism to complete activities in real life settings. It is difficult for some students with Autism to generalize the skills that they learn in one setting (e.g., the classroom) to a setting which is significantly different (e.g., the grocery store). It also may be difficult for the student to practice the skill learned in one store with a particular staff person and grocery store clerk to another store. Generalization of the skill is best learned through practice, using the skill in a variety of settings with a variety of people present. The following suggestions may be helpful for adolescents and adults with Autism who have difficulty learning:

- Work closely with families so that skills which the person learns in the school setting can be practiced in the community with family members.
- Provide sufficient time to teach each skill. People with Autism may need extra opportunities to learn and practice a skill. Even after the skill has been mastered, opportunities for practice should be provided so that the skill is maintained over time.
- Use a team approach with related service staff (e.g., speech, occupational, and physical therapists) so that all of the person’s needs are supported in the natural environment.
- Provide necessary supports even after the person has mastered a skill. For example, if a person needs visual supports (picture or written cues) to learn a skill, he or she may always need visual support for that particular skill.
- Make sure that the person understands the expectations for a specific activity. Picture or written schedules and rules may be used to provide helpful information.
- Provide concrete examples and hands-on activities to assist people with Autism to understand abstract ideas and concepts. Use real-life activities and materials (e.g., real money).
- Intersperse easy tasks within difficult tasks to ensure that the person experiences success throughout the day.
- Provide strategies to assist the person during transitions from one task or setting to another or if there will be delays or wait time (e.g., picture or written schedules, relaxation techniques, “safe spot”, waiting strategies, etc.).
- Adapt instruction to meet the needs of all people. For example, while the rest of the group is working on multiplication facts, the person with Autism may be working on identifying numbers, exhibiting appropriate behavior, and initiating requests for help.
- Provide clear information about the beginning and ending times of an activity. Do not make the person redo an activity that he or she perceives as finished. If additional practice is required, it should be interspersed throughout the day instead of having the person complete multiple trials of the same skill (which leads to a “why bother” response).
- Embed communication into the entire school day. People who are nonverbal must have access to their communication system at all times.
- Complete a functional assessment to determine why challenging behaviors may be occurring. Positive behavior support should be used to teach alternative ways to respond to challenges. (Chapter Four)
- Teach skills during natural times of the day. For example, if a person is learning to use a vending machine, instruction should take place during break time at work.

**Possible Educational Accommodations**

A checklist of possible educational accommodations that can be used with students who have Autism is provided in the following table. (Northeast Independent School District, San Antonio, 1997). These accommodations are also appropriate for adults with Autism and can be applied by support providers who are responsible for helping adults learn new skills.

<table>
<thead>
<tr>
<th>Pacing</th>
<th>Self-Management/Follow Through</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Extend time requirements</td>
<td>___ Use visual daily schedule</td>
</tr>
<tr>
<td>___ Vary activity often</td>
<td>___ Use calendar</td>
</tr>
<tr>
<td>___ Allow breaks</td>
<td>___ Have individual repeat directions</td>
</tr>
<tr>
<td>___ Omit parts of assignments</td>
<td>___ Use “first____, then____” statements</td>
</tr>
<tr>
<td>___ Home set of materials for review</td>
<td>___ Teach in real life settings</td>
</tr>
<tr>
<td>___ Other ___________________</td>
<td>___ Plan for generalization</td>
</tr>
<tr>
<td>___ Other ___________________</td>
<td>___ Other ___________________</td>
</tr>
</tbody>
</table>
### Environment
- Plan seating
- Alter room arrangement
- Define areas concretely
- Reduce distractions
- Teach rules for use of space
- Other ________________________

### Social Supports
- Create opportunities for interactions
- Cooperative activities
- Social stories
- Written protocols/scripts
- Rehearse social skills
- Teach social communication skills (e.g., greetings, turn taking, sharing)
- Other ________________________

### Presentation of Content
- Teach to individual’s learning style
- Cooperative learning groups
- Specialized curriculum
- Give extra cues
- Demonstrate/model
- Use visual sequence
- Other ________________________

### Motivation and Reinforcement
- Verbal reinforcement
- Nonverbal reinforcement
- Provide choices
- Intersperse difficult and easy tasks
- Capitalize on strengths/interests
- Other ________________________

### Assignments
- Give verbal directions in small steps
- Use picture or written directions
- Lower difficulty level
- Shorten assignment
- Provide alternative assignment
- Use hands on activities
- Allow individual to tape/type assignment
- Other ________________________

### Testing Adaptations
- Give test orally
- Read test to individual
- Modify test (shorten # of questions, provide word bank, change format)
- Extend time
- Other ________________________

### Additional tips for teaching people with Autism are provided in Appendix B.

**Inclusion**

Inclusion is often discussed in terms of “inclusive students”, “inclusive classrooms”, or “inclusive schools”. Inclusion, however, is not a student, a classroom, or a school. Instead, inclusion is a belief or philosophy that ALL people should be members of the general community. Children and adults with and without Autism should have access to the full range of options. This means that students with Autism should have access to typical homerooms, general education classes, social clubs, and
extracurricular activities. Inclusion eliminates the need for dual systems of “special” and “regular” education and creates a merged system that is responsive to the learning needs of all students.

The inclusion of students with Autism in regular education classes is very controversial. In reality, neither general education nor special education is inherently good. Just because a student is placed in a general education setting does not mean he or she is learning valuable information. Similarly, segregation does not equal quality programming. It is important to move past arguments about inclusion. Efforts should be focused on using effective teaching strategies to teach all students what they need to know.

Inclusion is not just a special education issue. Good schools are good schools for all students. Good teachers are good teachers for all students. As schools focus on improving outcomes and on preparing students for meaningful and productive lives, they will be in a better position to support the diverse learning needs of all students.

There are several suggestions which can be used to ensure the best outcomes from inclusion in general education settings for students with Autism. (These principles apply across the life span for people with Autism, but the purpose of this chapter is to focus on the needs of school age children with Autism.)

- **Provide training to educators.** Oftentimes, teachers feel unprepared to teach students with Autism. If teachers do not receive information and support, they are set up for failure. At the very least, teachers need to know about the primary characteristics of Autism, including strengths, areas of difficulty, and other important information. The instructional team also needs time to meet to address concerns and brainstorm possible solutions.

- **Welcome all students as members of the school community.** Schools that believe all students are part of the school community are in a better position to support students with Autism. Administrators have a key role in setting the tone for acceptance of diverse students into the school community.

- **Design a schedule which capitalizes on the students’ strengths.** It is important for students to experience success during the school day. It may be helpful to intersperse easy and difficult classes throughout the student’s day or to have easier classes during times of the day which are difficult for the student. It is also important to avoid certain environmental factors which may be difficult for the student (e.g., crowded classrooms, excessive noise, bright lights, etc.). If the demands of the school day become too intense, it may be helpful to provide a safe area in which the student can “escape”. Some students with Autism may learn best if opportunities for physical activity/exercise are incorporated throughout the day.
• **Implement peer-support programs.** Students learn best from each other. Peers are a natural and readily available source of support for students with Autism in general education classrooms. Study groups, tutoring, and cooperative learning may be effective strategies for supporting students who are struggling with some component of the school curriculum.

• **Provide instructional assistants** (para-educators). Instructional assistants can be valuable members of the educational team for students with Autism. Instructional assistants should receive training on providing effective instruction. It is also important for a variety of instructional assistants to work with students who have Autism so that the student does not become dependent on one person. Instructional assistants should be a part of brainstorming sessions in which concerns are addressed and solutions are identified. Sharing information about what works and what to avoid among instructional assistants and teachers is essential.

• **Give students information about rules and expectations.** Information about rules and expectations should be given to students in written and visual formats. This information should be readily available so that students can review them at their own pace and refer to them as needed (especially during stressful situations).

Research studies have shown that students with Autism can learn in inclusive settings if sufficient supports are provided, all members of the educational team are informed, and research-based methods of instruction are used. (Pratt, 1997). In addition, adults with Autism also benefit from inclusive employment, recreation activities, and living arrangements. Strategies for including adults with Autism in integrated settings will be presented in Chapter 5.

**Friendships**

For many people, friendships are among the most meaningful and important relationships in their lives. Friendships have an impact on all areas of a person’s well-being, are significant throughout one’s whole life, and are shaped by the unique traits of the participants (e.g., gender, needs, social skills, interests, etc.). For people with Autism, the development of friendships is critical.

There are many types and purposes of friendships. In the most basic type of friendship, people spend time together pursuing common interests. In this type of friendship, participants boost each other’s self-esteem and enhance feelings of empathy, trust, and intimacy (Shulman, Elicker, & Stroufe, 1994; Shulman, 1993). These friendships are reciprocal in that they provide mutual benefits, nurturing, and support to the people who are involved (Falvey & Rosenberg, 1995).
Friendships between peers with and without Autism can result in the following additional benefits (McDonnell, Hardeman, McDonnell, Kiefer-O’Donnell, 1995):

- Greater understanding and appreciation of individual differences
- Development of typical, age-appropriate social behaviors
- Expanded social networks
- Improved quality of life

Lasting friendships between people with and without Autism require some planning and support. Using the strategies described in the next section, family members and support providers can help set the foundation for interactions between peers that can result in such friendships.

There are two key strategies that can be used to promote social interactions between peers with and without Autism:

**Relationship facilitation strategies.** Support providers play an active role in fostering social interactions and relationships between people with and without Autism. Strategies include modeling respect and acceptance and including the person with Autism in naturally occurring activities (Snell & Janney, 2000).

**Social skills instruction.** Social skills instruction is another key strategy which can be used to promote peer acceptance and friendships for people with Autism. There are many commercial programs that focus on social skills instruction (Carter & Hughes, 2005; Snell & Janney, 2000). Social skills learning activities can be implemented individually or during small group instruction. There are several considerations in identifying the most appropriate approach. These include:

- Skills and instruction should be age appropriate
- Instruction should use verbal and visual cues
- There should be multiple opportunities for the person with Autism to practice the skills with various people in a variety of real life settings
- The training should focus on the development of discrete skills (establishing and maintaining eye contact or joint attention) as well as complex skills (engaging in a conversation)

For people with Autism, opportunity for social interactions is one of the most important considerations. When opportunities are available, people with Autism and their peers develop friendships. Direct support professionals and instructional assistants play a key role in creating opportunities for friendships to occur. For many people with Autism, the initial opportunities won’t occur without some planning and coordination by the support provider. As the relationships develop and the person develops social skills, support providers will play a less important role. For some people, some involvement of the support provider will be needed for a long time. For others, support can be faded much sooner. Provide just enough support to give the relationship a chance to succeed.
There are four factors which influence the development of friendships for people with Autism. These include: 1) individual characteristics; 2) social competency; 3) social context; and 4) developmental context.

- **Individual characteristics:** Reciprocal relationships are based on commonalities shared by both people. Friends are usually more alike than different. They usually share similar characteristics such as age, gender, ethnicity, appearance, attitudes, interests and goals (Hartup, 1996). These characteristics often form the foundation of a friendship. People who provide support to people with Autism should consider these characteristics when they support activities and interactions to foster friendships between people with and without Autism.

- **Social competency:** Basic social skills (e.g., eye contact, joint attention, turn taking, etc.) are the foundation of social competence. People with Autism often need systematic instruction and opportunities to learn social skills in a wide range of natural environments with a variety of people. See the Supporting Communication module in the North Dakota Community Staff Training curriculum for more information.

- **Social context:** Inclusive environments are the most common environment for interactions (Hendrickson, 1996). It is important to provide frequent opportunities for contact between peers with and without Autism to increase the likelihood that interactions will lead to the development of friendships. In the initial stages of the friendship, it may be necessary to support the interaction through prompting, reinforcing, and providing feedback to the person and his peers.

- **Developmental context:** Friendships change over time. Friendships that begin in childhood usually become more complex in early adolescence (Newcomb & Bagwell, 1996). Because of changes in friendships across the life span, opportunities for interactions and instruction should be reviewed periodically and modified as necessary.

For people who have Autism, social interactions and friendships are crucial for best possible adult outcomes. It can be a complex task to foster friendships. Use strategies that promote interactions and those that have specific goals and objectives related to the four factors described in this section.
Chapter 2: Feedback Questions

1. Under __________, children with Autism are entitled to educational services.

2. At what age should an early intervention program be implemented for a child diagnosed with Autism?

3. What is meant by the statement that children with Autism are entitled to educational services which are provided in the least restrictive environment?

4. List seven principles by which early intervention programs should be characterized.

5. The document that is used for providing Early Intervention services to young children with Autism and their families is called the _______________.

6. Describe seven guidelines for selecting and designing effective early intervention programs for children with Autism.


8. The document that is used for planning educational services for school age children with Autism is called a(n) __________.

9. List ten common learning characteristics of people with Autism.

10. List five components of educational programs for school age children with Autism.
11. Why is it important to provide individualized educational services for students with Autism?

12. What is a task analysis?

13. Why is it important to provide instruction in natural settings?

14. List 14 suggestions for helping adolescents and adults with Autism who have difficulty learning.

15. Fill in the blanks:

<table>
<thead>
<tr>
<th>Pacing</th>
<th>Self-Management/Follow Through</th>
</tr>
</thead>
<tbody>
<tr>
<td>• _____ time requirements</td>
<td>• Use _____ daily schedule</td>
</tr>
<tr>
<td>• _____ activity often</td>
<td>• Use personal _____</td>
</tr>
<tr>
<td>• Allow _____</td>
<td>• Have individual _____ directions</td>
</tr>
<tr>
<td>• _____ parts of assignments</td>
<td>• Use _______ _______ statements</td>
</tr>
<tr>
<td>• Provide a set of materials for review at _____</td>
<td>• Teach in _______ settings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
<th>Social Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td>• _____ seating</td>
<td>• Create opportunities for ________</td>
</tr>
<tr>
<td>• _____ room arrangement</td>
<td>• _______ activities</td>
</tr>
<tr>
<td>• Define areas _____</td>
<td>• _____ stories</td>
</tr>
<tr>
<td>• _____ distractions</td>
<td>• Written protocols/ _____</td>
</tr>
<tr>
<td>• Teach _____ for use of space</td>
<td>• _____ social skills</td>
</tr>
<tr>
<td></td>
<td>• Teach _____ communication skills (e.g., greetings, turn taking)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Presentation of Content</th>
<th>Motivation and Reinforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teach to individual’s _________</td>
<td>• _____ reinforcement</td>
</tr>
<tr>
<td>• _____ learning groups</td>
<td>• _____ reinforcement</td>
</tr>
<tr>
<td>• _____ curriculum</td>
<td>• Provide _____</td>
</tr>
<tr>
<td>• Give _____ cues</td>
<td>• _____ difficult and easy tasks</td>
</tr>
<tr>
<td>• _____/model</td>
<td>• Capitalize on ________</td>
</tr>
<tr>
<td>• Use _____ sequence</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Testing Adaptations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Give verbal directions in _________</td>
<td>• Give test _____</td>
</tr>
<tr>
<td>• Use _____ or _____ directions</td>
<td>• _____ test to individual</td>
</tr>
<tr>
<td>• Lower _____ level</td>
<td>• _____ test (shorten # of questions, provide word bank, change format)</td>
</tr>
<tr>
<td>• _____ assignment</td>
<td>• Extend _____</td>
</tr>
<tr>
<td>• Provide _____ assignment</td>
<td></td>
</tr>
<tr>
<td>• Use _____ activities</td>
<td></td>
</tr>
</tbody>
</table>
16. List six suggestions for ensuring the best outcomes of inclusion.

17. Describe four benefits of friendships for people with and without Autism.

18. Two key strategies for promoting interactions are _________________ and ________________.

19. List four considerations for selecting a social skills program.

20. Think about a person with Autism you support and describe how you would apply these four factors in supporting the person to develop friendships with people without disabilities:
   a. individual characteristics
   b. social competency
   c. social context
   d. developmental context

21. Identify natural activities in which an adolescent or adult with Autism could practice the following goals. The first goal is completed as an example.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Natural Setting for Goal Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognize coins</td>
<td>Vending machine at school or work</td>
</tr>
<tr>
<td>Use pictures to ask for assistance</td>
<td></td>
</tr>
<tr>
<td>Read sight words in a recipe</td>
<td></td>
</tr>
<tr>
<td>Clean up work space</td>
<td></td>
</tr>
<tr>
<td>Zipping a zipper</td>
<td></td>
</tr>
<tr>
<td>Recognize numbers</td>
<td></td>
</tr>
</tbody>
</table>

22. Write a task analysis with at least 10 steps for buying a DVD at Target.
Chapter Three: Intervention Options for People with Autism

**Purpose:** Support providers will select and correctly implement support strategies that are likely to have positive outcomes for people with Autism.

**Objectives:**

After completing this chapter, support providers will be able to:

- List three reasons why it may be difficult for parents and professionals to select interventions that have the best chance of leading to positive outcomes for people with Autism
- Explain why some parents are willing to try questionable interventions for their son or daughter with Autism
- Identify appropriate interventions for people with Autism
- Describe four categories of Autism interventions
- List the five steps which the Applied Behavior Analysis approach uses to teach new skills or decrease challenging behaviors
- Identify reasons why Discrete Trial Training is often effective for people with Autism
- Give examples of how Floortime principles for improving social and communication skills might be used with adults

**Choosing the Right Intervention**

Interventions are the approaches or strategies a team selects based on the needs of a person with Autism. Interventions are used to teach new skills and reduce challenging behaviors. It is critical to identify and correctly use interventions that have the best chance of leading to positive outcomes for the person with Autism. This is a difficult task for parents and support staff, however, because of the following factors:

- There is disagreement in the field of Autism about which interventions are most effective.
- The elements of effective and scientifically-based interventions are vague and undecided.
- There are limited practical guidelines to help families and professionals make decisions about interventions.

Because of these factors, people with Autism have often been on the receiving end of interventions which are unproven and controversial. There are many questionable interventions
that take advantage of parents who are willing to try just about anything to help their son or daughter. Parents and professionals may be willing to try these approaches because they often promise dramatic improvements and sometimes even “curing.” Even if these approaches are not scientifically validated, parents and support staff may be willing to “take a chance” and consider using treatments that usually have little benefit. The use of “miracle cures” and unproven interventions has been harmful to the field of Autism treatment.

Ultimately, family members and support providers must decide whether a particular intervention is appropriate for a specific individual. Concise information about the effectiveness of various interventions must be available and used in making these decisions.

**Recommendations for Parents and Support Providers**

Most parents and support providers would welcome an intervention that would alleviate all of the symptoms and challenges of Autism. Autism is a complex disorder, however, and cannot be remedied with just one intervention. No single intervention is effective for every individual with Autism. Also, an intervention that seems to work for a particular person may become ineffective over time.

Some interventions are supported by research; others are not. It is important for parents and support providers to understand the effectiveness of each intervention so that they can identify the possible benefits and risk for a specific individual with Autism.

Heflin and Simpson (1998) recommend three basic questions to guide parents and support staff in identifying appropriate interventions for people with Autism.

**Question #1: What are the expected outcomes of a particular intervention and do these outcomes match the needs of the person with Autism?**

It is essential for parents and professionals to evaluate the merits of a specific intervention. This is a difficult task because claims that a particular intervention is “evidence-based” or “research-based” may not be true. Be cautious about believing information from Internet websites or magazine articles that include personal testimonies about a particular intervention, as well as information that only comes from a single source.

Specific interventions should only be selected if they have been evaluated for overall effectiveness and usefulness in scientific research studies and reported in peer-referenced journals. Check to see if the research was conducted on people who are similar to the person for whom the intervention is being considered. Determine if the outcomes the intervention claims are in alignment with the needs of this person also.
Question #2: What are the potential risks with are associated with the intervention?

Evaluate any possible negative side effects that may be associated with a particular intervention. Potential risks may include health, behavioral, and quality of life factors for a person with Autism. Family-related risks involved with implementing an intensive intervention must also be considered. The risks to consider include cost, time, and stress on the family.

Question #3: How will interventions be evaluated?

Evaluation is essential to determine if a particular intervention is effective and if it is resulting in desired outcomes. Evaluation also involves monitoring for potential negative side effects that are occurring. It is not enough to accept that a specific intervention is effective based only on published or reported research results. Parents and professionals must also determine whether the intervention results in positive outcomes for the person with Autism that they are supporting.

The following questions can be used to guide the evaluation of a particular intervention:

- What are the criteria that will be used to determine if an intervention is effective and should be continued?
- How will the person’s progress be documented?
- Who will complete the evaluation?
- With whom will the results be shared?
- How frequently will the intervention be evaluated?

Research-Based Evidence for Effective Interventions

Despite the challenges mentioned, people with Autism must have access to the most effective interventions. The No Child Left Behind Act of 2001 (NCLB) and other legislative initiatives have been instrumental in calling for effective and scientific-based interventions for people with Autism.

Simpson and his colleagues used the following criteria to evaluate 33 frequently used interventions for people with Autism:

- Reported outcomes and effects of the intervention
- Qualifications of the people who are implementing the intervention
- How, where, and when the intervention is best administered
- Possible risks related to the intervention
- Costs associated with the intervention
- Methods for evaluating the effectiveness of the intervention
Based on these considerations, interventions were classified into the following categories:

<table>
<thead>
<tr>
<th>Scientifically-based</th>
<th>Proof of significant and convincing effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promising practice</td>
<td>Has effectiveness and usefulness even though the method requires additional proof</td>
</tr>
<tr>
<td>Practice with limited supporting information</td>
<td>Lacks evidence, with unsure or potential value and usefulness</td>
</tr>
<tr>
<td>Not recommended</td>
<td>Lacks effectiveness and has the potential to be harmful</td>
</tr>
</tbody>
</table>

The Autism field focuses on identifying and implementing those approaches that have the greatest potential for achieving desired outcomes. It is probably unlikely that there is a single approach which is best for all people. There are, however, some interventions that are associated with better results. The best interventions for people with Autism are probably those which integrate a combination of scientifically-based approaches and that are designed to support the individualized needs of people with Autism.

There are three interventions which have been found to meet the highest criteria of the scientifically-based category. These include:

- Applied Behavior Analysis (ABA)
- Discrete Trial Training
- Pivotal Response Training

**Applied Behavior Analysis (ABA)**

Many people make significant progress with Applied Behavior Analysis (ABA) and some even lose their Autism diagnosis after many years of intensive therapy. Since the late 1970’s, behavior analysts have used Applied Behavior Analysis to teach skills such as social, academic, self-care, employment, and community living to people with Autism. Applied Behavior Analysis has also been used to support positive behavior and reduce challenging behavior.

**How ABA Works**

The Lovaas approach to ABA starts with “discrete trial” training (as described in the next section). A discrete trial consists of a teacher/support provider asking the person with Autism for a specific behavior (e.g., “Sara, pick up the soap”). If the person complies with the request, she is given a reinforcer (e.g., tiny food treat, high five, or another reinforcer meaningful to the person). If the person does not complete the request, the reinforcer is not delivered and the trial is repeated.

Applied Behavior Analysis uses five steps to teach new skills or to reduce problem behaviors. These include:
1. A cue/signal (from the environment or another person) that tells the person it’s time to complete a skill or activity (e.g., dirty hands or a verbal cue “It’s time to wash your hands Sara”). The term for this cue is “discriminative stimulus”

2. A prompt – A verbal or physical prompt (instruction or request) that comes from another person (e.g., “Sara, pick up the soap” or the support provider pointing to the soap).

3. A resulting behavior – The person’s response or lack of response (e.g., Sara picks up the soap or does not pick up the soap).

4. A consequence –
   - Positive reinforcement following the desired response (e.g., a meaningful reinforcer if Sara picks up the soap)
   - No reinforcer (extinction) for an incorrect behavior if Sara does not pick up the soap

5. A short break before initiating a new trial.

Most ABA programs are highly structured. Skills that are targeted for teaching are broken down into small steps. This is called a task analysis. Each step of the task analysis is taught using a hierarchy (sequence) of prompts starting with the least amount of support needed. If more support is needed, progressively more assistance (e.g., verbal, gestural, physical) is provided. When the learner completes the step correctly, he or she receives positive reinforcement in the form of verbal praise or another consequence that is age appropriate and highly motivating (e.g., high five, small trinket, sticker, edible, etc.). The teacher/support staff does not reinforce steps of the task analysis that are completed incorrectly.

As the person with Autism learns the steps of the task analysis, the teacher/support provider systematically removes the prompts/assistance. This is known as fading. It is important for the learner to have repeated opportunities to learn and practice each step of the task analysis in a variety of settings. This will help ensure that the skill will be demonstrated in all the places the person lives, works, and interacts with others. This is called generalization. Progress is measured carefully. Data from direct observations is collected and analyzed for each step of the task analysis. If the person is not learning the skill, modifications to the teaching steps, prompts and reinforcers are made.

The behaviors that will be taught during ABA sessions are based on an evaluation of the person and his/her needs and abilities. For people with Autism who already have basic skills, ABA training should focus on more challenging social and behavioral tasks. In addition, people with Autism should also have opportunities to practice and adapt their new skills to the real world in natural settings.
Who Provides ABA

Board certified behavior analysts typically write, implement, and monitor ABA programs. Support providers will work with the person on a day-to-day basis. In some settings program coordinators, QDDPs, and teachers will be responsible for designing plans for children and adults with Autism. *Positive Behavior Supports, Designing and Implementing Positive Behavior Supports*, and *Achieving Personal Outcomes* training materials in the Community Staff Training Curriculum will provide background for creating effective teaching plans.

What is a Typical ABA Session Like?

ABA sessions are typically two to three hours long and consist of three to five minute periods focused on the new skill. Breaks are usually taken at the end of each hour for approximately 10 to 15 minutes. During free time and breaks, the person has opportunities to practice the skills in natural environments. Families and support providers are also encouraged to incorporate ABA principles in their daily lives.

**Discrete Trial Training**

Discrete Trial Training is the approach upon which Applied Behavior Analysis is based. Discrete Trial Training is a highly structured teaching strategy in which a teacher/support provider uses a series of learning opportunities called “trials” to instruct a person with Autism. Each trial is “discrete” because it has a definite beginning and end. A particular trial may be repeated several times in a row, interspersed throughout the day, or repeated over several days (or longer) until the skill is mastered. Each discrete training trial usually lasts between five and 20 seconds (with a pause between trials). Typically, the total time for a teaching sequence is 15 to 20 minutes. After the teaching sequence, there is a short break before moving on to a new activity or starting a new sequence.

Discrete Trial Training may be implemented by the person’s parents and/or support providers. Discrete Trial Training allows the teacher to break complex tasks into small steps. Complex skills can be built on simpler ones. For example, the support provider might teach the person to say “Hello. how are you?” before teaching more complex social skills such as making eye contact and paying attention to what the other person is saying.
Who Provides Discrete Trial Training?

Discrete Trial Training sessions are usually conducted by qualified support providers (e.g., parents, early interventionists, teachers, direct support professionals) in consultation with a behavior analyst.

What is a Typical Discrete Trial Training Session Like?

Similar to ABA, Discrete Trial Training has five components.

1. The teacher’s instruction or an environmental cue/signal that lets the person know he/she should respond.
2. A prompt from the support provider to help the person respond correctly. If the teacher thinks that the person may need some help to respond correctly, he or she will give the least amount of prompt (e.g., verbal, model, physical assistance) necessary for the correct response.
3. Response: The desired skill or behavior that is the target of instruction. Either with or without help, the person will respond to the instruction.
4. Consequence: Reinforcer or corrective assistance:
   - If the person responds correctly, he or she will be given a reinforcer/consequence (e.g., verbal praise, token, etc.). The reinforcer should be tangible and immediate so that the person connects the desired response with the reinforcer.
   - If the person responds incorrectly, he or she will be corrected by the support provider and given another chance.
5. A brief pause between consecutive trials. It is important for the support provider to pause before moving on to the next trial so that the person knows that he or she has completed one set and will be moving on to the next trial.

Discrete Trial Training follows these steps:

Instruction or cue → Prompt → Desired skill → Consequence → Pause or behavior

In the following example of discrete trial training, a speech-language therapist is teaching a child with Autism to verbally label a ball during gym class.

<table>
<thead>
<tr>
<th>Step in Discrete Trial Training</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction or cue</td>
<td>Speech-language therapist holds up a ball and says “What is this?”</td>
</tr>
<tr>
<td>Prompt</td>
<td>Speech-language therapist cues the person by saying “This is a ball. What is it?”</td>
</tr>
<tr>
<td>Response – Desired skill</td>
<td>Individual says “Ball”.</td>
</tr>
<tr>
<td>Consequence - Reinforcer</td>
<td>Speech-language therapist says “Good job. It is a ball” and gives the ball to the person. If the person responds incorrectly or does not respond, the speech-language therapist repeats the cue. “This is a ball. Say ball.”</td>
</tr>
</tbody>
</table>
Pause

The speech-language therapist pauses before repeating the trial with the ball or starting a new trial with a different object.

Discrete Trial Training is often effective because it addresses the following learning difficulties which are common among people with Autism.

<table>
<thead>
<tr>
<th>Learning Difficulty Experienced by Many People with Autism</th>
<th>How Discrete Trial Training Addresses Learning Difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short attention span</td>
<td>• Breaks down task into small, simple trials</td>
</tr>
<tr>
<td></td>
<td>• Support provider gives short, concise instructions</td>
</tr>
<tr>
<td>Limited motivation to learn</td>
<td>• Correct responses are immediately followed by meaningful reinforcers and social praise</td>
</tr>
<tr>
<td>Difficulty recognizing important stimuli (e.g., support provider prompts and environmental cues such as school bells, alarms, weather)</td>
<td>• Support provider provides clear and consistent prompts (stimuli)</td>
</tr>
<tr>
<td></td>
<td>• Individual receives reinforcers only for correct responses to those prompts (stimuli) so he or she distinguishes between what is relevant and what is unimportant</td>
</tr>
<tr>
<td>Generalization – difficulty applying skills across different environments and support providers</td>
<td>• Prompting changes over time (e.g., the wording of the instruction as well as who gives the instruction, where, and when it is given) so that the person learns to respond in a variety of settings with different people</td>
</tr>
<tr>
<td>Cause-effect/observational learning – difficulty “picking up cues” from the environment</td>
<td>• Uses concrete instructions so that people are not required to pick up abstract cues from the environment or support provider</td>
</tr>
<tr>
<td>Communication – difficulty with expressive and receptive language</td>
<td>• Uses short, concise instructions to minimize support provider’s words</td>
</tr>
</tbody>
</table>

**Pivotal Response Training (PRT)**

Pivotal Response Training (also known as Pivotal Response Treatment or Pivotal Response Therapy) is a behavioral intervention model that is based on the principles of Applied Behavior Analysis (ABA). Pivotal Response Training was initially called the Natural Language Paradigm. Pivotal Response Training was primarily developed by Drs. Bob and Lynn Koegel at the University of California at Santa Barbara (http://education.ucsb.edu/Autism/).

Advocates of Pivotal Response Training suggest that there are two main “pivotal” behaviors that affect a wide range of other behaviors. These two main pivotal behaviors are motivation and
The ability to respond to multiple cues. By targeting these critical areas, there are also improvements in skills that were not directly targeted such as play, communication, social, and self-monitoring of behaviors.

There are a variety of motivational strategies which are used during the PRT session so that people will use the skills that are being taught to them. These include offering individual choices, varying, interspersing maintenance trials, and rewarding attempts using natural reinforcement. For example, a learner’s attempts at meaningful communication would be rewarded with a reinforcer that matches their efforts to communicate (e.g., if a learner attempts to request a toy, he or she would receive the toy instead of an edible item or other unrelated reinforcer).

Who Provides PRT?

PRT is usually provided by doing everyday activities in natural environments by parents, special education teachers, speech therapists, psychologists, direct support professionals, and other qualified support providers. PRT is versatile enough to be used at home, in inclusive classrooms, in the community, and in clinical settings.

What is a Typical PRT Therapy Session Like?

Pivotal Response Therapy is usually implemented in everyday activities in natural environments. Pivotal Response Treatment is usually used to teach language, play, and social skills to children with Autism by focusing on motivation and self-initiations (two pivotal areas that are central to improvements across a large number of other behaviors). The following example illustrates how this works. During free play, a child’s motivation to communicate about colors will increase if he is offered specific colored toys, to be given once he attempts to verbally ask for the toys. As he begins to understand the connection between his own efforts to communicate and getting a desired item, he will start to communicate spontaneously to communicate his needs. In other words, this pivotal skill (motivating the child to understand the connection between his effort to communicate and the outcome of this effort) will generalize to other activities in natural settings. As a result of this one pivotal behavior, there will be improvements in many other areas such as speech and overall language development, cognitive development, and social connection.

The following link shows a brief video clip of PRT in practice.

Even though the PRT model was initially developed for use with children with Autism, its crucial components (e.g., response to multiple cues, motivation to initiate and respond
appropriately to social and environmental stimuli, and natural reinforcers) can also be effectively implemented with adults with Autism during age-appropriate activities in natural settings.

**Promising Practices**

Two additional interventions which meet the criteria for “promising practices” are Training and Education of Autistic and Related Communication-handicapped Children (TEACCH) and Floortime.

**TEACCH**

TEACCH is a special education program that is also known as “Structured Teaching”. The TEACCH approach focuses on the strengths of individuals with Autism and capitalizes on their preferences for visual processing of information. During TEACCH sessions, persons with Autism are assessed to pinpoint skills for instruction and an individualized plan is developed. Visual supports are created to help the person understand his or her daily activities and tasks.

**Who Provides TEACCH Intervention?**

TEACCH sessions are usually conducted by trained psychologists, special education teachers, and speech therapists. In some environments, direct support professionals or para-educators specifically trained by the therapist will conduct the sessions.

**What is a Typical TEACCH Session Like?**

TEACCH programs are usually implemented in a classroom setting. Parents also conduct TEACCH sessions so that skills can be applied at home.

**Floortime**

Floortime is a special play time that is set aside for a child with Autism and his or her parent (or other support provider). It occurs as a natural part of the child’s everyday routine. The intervention is called Floortime because the parent or support provider gets down on the floor with the child. During Floortime, the parent or support staff enters the activity at the child’s level and moves him or her toward more complex interactions. This process is known as “opening and closing circles of communication”. Floortime focuses on speech, motor, and cognitive skills all together instead of separately. Sometimes Floortime is implemented in combination with other behavioral strategies.

Floortime involves spontaneous and unstructured activities during which the parent follows the child’s lead in order to connect with his or her interests. Floortime is a way for a child to reach important developmental milestones and gain missing skills. During Floortime, children enjoy
the fun of interacting with others while experiencing success at taking initiative, making desires known, and getting responses.

As play partners, parents (and other support providers) have a very active role in following the child’s lead, playing whatever captures his or her interest, and encouraging interactions. Floortime is implemented as part of natural environments at the child’s home and school.

Who Provides Floortime?

Floortime is usually provided by trained parents or direct support professionals. Psychologists, special educators, speech therapists, and occupational therapists may also be trained to implement Floortime.

What is a Typical Floortime Therapy Session Like?

Floortime is usually implemented in low stimulus environments for 20 to 30 minutes several times a day.

Floortime in the Classroom

The Floortime approach can also be implemented in the classroom by setting up mini-learning environments that promote hands-on, spontaneous learning. Each environment should include age-appropriate toys and materials that provide opportunities for exploration and the development of cognitive, social, language, and motor skills.

Examples of mini-learning environments in the classroom are shown in the following table.

<table>
<thead>
<tr>
<th>Classroom area</th>
<th>Items/Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretend corner</td>
<td>Dolls, dress up clothes, hats, and props</td>
</tr>
<tr>
<td>Math</td>
<td>Big and little objects, fast and slow-moving items, light and heavy objects (and a scale for weighing them), and containers with different items inside</td>
</tr>
<tr>
<td>Spatial concepts</td>
<td>Objects to climb on, over, and under, places to hide inside, tall and short structures, different sized balance beams</td>
</tr>
<tr>
<td>Listening and reading</td>
<td>Sounds with matching objects, alphabet blocks, items labeled with their names</td>
</tr>
<tr>
<td>Sensory, music, and art</td>
<td>Materials to smell, touch, listen to, and see, rough, smooth, hot, cold, squishy, firm, noisy and quiet items, water and sand tables, arts and crafts materials</td>
</tr>
<tr>
<td>Oral-motor</td>
<td>An area near a sink with musical instruments, party favor blowers, bubbles, and foods with different textures</td>
</tr>
<tr>
<td>Motor skills</td>
<td>Mini-obstacle courses, mattresses, mini-trampolines</td>
</tr>
</tbody>
</table>
Using Floortime to Help Children with Autism Play with Other Children

Floortime principles can be used to foster interactions between children with and without Autism.

1. Invite another child to join the child with Autism who is already playing. For example, if the child with Autism is playing with cars, hand the other child one of the cars. Hopefully the two children will find a way to play together even if the interaction is brief.

2. Cue the child with Autism to pay attention to what another child is doing. Saying things like “Wow! Look! Did you see that?” may draw the child with Autism into an interaction with another child.

3. Involve both children in joint problem solving by saying things such as “Oh no! The car is missing a wheel. What can we do?” or “Please help! The cat is stuck in the tree. How can we help him get down?”

4. Describe the emotions of other children to the child with Autism. Saying things such as “Oh no, look at Sara. She looks so sad.” or “Wow, Jeff looks really mad right now,” may help the child with Autism tune in to the feelings of others.

5. Translate behavior into simple terms for children with and without Autism. Both children may be confused by the other’s behavior. It may help to explain what the other child is doing by saying things such as “Ryan screams when it’s too noisy in our classroom because it hurts his ears” or “Abbie looks mad. She’s throwing the blocks because she doesn’t want anyone else to play with them.”

6. Capitalize on shared interests. Encourage interactions between children with and without Autism who enjoy the same toys and activities.

NOTE: While playing on the floor would not be an appropriate intervention for adolescents or adults with Autism, cues similar to the ones used in 2 – 5 can be used across the lifespan to teach communication and social skills. Strategy number six applies to people of all ages. It is important to provide opportunities for the person with Autism to interact with others and to use these opportunities to help strengthen the person’s communication and social skills.
Chapter 3: Feedback Questions

1. List three reasons why it may be difficult for parents and professionals to select interventions that have the best chance of leading to positive outcomes for people with Autism.

2. Why are some parents willing to try questionable interventions for their son or daughter with Autism?

3. What are three basic questions that parents and support providers can use to identify appropriate interventions for people with Autism?

4. List five criteria that were used by Simpson and his colleagues to evaluate interventions for people with Autism.

5. List the four categories into which Autism interventions have been classified by Simpson and his colleagues.

6. The three interventions which meet the criteria for the scientifically-based category include: ____________________, ____________________, and ____________________.

7. List the five steps which the Applied Behavior Analysis approach uses to teach new skills or decrease challenging behaviors.
8. Fill in the blanks in the chart explaining effectiveness of Discrete Trial Training for people with Autism?

<table>
<thead>
<tr>
<th>Learning Difficulty experienced by many people with Autism</th>
<th>How Discrete Trial Training Addresses Learning Difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short attention span</strong></td>
<td>• Breaks down task into ___________ trials</td>
</tr>
<tr>
<td></td>
<td>• Support provider gives short, concise _______________</td>
</tr>
<tr>
<td><strong>Limited motivation to learn</strong></td>
<td>• Correct responses are ______________ followed by</td>
</tr>
<tr>
<td></td>
<td>______________ reinforcers and social praise</td>
</tr>
<tr>
<td><strong>Difficulty recognizing important stimuli</strong> (e.g., support provider prompts and environmental cues such as school bells, alarms, weather)</td>
<td>• Support provider provides clear and consistent ________ (stimuli)</td>
</tr>
<tr>
<td></td>
<td>• Individual receives reinforcers only for ________ responses to those prompts (stimuli) so he or she distinguishes between what is relevant and what is unimportant</td>
</tr>
<tr>
<td><strong>Generalization</strong> – difficulty applying skills across different environments and support providers</td>
<td>• ________ changes over time (e.g., the wording of the instruction as well as ________ gives the instruction, ________, and ________ it is given) so that the person learns to respond in a variety of settings with different people</td>
</tr>
<tr>
<td><strong>Cause-effect/observational learning – difficulty “picking up cues” from the environment</strong></td>
<td>• Uses ________ instructions so that the person is not required to pick up abstract cues from the environment or support provider</td>
</tr>
<tr>
<td><strong>Communication</strong> – difficulty with expressive and receptive language</td>
<td>• Uses short, concise instructions to __________ support provider’s words</td>
</tr>
</tbody>
</table>

9. Describe two interventions that meet the criteria for “promising practices”?

10. Give an example of how you might apply the following Floortime principles to teach social interaction and communication skills to adolescents or adults with Autism. The first one is done for you.

<table>
<thead>
<tr>
<th>Floortime principle</th>
<th>Real Life Situation</th>
<th>Support Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cue the person with Autism to pay attention to what another person is doing</td>
<td>Susan is baking cookies</td>
<td>“Look at what Susan is mixing. I wonder if she needs help.”</td>
</tr>
<tr>
<td>Involve both people in joint problem solving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describe the emotions of the other person to the person with Autism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translate behavior into simple terms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capitalize on shared interests</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chapter Four: “Related Service” Strategies to Support People with Autism

Purpose: This chapter will describe several practical strategies which are effective for addressing the core symptoms of Autism (in addition to the research-based interventions which were described in Chapter 3). These strategies may be implemented in conjunction with research-based interventions to teach new skills, decrease challenging behaviors and promote positive behavior, and support people with Autism by capitalizing on their learning strengths and characteristics.

Objectives:

After completing this chapter, support providers will be able to:

- Explain why it is usually more effective to embed therapy services in everyday activities and routines in natural environments
- Implement effective communication strategies to help people with Autism understand what is going on around them and communicate their needs.
- Describe the benefits of Picture Exchange Communication System (PECS) for people with Autism.
- Describe critical components of social skills training programs for people with Autism.
- Describe how to teach a person with Autism to support his or her own use of social skills.
- Capitalize on learning strengths and accommodate learning needs of people with Autism.
- Describe the four areas for intervention in a positive behavior support plan for a person with Autism.
- Describe how adaptations and enablers help people with Autism.
- Explain how to use a desensitization plan for a person with Autism.
- Describe how to support generalization of communication and social skills for people with Autism.

Integrated Related Services

People with Autism may benefit from the strategies which are implemented by a team of related service providers. (See the Team Planning module in the North Dakota Community Staff Training curriculum for more information on the team planning process). In the school system, Speech language pathologists may teach skills such as responding to questions, initiating requests for help, relaying important messages, and using communication devices. Occupational therapists may provide therapy to increase skills in areas such as daily living, self-care,
employment, community integration, and recreation. In support environments for adults with Autism, these therapists act as consultants. They often participate in the team meetings and design a support plan with the input of the other team members. These plans are typically carried out by direct support professionals. Program Coordinators and the therapists review the data and provide ongoing direction in a consulting role. Clearly, people with Autism can benefit from the services of related service providers. Controversy remains, however, over where these services should be provided for maximum effectiveness.

Traditionally, therapy services were provided in segregated and isolated settings. People with Autism were “pulled out” to work with a therapist in a “therapy” room away from their integrated setting and peers. There is currently a shift in the model for delivering related services. Many therapists recognize that it is more effective to embed services within natural environments and everyday activities and routines. This shift is based on the learning characteristics of people with Autism. As discussed in earlier chapters, it is difficult for people who have Autism to generalize learning from one setting to another. It is not uncommon for speech language pathologists to report that a person has a communication skill in the “therapy” room while support providers observe that the person is unable to demonstrate that same skill in natural environments (e.g., home, job site, community setting). Also, people with Autism often learn skills within a particular context. They are attentive to specific pieces of information in the setting which prompt them to perform a skill or complete an activity. It is more effective for people with Autism to practice the skills in the settings in which they will be used. For example, a person with Autism may need to learn to respond to the greetings of co-workers during break time. By practicing this skill in the hallway at the work site (instead of a “therapy” room), the person will cue into relevant prompts within the natural context for using the skill. The person may also need to use the same skill in other settings. “Responding to greetings” might improve the person’s ability to form friendships and other activities such as at the bank, grocery store, restaurant, and church. By practicing this skill in many different settings with many different people, the person is more likely to use it in all of his or her interactions.

Teaching skills in natural settings may be challenging for both the therapists and support providers (e.g., classroom teacher, job supervisor, direct support professional, family members, etc.). Both the therapist and service providers must shift from being the sole professional “in charge” of teaching specific skills to sharing space, instructional time, strategies, and goals. This shift in service delivery requires collaborative partnerships.

In the context of integrated related services, it does not make sense to write goals such as:

- Suzie will correctly respond to “wh” questions
- Brent will use a pincer grasp to pick up beads
In reality, communication and fine/gross motor skills are not used in isolation. It is more effective to embed related service goals within the context of daily activities as they naturally occur. For example:

- During lunch at the fast food restaurant, Suzie will point to the items she wants to order on her communication board when asked by the cashier
- During work in the office, Brent will collate and staple 10 pages of a booklet

This service delivery model may require a shift in scheduling for therapists. Instead of pulling students out for 30 minutes twice a week, the therapist may spend extended time in various settings for a few days each week. For example, a speech-language pathologist (SLP) may spend an afternoon in a regular education classroom which has several students who are receiving services. In this setting, the SLP may be working on a variety of skills (e.g., greetings, initiating requests for assistance, using a communication device, collecting data to measure progress, etc.) with multiple students.

When therapy services are delivered in natural settings, it may encourage parents and other support providers to use strategies that will help the person to be more successful in real life settings. For example, the SLP can work with the regular education teacher to help the student initiate requests or respond to questions. The SLP can develop a plan in which direct support providers teach the person to order items at a fast food restaurant, respond to requests for payment, and initiate conversations. SLPs can also develop instructional plans that help to ensure that skills generalize to job situations. The SLP can assist the team to help the person with Autism learn how to communicate that he or she needs assistance or a break. The occupational therapist can assist with adapting a work station supports a specific person needs to be successful at their job.

Everyone benefits when related services are integrated into the everyday routines and environments. By infusing therapy services into natural settings, peers without disabilities learn how to interact with and provide support to people who have Autism. In natural environments, therapists are a source of support to service providers and a valuable resource during brainstorming sessions for new ideas and strategies. When therapy services are embedded in everyday activities (rather than provided through a “pull out” delivery model), opportunities to learn and practice skills in natural settings are increased.
The following section describes several “related services” which are designed to address Autism-related symptoms in such areas as functional living, mobility, diet, and sensory processing. Additional strategies related to communication, social skills, and behavioral supports are also provided.

Occupational Therapy

Occupational therapy (OT) is provided by certified occupational therapists and is designed to help people with Autism participate more independently and fully in everyday activities. Fine motor, sensory motor integration, social, and visual perceptual skills are addressed.

Based on an evaluation of the person’s development, OTs implement strategies to teach everyday living skills in home, school, and community settings. OT goals may include self-help skills such as independent dressing, eating, grooming, and using the bathroom. In addition, OT training may also include community living and employment skills for older persons with Autism.

Physical Therapy

Physical therapy (PT) addresses the motor ability challenges associated with Autism (e.g., gross motor activities such as sitting, walking, running, etc.). PT also focuses on building muscle tone, balance, and coordination. Physical therapy sessions are conducted by a certified physical therapist in a variety of settings (e.g., home, school, community).

Following an evaluation, the physical therapist develops activities to strengthen areas of concern. PT may include assisted movement, exercise, and adaptive equipment.

Speech-Language Therapy

Speech-Language Therapy (SLT) uses a wide range of techniques to focus on a variety of communication challenges for persons with Autism. SLT begins with an individual assessment that is conducted by a speech-language pathologist (SLP). Therapy sessions may take place one-on-one, in a small group, or in a classroom with a whole group.

SLT goals should be individualized. Learning to speak may be an appropriate goal for some people. Others may have goals to learn how to use signs, gestures, pictures, assistive technology, or augmentative communication devices to communicate. In all cases, the overall goal of SLT is to help persons with Autism use and understand functional and meaningful communication.
**Communication Strategies**

Difficulties with communication continue throughout adulthood for many people with Autism. There are a variety of strategies that may help people understand what is going on around them and effectively communicate their needs.

**Modifying the Language of Support Providers**

Sometimes it is necessary for support providers to change the ways in which they communicate with people with Autism. In order to ensure a desired outcome, it may be necessary to make instructions very specific. Examples of specific instructions are provided in the following table.

<table>
<thead>
<tr>
<th>Instead of saying...</th>
<th>Say...</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Go to the kitchen and look for a spoon”</td>
<td>“Go to the kitchen, look for a spoon, and then bring it back to me”</td>
<td>Bob brings his mom a spoon instead of just going into the kitchen and looking in the drawer for a spoon.</td>
</tr>
<tr>
<td>“Take the towel upstairs”</td>
<td>“Take the towel upstairs and put it in the bathroom”</td>
<td>Sarah puts the towel in the bathroom instead of just leaving it on the top step.</td>
</tr>
<tr>
<td>“You are going to sleep on the train”</td>
<td>“You are going to go to bed on the train”</td>
<td>Marcia lies down on the bed in the sleeper car instead of being anxious that she is “going to sleep” and will never wake up.</td>
</tr>
<tr>
<td>“We are going to the store”</td>
<td>“We are going to the store but we will stop at the traffic lights on the way”</td>
<td>Steve enjoys the trip to the store instead of becoming agitated every time they stop for a red light.</td>
</tr>
</tbody>
</table>

While some people with Autism will be able to follow multiple step directions in the table above, others may need these instructions broken down into single step instructions. If the support provider’s instructions are too complex for the person with Autism, it may cause frustration and lead to challenging behavior. The Support Provider’s instructions must be individualized for each person with Autism. See the *Supporting Communication* module in the North Dakota Community Staff Training curriculum for more examples of matching communication to the person’s ability to understand.
Removing Uncertainty

People with Autism often use “obsessional” speech when they do not understand what someone else is saying to them. They may repeatedly ask questions to gain more information. Sometimes rephrasing the answer may be enough for the person to understand. Other times it may be necessary to give more information in another way (e.g., a picture, a gesture, or modeling prompt.)

Visual information is often more effective than verbal communication alone. Instead of just using verbal messages about people, activities, and places, it may also be helpful to give visual forms of communication (as shown in the following table).

<table>
<thead>
<tr>
<th>Instead of saying…</th>
<th>Visual Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Go to Mrs. Mayer’s class now”.</td>
<td>Show a picture of Mrs. Mayer</td>
</tr>
<tr>
<td>“Fold the towels”</td>
<td>Show a picture of each step of towel folding</td>
</tr>
<tr>
<td>“It’s time to go to the store”.</td>
<td>Show a picture of the grocery store</td>
</tr>
</tbody>
</table>

Set Rules

It may be possible to ignore the inappropriate speech of a person with Autism. Because the person with Autism is no longer receiving attention for his or her inappropriate speech, it may decrease. This is known as extinction.

While it may be relatively easy for family members (and direct support providers) to ignore the person’s inappropriate speech, the person may still receive attention (and reinforcement) from others who do not know that they should ignore the person’s inappropriate questions and comments. Because if this, in addition to teaching appropriate behavior and ignoring inappropriate speech, the person should also be given rules about when, where, how often, and with whom such speech can be used. If persons with Autism are taught that they can only talk about certain topics, with certain people, in certain situations, and at a specific time of day, it is much easier to minimize the disruptions that are caused by inappropriate speech. For example, if Tom is so fascinated with trains, that whenever the topic of trains comes up, it is very difficult for him to do anything else until he has told everything he knows about trains. If Tom starts talking about trains at work, he won’t complete the tasks his employer expects him to do. His obsession on this topic may also convince the customers at McDonalds that they really want to eat at Burger King the next time they are hungry, which also won’t make Tom’s manager very happy. So for Tom’s long term employability, it is important for him to learn a rule about when it is okay and when it is not okay to talk about trains. Work is one time it is not okay.
Teaching Alternative Communication Skills

The only way that some persons with Autism can gain control over what happens to them is through inappropriate communication routines and behaviors (e.g., head banging, throwing an item, repeated questions or phrases, hair pulling, etc.). These behaviors actually serve a purpose (or function) for the person. The majority of communication routines and behaviors can be categorized as attention-seeking, self-stimulatory, escape or avoidance, or to request a need for assistance (Howlin, 2004). Even though these behaviors may seem very maladaptive, it is apparent that they actually work very well for people who are unable to express their needs, feelings, or emotions in any other way.

Because inappropriate communication routines and behaviors serve a purpose for the person, it does not work to just suppress or eliminate them. It is critical for support providers to complete a functional analysis and to use positive behavior supports (as described in Positive Behavior Supports and Designing and Implementing Positive Behavior Supports training modules in the North Dakota Community Staff Training curriculum). The team needs to identify and systematically teach a more appropriate communication routine or behavior that will replace the inappropriate behavior.

People with Autism often need to learn replacement skills to request help, get attention or a desired item, or to escape an undesirable situation. If people with Autism are taught more efficient ways to communicate the same message (through words, tokens, gestures, pictures, or switches), it is likely that challenging behaviors will decrease and appropriate communication will increase. For example, if a person is taught to say or sign “please” instead of reaching, grabbing, or leading to get something he or she wants, this new communication skill must be reinforced (e.g., verbal acknowledgment and access to the desired item). The maladaptive behaviors must not be reinforced (e.g., they should be ignored and no longer provide access to the desired item). When a new communication behavior is made more efficient than an old behavior, it will more readily generalize across other settings.

Research has shown that role playing, social skills groups, and Discrete Trial Training have been effective in teaching more appropriate communication skills and behaviors (Mesibov, 1984) such as shaking hands, saying “hello”, and introducing him or herself by name.

Using the Picture Exchange Communication System

The Picture Exchange Communication System (PECS) is designed to help people acquire a functional means of communication to request items or activities. PECS is appropriate for people who do not use speech or who may speak with limited effectiveness. It is also effective for people who have limited communication partners or who lack motivation in communication.
The Phases of Picture Exchange Communication System

Teaching people with Autism to use the PECS usually involves six phases. These phases are usually taught in order.

Phase I - The first step involves two support providers (e.g., family members, teachers, support staff members) working with the person to request items or activities that he or she really wants. During this phase, the first support provider (the primary communication partner) shows the person a desired item. The second support provider stays behind the person and waits for him or her to reach for the item and then physically assists the person to pick up the picture of that item and hand it to the first support provider. The first support provider gives the person the desired item along with verbal reinforcement (e.g., “Oh, you want a cracker!”). As soon as possible, the physical assistance from the second support provider is faded until the person is independently exchanging a picture for the item with the first support provider.

Phase II - The second phase of training involves encouraging the person to request items naturally and also to use PECS with other people in a variety of settings. During this phase, the person is required to move a longer distance to get to a communication partner or to get to the picture. The person is also encouraged to make requests in environments other than the initial training setting and with a wide array of people (e.g., parents, grandparents, siblings, peers, employers, community providers, etc.). In addition, the person begins expanding his or her vocabulary during this phase by requesting different items or activities (even though there is still only one picture on a board at any give time).

Phase III - In the third phase of PECS training, the person begins to choose between a number of items on a board. This phase usually begins with two choices with more and more items quickly added as the person becomes comfortable finding items from a large display of pictures.

Phase IV - During this phase of training, the person is taught to use sentence strips to make more complex requests. Usually the person starts by combining a picture for “I want” with a picture of the desired item or activity. The two pictures are attached to a sentence strip (usually with Velcro) and the entire strip would be exchanged with the communication partner for the requested item or activity.
Phase V - The fifth phase expands the sentence structure to include adjectives and other words that will help the person to more clearly describe requests. For example, the person would move from “I want candy” to “I want three red candies”.

Phase VI - During the final phase of training, the person is taught to use pictures to make comments such as, “I see”, “I hear”, “I feel”, and “I smell”.

The following benefits have been reported about PECS:

- Communication is initiated by the person in natural settings and events.
- When the person hands someone a picture or sentence strip, the request or comment can be easily understood.
- Reinforcement for communication is natural because the person’s request or comment is rewarded.
- Materials are inexpensive, easy to prepare, and portable. A PECS symbol can be as simple as a hand-drawn figure, a snapshot, or a picture made on the computer.
- PECS involves an unlimited number of communication partners. Because PECS can be used with anyone who will accept a picture (not just people who know sign language or can understand the person’s verbal speech), people with Autism are able to generalize communication to a wide circle of people.


In addition to commercially produced resources, there are a variety of homemade materials which may be effective for increasing a person’s ability to understand their schedule and communicate their preferences. Wall charts with laminated photographs of the daily schedule (including support providers who will be working and meal menus) may be used to indicate each of the person’s activities. For some people, it may be helpful to check off each activity as it is completed.

Individuals may also have their own personal sets of picture cards to indicate their needs (e.g., bathroom, drink, break, etc.) or to guide their completion of an activity (e.g., step-by-step pictures of a work task, recipe, daily care skill, etc.). These picture cards must be readily accessible and could be attached to a key ring, lanyard, or clipboard. Picture cards must be
protected (e.g., laminated), updated regularly, and replaced as the person’s interests and preferences change.

At first, people with Autism may not use the picture cards to indicate a need or make a request without prompts. Consistent prompting by staff may be necessary to establish a link between the picture and the resulting activity or item. For example, if the person wants a drink, the staff member should show the water bottle picture and say “Point to water if you want a drink”. When the person uses the picture system to communicate (whether prompted or not) their efforts should be reinforced with verbal praise and access to the desired activity or item.

Electronic communication systems have opened up the world to many people who previously struggled to make their needs met. Keeping up-to-date with cutting edge technology can be difficult. Take advantage of state assistive technology programs and web-based vendors of these tools. Many states have augmentative communication lending libraries which allow a person to “test drive” equipment to see if it would be a good choice for a particular individual. Taking advantage of these resources can help prevent a costly mismatch between a device and the user’s communication need and/or the level of support needed to be successful with a particular device. Sometimes low tech is all that is needed.

**Dietary and Nutritional Support**

Many parents are interested in nutritional interventions for their sons or daughters with Autism. Two common dietary treatments for Autism-related symptoms include removal of gluten (a protein found in grains such barley, rye, wheat, and oats), and removal of casein (a protein found in dairy products).

The theory behind these elimination diets is that people with Autism may absorb proteins differently than other people. Instead of having an allergic reaction when they eat products with gluten and casein, people with Autism experience physical and behavioral symptoms. Many families report that eliminating gluten and casein from their son or daughter’s diet helped in areas such as bowel regulation, sleep activity, repetitive behaviors, and overall progress.

Despite the promising results reported by families, currently there is not sufficient scientific research to support these treatments. If families choose to try these diets, the person with Autism must be closely monitored by his/her parents and intervention team (e.g., physician and dietician).

**Medical Support**

Effective medical management is also important for people with Autism. People with Autism should have routine preventative care in addition to treatment for acute illnesses. Medical interventions may also be necessary in the following areas related to Autism.
- Sleep dysfunctions
- Eating issues
- Challenging behaviors
- Co-existing psychiatric conditions
- Seizures

**Social Support**

Challenges with social skills are one of the defining characteristics of Autism. Through training, people with Autism can be taught appropriate social skills for a variety of natural environments. It is crucial to teach social skills because they provide a foundation for other goals. Social skills are also required for later success with maintaining jobs, relationships, and community participation.

Social skills training programs have four critical components. These include: 1) Creating opportunities for social skills to be used across the day; 2) Preparing peers to support the use of social skills; and 3) Planning direct instructional time to teach new social skills; and 4): Self-monitoring.

1. Creating Opportunities. The first step in developing a social skills program is to identify the natural socialization opportunities which occur in the person’s everyday routine. It is important to sketch out the person’s entire day because opportunities for social interactions will vary during different times of the day.

After the team has an understanding of the natural opportunities in which social skills can be embedded, a skills matrix can be completed for the person (See sample below). This visual matrix reminds support providers to prompt the person to use social skills throughout the day. These everyday routines will support the use of acquired social skills throughout the day.

<table>
<thead>
<tr>
<th></th>
<th>Arrival</th>
<th>Work Station</th>
<th>Lunch</th>
<th>Break</th>
<th>Departure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment to co-worker</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ask a social question</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Compliment someone</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Initiate a new conversation</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
2. Preparing Peers. Social skills programs which involve peers as natural supports are usually successful. With adequate training and support, peers can teach nearly any social skill to people with Autism. Peer-mediated social skills programs include the following steps:

   a. Recruit individuals who are willing to be natural supports
   b. Discuss what it means to provide social skills training
   c. Assist in the selection of social skills that will be taught (e.g., initiating conversations, making comments, complimenting, asking questions, etc.)
   d. Watch a support provider demonstrate appropriate social skills teaching methods
   e. Implement social skills teaching approaches
   f. Prompt and reinforce the person’s use of appropriate social skills
   g. Participate in team meetings to make necessary modifications to the training program

Peer involvement is a crucial part of a social skills training program. Without the involvement of peers, social skills may never become truly functional and meaningful for people with Autism.

3. Planning Direct Instruction. Instruction during natural routines in a variety of natural environments is best practice for teaching most skills including communication and social skills. However, many people with Autism need more practice sessions to learn a skill than would be practical to teach in the natural environment. In these situations Direct Instruction strategies are used and quickly paired with, and ultimately replaced by, opportunities to practice the skill with a variety of people in a variety of natural settings.

   Opportunities for direct instruction must be scheduled if social skills development is expected to progress. Ample time for practice and feedback must also be available. As skills are acquired through direct instruction, people with Autism must also have opportunities to use them in natural settings with peer support (generalization).

   Discrete Trial Training has been used effectively to teach social skills to people with Autism. Social skills practice sessions can be structured very tight or more informally (loose structure). Tight structure involves a support provider modeling the social skills for the person who is then asked to imitate the support provider. Through several trials, the person practices and perfects the skill. Loose structure involves teaching the person in a natural social routine with his or her peers. Incidental opportunities which are created by the support provider give the person several opportunities to practice the social skill with the natural support (e.g., prompts and reinforcement) of his or her peers.
Each of these approaches has advantages and risks. While tight structure usually results in fast skill attainment, the person may not learn how to apply the skill in more natural social routines. Loose structure offers better skill generalization. However, the time it takes for the person to learn a skill may be significantly longer because there aren’t as many practice opportunities.

A program which uses a combination of both tight and loose structure is usually most effective. This type of program allows the person to acquire the skill in a relatively short period of time while at the same time providing adequate opportunities for generalization.

4. Teaching Self-Monitoring. Self-monitoring strategies teach people with Autism to monitor their own use of social skills. After a social skill has been learned through direct instruction the person is taught to complete the following steps:
   - Recognize when he or she is using a specific behavior in social situations
   - Record his or her own behavior
   - Set social goals and reward himself or herself for achieving those goals
   - Seek feedback from others about their social behavior
   - Adjust behaviors for different social interactions

Specific Social Strategies

In addition to direct social skills training, there are some other strategies which are helpful for supporting people with Autism to reach their goals in the area of social skills.

Implementing Joint Activity Routines

For young children with Autism, social games (e.g., “peek-a-boo”, tossing a ball, etc.) can be used to facilitate social communication. These joint activity routines are effective for the following reasons: 1) they are very simple; 2) they can be easily used by either participant; 3) they can be easily varied to facilitate generalization (e.g., playing “peek-a-boo” using a washcloth at bath time or a paper plate at a picnic); and 4) they can be repeated to provide a large number of opportunities for interactions. Joint activity routines can be used to support communication across a wide range of motivating situations.
Using Visual Supports for Social Rules

People with Autism need to learn broader social rules in addition to individual social skills. Because it is impossible to teach every possible skill for every possible social scenario, it may be helpful to use visual supports which can remind the person about a particular rule. Visual supports are effective for social rules for which the person may require an occasional reminder or prompt. Examples of visual supports include the following:

- Rules posted on walls, desks, or work stations
- Rules written on the front of a notebook or work checklist
- Reminder cards with short phrases such as “If I need help, I can….” or “Remember to say ‘hi’ to three people in the break room”.

Capitalizing on Existing Skills

Support providers are responsible for identifying and/or creating opportunities for people with Autism to participate in interactive activities and tasks that will help them learn social skills such as sharing, turn-taking, and cooperating. Focus on the person’s existing skills or interests (e.g., music, games, computers, cooking, gardening, hobbies, etc.) to increase potential opportunities to interact with others.

Using Social Scripts

“Social scripts” may be helpful to improve social interactions for people with Autism. “Social scripts” are brief written instructions that a person can use to introduce him/herself and respond to specific situations or questions. Because many people with Autism have excellent memorization skills, they are able to use well-rehearsed scripts appropriately in a variety of social settings.

Social stories are one type of social script that can be used to teach social skills. (See discussion of “social article” in the Positive Behavior Support module of the ND Community Staff training curriculum.) Social stories/articles are designed to provide accurate information about social situations that may be confusing or difficult for the person. Social stories/articles are brief and straightforward. They usually include the following key components:

- Important social cues
- The events and reactions that might occur in the situation
- The reactions that might be expected of the person and why

The goal of social stories/articles is to increase the person’s understanding of a particular social situation, to increase his or her comfort, and to suggest some possible responses for the specific circumstances. Before writing a social story, it is important to identify the person’s specific needs based on three broad categories of social challenges.
1. Social avoidance – Some people with Autism may try to escape from social situations. Specific avoidance behaviors may include screaming, becoming aggressive to self or others, becoming very shy, or running away.

2. Social indifference – Many people with Autism do not actively seek social exchanges nor do they aggressively avoid such interactions.

3. Social awkwardness – Some people with Autism try very hard to make and keep friends. This may be difficult, however, because they are so preoccupied with their own favorite topics (to the exclusion of the other person). They also have difficulty picking up on others’ social cues and learning social skills by observing others.

Although social stories should be written from the perspective of the person with Autism, they should also be based on input from a variety of people who support that person (e.g., family members, direct support professionals, employers, teachers, peers, etc.). Each of these people may have unique insight into the social situations that are challenging for the person. Some people with Autism may be able to assist in writing social stories.

Social stories are usually a first-person, present-tense narrative. They are designed to give a person with Autism as much information as possible about a social situation so that he or she is better prepared to face and react appropriately in those circumstances.

The focus of social stories should be on the motivation of the behavior instead of the behaviors themselves. For example, a social story should focus on being scared when he/she is in an elevator with people he doesn’t know (instead of crying or screaming when in the elevator).

Social stories include the following types of sentences:

- Descriptive sentences which address the “wh” questions (e.g., where the situation takes place, who is involved, what they are doing, and why they may be doing it)
- Perspective sentences which provide details about the emotions and thoughts of those involved in the social interaction
- Directive sentences which recommend desired reactions which are individualized for the person with Autism
- Control sentences which help the person remember the story or deal with the situation.

These sentences are usually used with people who have higher cognitive ability.

In the following social story about taking a break at work, each type of sentence has been labeled as a sample.
In the morning and afternoon, I take a break at work. (descriptive) I go to the break room and sit at a table with my co-workers. (descriptive) My co-workers are trying hard to listen to each other when they are talking. (perspective) It is hard for them to hear when someone at the table is screaming or not sitting still. (descriptive) I will try not to scream and to sit still when I am in the break room with my co-workers. (directive)

Carol Gray, the developer of social stories, provides several guidelines for writing social stories:

- Use a ratio of three to five descriptive or perspective sentences for every one directive sentence.
- Fade directive sentences as the person becomes more skillful at coming up with desired responses on his or her own.
- Avoid the use of absolutes by replacing phrases such as “I can” and “I will” with “I will try” or “I will work on” in directive sentences.
- Use age-appropriate vocabulary and fonts (similar to other printed materials that the person may be encountering). For example, a social story for a kindergarten student may have one idea on each page. An older individual might have a longer story with multiple columns and smaller font (similar to a newspaper or magazine article).

Additional information about social stories is available at Gray’s website http://www.thegraycenter.org/.

The format of social stories should be individualized for each specific person with Autism. Written social stories won’t be helpful if the person doesn’t read. Other formats will add interest and will increase understanding of the social concepts.

1. Illustrations – Pages of the social story can include illustrations or photographs of the person in social situations with his or her peers. These illustrations/photographs can give visual support to the ideas that are being presented. To help the person focus on the relevant information, the illustration/photograph should be simple and uncluttered.

2. Simple line drawings or PECS symbols can be substituted for written words. Picture exchange symbols are available through Mayer-Johnson’s Boardmaker computer program.

3. Audio recordings – Social stories can be read and recorded on audio tape. A tone or verbal cue can be added to prompt the person to turn the page.

4. Video – A videotape can be made of the person and his/her peers acting out important scenes from the social story. The written story should be read as the scenes are being
acted out so that eventually the video can be faded and the person can use just the audio or written script.

5. Story boxes – For children with Autism, scenes from the story can be acted out with small figures, rooms made of shoe boxes, etc.

It is important to share a person’s social stories with all of his/her support providers so that everyone can refer to the stories when a specific social situation occurs. For example, if a school age child with Autism is using a social story to work on raising his/her hand before speaking out, the classroom teacher might review the story with the student prior to circle time. In addition, the social story should also be used in other natural environments so that the student learns to raise his/her hand across settings. If a person with Autism is frightened when riding an elevator, family members, direct support professionals, or friends could review the social story before leaving for an appointment or activity that will require riding the elevator.

Social stories should be reviewed on a consistent basis, usually right before the targeted activity (e.g., right before recess if the social story is about taking turns on the playground; right before break if the social story is about visiting with co-workers in the break room at work; etc.). If the time right before the situation is too busy, exciting, or stressful for person, it might be helpful to read the social story first thing in the morning and review the highlights right before the activity.

The use of social stories should be evaluated on a regular basis. If there is limited change in the person’s social skills after a week or two with a particular story, it should probably be rewritten (e.g., remove vague or confusing words, add more photographs or illustrations, etc.). As the person becomes more successful with a specific social situation, the story can be faded out (e.g., reduce or eliminate directive sentences) or changed to meet the person’s new needs. The schedule for reviewing the social story can also be modified (e.g., from daily to every other day, to once a week, to twice a month, etc.). After the person has mastered a particular social story, it should still be accessible for review when needed.

**Capitalizing on Learning Strengths**

Many people with Autism have several learning strengths. These include the ability to:

- Take in whole chunks of information quickly
- Remember information for a long time
- Use visual information
- Learn and repeat lengthy routines
- Understand rules
- Use concrete information
- Concentrate on narrow topics of interest
It is important to capitalize on these learning strengths when teaching new skills to people with Autism. The following strategies can be implemented to focus on learning strengths and maximize independence.

1. Be prepared and provide relevant cues. People with Autism have the ability to take in chunks of information quickly and to remember that information for a long period of time. Because of this, it is important to provide relevant cues to which the person can attend every time the skill is taught. If information which is not relevant to the skill is provided, the person will learn the wrong information and remember it for a long time. To prepare for teaching skills, it is necessary to follow these steps:
   - Have all necessary materials ready ahead of time
   - Prepare visual supports
   - Develop concise verbal cues
   - Follow the routine and cues consistently

An example of visual supports for teaching a person with Autism how to follow a recipe is provided in the following table.

<table>
<thead>
<tr>
<th>Equipment Ready</th>
<th>Visual Supports</th>
<th>Cues</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Equipment" /></td>
<td><img src="image2.png" alt="Visual Supports" /></td>
<td>“Cut open”</td>
</tr>
<tr>
<td><img src="image3.png" alt="Equipment" /></td>
<td><img src="image4.png" alt="Visual Supports" /></td>
<td>“Noodles in pan”</td>
</tr>
<tr>
<td><img src="image5.png" alt="Equipment" /></td>
<td><img src="image6.png" alt="Visual Supports" /></td>
<td>“2 cups of water”</td>
</tr>
<tr>
<td><img src="image7.png" alt="Equipment" /></td>
<td><img src="image8.png" alt="Visual Supports" /></td>
<td>“Timer on 2”...</td>
</tr>
<tr>
<td><img src="image9.png" alt="Equipment" /></td>
<td><img src="image10.png" alt="Visual Supports" /></td>
<td>“Boil”</td>
</tr>
<tr>
<td><img src="image11.png" alt="Equipment" /></td>
<td><img src="image12.png" alt="Visual Supports" /></td>
<td>“Drain”</td>
</tr>
<tr>
<td><img src="image13.png" alt="Equipment" /></td>
<td><img src="image14.png" alt="Visual Supports" /></td>
<td>“Put in bowl”</td>
</tr>
<tr>
<td><img src="image15.png" alt="Equipment" /></td>
<td><img src="image16.png" alt="Visual Supports" /></td>
<td>“Eat”</td>
</tr>
</tbody>
</table>
2. Establish predictable routines. Most people with Autism can learn routines quite quickly and are naturally motivated to repeat them. It is important for the steps in a routine to be presented with a clear beginning and end. For example, it may be helpful to say “First we do X. Then we do Y and Z and then we are done.” Since people with Autism are naturally motivated to repeat routines, completing a skill or activity from start to finish is often reinforcing for the person. This includes individual tasks as well as daily, weekly, monthly, and annual routines.

3. Provide information about the schedule before events occur. People with Autism often have difficulty anticipating future events and coping with transitions and changes in their routines. It is critical to inform people with Autism about an event before it occurs. Because verbal instructions are usually not enough, visual supports (pictures and words) should also be used to inform the person about the next activity in his or her schedule.

   **Morning Schedule**
   The following things must be done every morning before school.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Make your bed.</td>
<td>Get dressed.</td>
</tr>
<tr>
<td>Eat breakfast.</td>
<td>Brush your teeth.</td>
</tr>
<tr>
<td>Pack your lunch and snacks.</td>
<td>Get your backpack.</td>
</tr>
</tbody>
</table>

4. Use visual teaching methods. Visual supports are effective for many people with Autism. When presenting instructions or teaching a skill, it is helpful to combine verbal cues with visual supports such as written words, photos, templates, and timetables. Facial expressions and gestures such as pointing may also be useful.
5. **Teach the whole task.** When a person with Autism begins a task, they usually want to finish it. People with Autism may become agitated if they only complete some steps of the task and do not finish it. At the very least, the person should be able to observe the whole task from the beginning to the end. At the beginning of the task, it is helpful to use visual supports to show the end product and how each step fits together (as shown below in an illustration on how to make coffee).

![Illustration of making coffee](image)

1. Fill water  
2. Turn on switch  
3. Get coffee  
4. Put in cup  
5. Add water

6. **Allow sufficient response time.** It may take longer for people with Autism to process and respond to what is said to them. It may take a person with Autism between 30 to 45 seconds to respond to an instruction or request. Expecting a person with Autism to respond immediately will cause stress and agitation. Repeating an instruction within seconds of the original message will cause even greater stress. It is important to allow adequate response time for the person with Autism to respond. As a general rule, it is important to wait at least 45 seconds for the person before repeating the instruction or using another visual support.

7. **Give choices.** People with Autism usually respond better if they are given choices rather than being expected to respond to open-ended questions. For example, instead of asking “What do you want for your snack?” it is better to ask “Do you want carrots, chips, or an apple for your snack?” It may also be helpful to use visual supports (photos or actual items) to assist the person in making a choice.

```
Snack Choices

[carrot] [chips] [apple]
```

The person with Autism does not need to speak to make a choice. He or she may simply reach toward or point at the desired item or push the non-preferred item away.

8. **Use positive statements.** Challenging behavior may be triggered by overuse of words such as “no”, “don’t”, “stop”, “wait”, and “not right now”. It is important to use positive words instead of focusing on negative statements. If a person with Autism needs to be redirected, it is better to explain what to do rather than what not to do. For example,
instead of saying “Stop flicking your fingers” or “No flicking”, it is better to say “Let’s go in the kitchen and set the table” (a positive activity that is incompatible with finger flicking).

9. Adapt verbal language. People with Autism tend to respond well to key words and simple phrases. The following guidelines should be used when communicating with people who have Autism:

- Give one direction, prompt, or request at a time in the order that they will happen. (“Get the measuring cup”, “Get two cups of water”, “Add the water”)
- Use concise language. (“Add the water” instead of “You need to pick up the measuring cup by the handle using your left hand and then dump the water into the bowl”)
- Don’t phrase directions, prompts, or requests in the form of a question (“Pick up the measuring cup” instead of “Do you want to pick up the measuring cup?”)
- Use pauses to allow the person to process and respond to the request. (“Pick up the measuring cup…..pause…..Get two cups of water…..pause…..let’s go”)
- Use normal voice volume and varied intonation.
- Combine verbal directions, prompts, and requests with visual supports (e.g., gestures and photos)

When interacting with people who have Autism, it is important to remember that tone of voice, body posture, and facial expressions speak much louder than words when communicating politeness and respect.

Behavior Support

Stereotypical, ritualistic, and obsessional behaviors may disrupt the lives of people with Autism and their families. In order to minimize the interference that these challenging behaviors may cause, support providers should complete the steps which are outlined in the following sections to develop positive behavior support plans for people with Autism.

Identifying Underlying Causes

Many challenging behaviors serve an important adaptive function for the person who is exhibiting them. They obtain something they want or avoid something they don’t want. Challenging behaviors are often reinforced by their consequences (e.g., receiving attention; gaining a desired object, activity, or sensation; or escaping from an undesirable situation or demand).

It is crucial for support providers to complete a functional behavior analysis when a person with Autism is exhibiting challenging behaviors. (See the Designing and Implementing Positive Behavior Support module in the Community Staff Training curriculum). The following possible
functions have been identified for challenging behaviors. Possible strategies for consideration by the person-centered planning team are suggested.

<table>
<thead>
<tr>
<th>Possible Function</th>
<th>Suggested Approaches</th>
</tr>
</thead>
</table>
| Exploration for sensation                                  | • Teach a more acceptable alternative  
• Provide a variety of sensory activities which give the same sensation  
• Redirect the person’s attention to another activity |
| Screen out excessive stimulation                            | • Use ear plugs, sunglasses, a visor, etc. to help the person filter stimuli  
• Change the environment if possible  
• Encourage the person to listen to music with ear phones  
• Teach the person to relax and calm down when input level is high |
| Enjoyment of a particular sensation (self-stimulation)      | • Teach an alternative behavior which provides the same sensation (e.g., sitting in a rocking chair rather than rocking while sitting on the floor)  
• Divert the person’s attention to another activity  
• Provide rules about when and where the behavior is appropriate. Controlled access to a behavior may reduce the person’s desperation to do the behavior. |
| Predictability, order and security                          | • Provide a predictable routine  
• Use visual schedules  
• Give clear directions  
• Make sure the person has a clear understanding of expectations  
• Use statements such as “first you do _____ and then you do _____” |
| Communication of thoughts and feelings (e.g., “I need help”, “I don’t like this activity”, “I am frustrated”, etc.) | • Teach a more appropriate way to communicate the same thoughts or feelings (e.g., pictures)  
• Teach the person when and where to show various emotions. |

Challenging behaviors, such as aggression, disruption, or self-injury are often a chief concern. Many of these challenging behaviors are learned and maintained by what happens immediately before and after the problem behavior. Because they are learned behaviors, problem behaviors can be modified by manipulating or changing the situations in the environment, especially the events before and after the problem. In most cases, challenging behavior is seen as a way to request or communicate a preferred outcome (e.g., access to toys, food, social interaction, or cessation of unpleasant activity). Therefore, the goal is to replace the inappropriate “request”
with a more adaptive (appropriate and effective) communication. (Yoo n.d.) By linking program ideas to the function of the behavior that was discovered in the functional behavior analysis, people with Autism can learn positive alternative skills which serve the same purpose as the challenging behaviors.

**Functional Analysis of Challenging Behavior**

A functional analysis is used to identify the function of a particular behavior. ABC analysis, direct observations, interviews, record reviews, and other tools are used to conduct the functional analysis. During the functional analysis, data is collected and interpreted to allow the team to select the most appropriate behavior support interventions.

Functional analysis involves the following components:

- Identifying what triggers the challenging behavior (antecedents which precede the behavior)
- Describing the challenging behavior (including frequency, intensity, and duration)
- Determining what follows the challenging behavior (consequences which maintain the behavior)
- Developing hypotheses (guesses) about the motivating function of the challenging behavior

The following functional analysis chart can be used as a template for recording these components:

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>Behavior</th>
<th>Consequences</th>
<th>Hypothesis About Function of Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A completed functional analysis is provided as a sample.

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>Behavior</th>
<th>Consequences</th>
<th>Hypothesis About Function of Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>The direct support professional asks Jeff to stop working on his puzzle and help with the dishes</td>
<td>Jeff hits the direct support professional.</td>
<td>The direct support professional lets Jeff keep working on his puzzle project and asks Tim to help with the dishes.</td>
<td>Escape: Jeff likes working on his puzzle more than doing the dishes and hits the direct support professional to avoid an undesirable request. Or maybe Jeff needs a break before starting the next activity.</td>
</tr>
<tr>
<td>The bell rings to signal that it’s time to go back to work.</td>
<td>Leslie screams.</td>
<td>The job coach tells Leslie to be quiet and to go back to work.</td>
<td>Screen out excessive noise: Leslie screams because the bell is too loud and hurts her ears. She does not know where to go next.</td>
</tr>
</tbody>
</table>
Developing Positive Behavior Support Plans

Following completion of a functional behavior analysis, it is necessary for the person’s support team to develop a positive behavior support plan. A plan should meet four essential elements:

- **Clarity:** Information about the plan, expectations and procedures are clear to the individual with Autism, family, staff, and any other team members.
- **Consistency:** Team and family members are on the same page with interventions and approaches, and strive to apply the same expectations and rewards.
- **Simplicity:** Supports are simple, practical and accessible so that individual with Autism, the family, and everyone on the team, can be successful in making it happen.
- **Continuation:** Even as behaviors improves, it is important to keep the teaching and positive supports in place to continue to help your loved one develop good habits and more adaptive skills.

There are four critical and required areas of intervention in positive behavior support plans. They are:

1. **Prevention Strategies:** Such strategies are designed to change the environment so that the person does not have to use the challenging behavior to get their needs met. Support staff consider if they can change the environment so that they can eliminate, block, neutralize, or otherwise change the triggers or ‘antecedents' that lead to problem behavior.

   In the sample functional analysis in the previous section, the bell which prompted students to change classes caused anxiety for Leslie and resulted in her screaming every time she heard the bell. In this case, a simple environmental modification could be made by turning off the bell in Leslie’s classroom and setting a timer to prompt Leslie to go to her next class.

2. **Teaching New Behaviors:** It is very difficult to get rid of long-standing habits. Because challenging behaviors are effective for people with Autism, they cannot simply be eliminated without being replaced by alternative behaviors (or even more disruptive behaviors may take their place).

   If a challenging behavior is going to be reduced, it must be replaced with an alternative behavior that serves the same function as the challenging behavior. The new behavior must be efficient and adaptive and must result in the desired function for the person. In the functional analysis above, the person would be taught to ask for a break or a few more minutes to work on his project instead of hitting to get out of complying with an undesirable request.

3. **Responding to New Behaviors:** This component provides a plan for the team to reinforce and respond to the new behaviors. For example, consider a case where the function of the person's behavior is to escape a task. A replacement behavior for hitting in that case is asking for a break.
In order for this to be an effective replacement behavior, all team members, including family and support providers, must agree to give the person a break when it is appropriately requested. This part of a behavior intervention plan directs the team on how to reinforce the new behavior, so that the person will continue to use the new behavior (asking for a break) in place of the challenging behavior (hitting to get a break).

4. Responding to Challenging Behaviors including Crisis Management Plan: If the support team for a person with Autism is trying to replace hitting with the behavior of asking for a break, they must also have a way to respond to his hitting that a.) does not result in a break, and b.) reminds him that there is a better way to ask for a break. Therefore, this section of a behavior intervention plan teaches the team how to respond to a person when the problem behavior does occur. In addition to responding to the challenging behavior, sometimes it is necessary to implement a crisis management plan that will keep the person and those around them safe. In the case of positive behavior support plans, the role of the crisis management plan is to keep the person and others safe, not to attempt to change behavior with punitive or reactive management.

**Use Positive Behavior Support**—Strategies need to be individualized based on the person’s needs and challenges. Positive behavior supports can be helpful in building a sense of pride in accomplishments and personal responsibility, and a sense of what is expected. Some helpful strategies:

- Celebrate and build strengths and successes. Tell the person what he/she has done well and what you like.
- Respect and Listen. Look for things he/she is telling you verbally, through actions, or choices.
- Validate his/her concerns and emotions. Do not brush aside his/her fears or tell him/her not to worry. His emotions are real. Help give language to what he/she is feeling.
- Reward flexibility and self-control.
- Pick your battles. Strive for balance. Focus on the behaviors and skills that are most essential.
- Use positive language. Describe what you want the individual to do and try to avoid saying, “No.”

Focus on communication and functional skills to promote greater independence, social skills to promote greater understanding and self-regulation skills.
Teaching Self-Management Skills

Self-management interventions help learners with Autism independently regulate their own behaviors and act appropriately in a variety of home, school, and community-based situations. With these interventions, learners with Autism are taught to discriminate between appropriate and inappropriate behaviors, accurately monitor and record their own behaviors, and reward themselves for behaving appropriately (Neitzel & Busick, 2009).

Teach self-regulation and de-escalation strategies: Learning to self-regulate is essential to a person’s ability to remain calm. A person with Autism is most likely to show problem behaviors when he is in an emotional state of anxiety or agitation. Strategies and programs for building self-regulation relate to both arousal and emotions. Many of us have had to learn these ourselves—counting to ten, taking a deep breath—and the same principles apply to the learning needs of an individual with autism.

An important part of independence is helping people with Autism to manage their own behavior once they have learned alternatives to challenging behaviors. There are five basic steps for teaching a person to self-manage his or her behavior.

1. Define the targeted replacement behavior (what the team wants the person to do instead of the challenging behavior.) It is important to define the target behavior so that the person who is learning to self-monitor will be able to tell whether or not the behavior has occurred. For example, instead of a vague description such as “behaving in the cafeteria,” it would be better to describe specific behaviors such as staying in line, not touching others, and remaining seated until finished eating. Each of these specific behaviors is observable, measurable, and leaves no room for different interpretations by different observers.

When a person is initially learning to self-monitor, the target behavior should be easy to perform so that the person can quickly gain access to a reinforcer. As the person is successful, more behaviors can be added to the self-management procedure.

2. Identify reinforcers. Reinforcement should be given each time the person performs the target behavior and self-monitors the occurrence of the behavior. It is important to involve the person who is self-monitoring in selecting meaningful reinforcers for him or herself. It may be difficult, however, for some people with Autism to identify their own reinforcers. In such instances, it is helpful to observe the person to see what they like (activities, interests, objects, food). It may also be helpful to select reinforcers based on the function of their behavior. For example, if the person is using a challenging behavior to escape a boring or difficult task, a logical reinforcer for using a
more appropriate target behavior might be extra opportunities for participation in activities that the person really enjoys.

Teams need to ensure that the reinforcement plan does not restrict the person’s rights or typical access to foods, objects, and activities used as reinforcers in the plan. For example, a plan that uses dessert as a reinforcer when the person demonstrates the social skills targeted for increase in his/her support plan, would also mean that if he/she didn’t perform the social skill he/she would be denied dessert. This plan would be a restriction of the person’s rights and not permitted in most situations. Reinforcers need to be extra opportunities or access to desired activities, objects, etc. For more information see the Legal Issues module in the North Dakota Community Staff Training curriculum.

3. **Choose a recording system.** People with Autism need a self-management system to record whether or not the target behavior has occurred. Examples of recording systems include:

- Check marks on a piece of paper
- Stickers on a chart (for younger persons with Autism)
- Using a audio device with beeps set at specific intervals to signal when to record behavior
- Tallying devices (e.g., hand-held counter, wrist counter, etc.)

When selecting a recording system, it is important to consider the ability level of the person, the portability, and age-appropriateness of the system, and the target behavior to be recorded. The recording system should be as natural as possible for each specific setting (e.g., a clipboard at the work site or a wrist counter in gym class) so that it does not draw unnecessary attention to the person who is using it.

4. **Teach the person to use the system.** In this step, the person with Autism is taught (usually through modeling by a support provider) to perform the target behavior and to accurately record its occurrence in real world settings. After the target behavior is recorded, the person should be reinforced by the support providers.

5. **Teach self-management independence.** During this step, the support provider will fade out his or her assistance so that the person with Autism can independently self-monitor and self-reinforce the target behaviors. This step includes the following components:

- Reducing prompts to self-manage
- Increasing the amount of time that the person spends self-managing
- Increasing the number of self-recording responses that are required before the person receives the reinforcer (e.g., instead of receiving a reinforcer after recording each individual behavior, the person must record three behaviors before receiving the reinforcer)
- Teaching the person to access his or her own reinforcement for accurate self-recording

Each of these five steps is demonstrated in the following example.
Erin is a 23 year old with a diagnosis of Autism. In McDonalds, Erin has difficulty waiting in line for her food. She also tries to grab food off of other customers’ trays and she does not like to stay seated until she is done eating. Erin’s team is concerned that if these behaviors continue, it will be difficult for her to be included in typical activities (e.g., eating in the break room at a work site, ordering in a fast food restaurant, and working on a task until it is finished). Erin’s team decided to teach her how to use a self-management procedure for these behaviors.

Step #1: Define the target behaviors. Three behaviors were targeted for self-management. These included: waiting in line for food, keeping hands to self, and staying seated until finished. These behaviors were communicated to Erin by using photographs that showed her performing each of the target behaviors.

Step #2: Identify reinforcers. Observations of Erin quickly showed that her preferred reinforcer was to go for walks in the park with Helen, her favorite direct support professional. It was agreed that Erin could earn time to walk in the park with Helen after she completed each of the targeted behaviors.

Step #3: Choose a recording system. Because Erin was able to read and write, the team decided that Erin would record a plus or minus after each of the target behaviors. The data sheet for self-recording (as shown below) would be part of Erin’s daily planner so that it could be used discretely in McDonalds or other fast-food restaurants.

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waited in line for food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kept hands to self</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stayed in seat until done</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Step #4: Teach Erin to use the system. Initially, the direct support professional kept the data on when Erin demonstrated the target behaviors. The direct support professional prompted Erin to record a plus or minus next to each behavior.

After the modeling phase, the direct support professional prompted Erin to monitor her own behavior by asking a question about each target behavior. “Did you wait in line?” “Did you keep your hands to yourself?” “Did you stay in your seat until you were done eating?” The direct support professional also prompted Erin to record her behavior by writing a plus or minus next to each target behavior. Following completion of each target behavior and accurate
recording of a plus or minus, the direct support professional verbally reinforced Erin. If Erin did not complete a target behavior or did not accurately record a plus or minus, she was prompted or re-directed by the direct support professional. Following completion of each individual target behavior, Erin earned five minutes of free time to walk in the park with Helen.

Step #5: Teach Erin to use the self-management system independently. Eventually, Erin was able to complete all three of the target behaviors in the cafeteria (although she still needed prompts to accurately record her responses). Once she was able to complete all three of the target behaviors, she no longer received free time after each individual behavior. Instead, she was required to complete all three of the target behaviors before she received free time to walk in the park with Helen.

Additional sample recording sheets are provided in Appendix E.
For more information on self-management strategies, refer to the Evidence-Based Practice Brief: Self-Management by the National Professional Development Center on Autism Spectrum Disorders available online [http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/imce/documents/Self-management-Complete-10-2010.pdf]

Promoting Independence Through the Use of Adaptations and Individualized Supports

People with Autism may have limited independence in a particular setting (e.g., work, living, recreation, community) because of impairments in their ability to communicate and to understand social interactions. It is important to develop instructional strategies which capitalize on the strengths of the person with Autism. The most effective instructional strategies for people with Autism may be those which include adaptations and individualized supports. Adaptations and individualized supports are as important for persons with Autism as eyeglasses are to people with visual impairments. Common adaptations and individualized supports are described in the following sections.

Building Consistent Routines/Schedules. Consistent routines and schedules provide an optimal learning situation for people with Autism. Because most people with Autism are concrete learners, the following visual materials may help them to understand their daily schedule and expectations about their routine.

- Wall calendars
- Written schedules
- Boards with Velcro pictures of activities
- Written steps of a task
- Picture steps of a task
- Written rules
Communicating Expectations. Clear directions must be given to people with Autism so that they understand exactly what to expect in their day. Abstract phrases such as “we’ll see”, “in a little while”, “maybe”, and “just a moment”, etc. should be avoided because they may be confusing or frustrating to people with Autism. Concrete statements such as “we’ll leave in five minutes” or “we’ll leave when the timer goes off” are much more effective because they provide clear information about how long the person will have to wait until the next activity begins.

It is also important to clearly state when an activity is finished. People with Autism may not automatically understand when they are finished with an activity or task, that they should work faster to make more money, or how long a certain period of time lasts. Statements such as “Stuff 25 envelopes and then you are finished” or “Fill the template two times and then it’s break time” are more effective than abstract comments such as “You’ll be done in 10 minutes” or “Only a little bit longer until your break”. Timers are an effective adaptation that can be used to help a person with Autism know when one event is finished and another begins.

Other adaptations and enablers that may help people with Autism to understand the order of events and expectations include the following:

- Visual templates with the steps in a routine
- A checklist of steps which can be marked off as they are completed
- A picture of the reinforcer which the person will receive at the end
- “First _____, then _____” statements which tell the person exactly what is expected. For example, “First wash your hands, and then snack”, “First go shopping, and then we get ice cream”, or “First set the table, then make the salad”.

Providing Environmental (Stimulus) Cues

Because people with Autism may have difficulty processing verbal directions, they often rely on cues in the environment (stimulus cues) to understand what is going on around them. Stimulus cues make settings predictable and orderly for persons with Autism. They help increase the person’s independence in everyday activities. Examples of environmental cues include:

- Flicking the lights when it’s time to clean up or turning off the lights when it’s time to leave the house
- A timer going off when it’s break time or time to transition to a new activity
- A particular object for the same task every day (a certain bucket that is used only for washing tables, a certain CD that is used for relaxation during free time, etc.)
- A template to complete a job (e.g., a placemat with an outline of each object drawn on it for setting the table)
Incorporating Motivational (Reinforcement) Procedures

People with Autism may not be motivated by the same things that motivate other people (e.g., paychecks, verbal praise, social interactions, competition, etc.). When people with Autism do not respond to these typical reinforcers, others may assume that they are lazy, uncaring, disinterested, unenthused, etc.

It is important to individualize reinforcers. What is reinforcing for one person with Autism may be very offensive to another person. Also, because a person’s interests may change, what is reinforcing one week may not motivate him or her at all during the next week. Too much of a good thing may also cause a person to become unmotivated. This is known as satiation. Assess the person regularly to determine if a particular reinforcer is still motivating. Change reinforcers if necessary to avoid satiation.

Examples of reinforcers for people with Autism may include:

- Time spent alone
- Time to talk to a staff member
- A favorite object that is age-appropriate
- Music
- Time to complete a favorite routine or activity

Using Desensitization Procedures and Rehearsal Strategies

People with Autism may have heightened fears and anxiety when their routine is disrupted or when they are facing new or unusual situations, people, or places. These unusual concerns and obsessions may prevent them from enjoying many aspects of everyday life. Examples of such situations may include:

- Certain medical or dental procedures
- Loud noises
- Animals
- Change in schedule due to unforeseen circumstances
- Change in location/route
- Objects out of place
- Seeing a person out of context
- Interrupted rituals

The feelings associated with these situations may make it very difficult for the person to successfully complete a task or participate in an activity. In these cases, a desensitization procedure may be necessary.
Desensitization involves gradually introducing or exposing the person to the particular object or activity which causes fear and anxiety. This process starts with brief exposure to the object or activity, with a gradual increase as the person becomes less fearful or anxious. If the person remains calm while the object is near or the activity is occurring, he or she is reinforced.

Rehearsal strategies can also help to eliminate many of the fears and anxieties which are associated with certain activities, settings, and transitions. Examples of rehearsal strategies include looking at pictures of a dental routine, saying the steps for completing a particular job, practicing writing a signature before cashing a check at the bank, and making a grocery list and writing down the aisle numbers before going into the store.

**Offering a Relaxation Area**

For some people with Autism, it may be helpful to provide an area for relaxation if he or she needs to calm down or withdraw from an upsetting situation. This may be as simple as having a bean bag chair in a designated corner or the person’s favorite toy (for younger children with Autism) or object (such as a CD player for older people with Autism) on a particular shelf in the room. When the person becomes anxious or frustrated, he or she can independently choose to calm down in this area or be directed to go there by a support provider.
Chapter 4: Feedback Questions

1. Why is it usually more effective to embed therapy services in everyday activities and routines in natural environments?

2. Indicate the related-service professional who is most likely to work on the following skills with a person who has Autism.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Related-Service Professional</th>
<th>Skill</th>
<th>Related-Service Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination</td>
<td>Exercising</td>
<td>Using signs</td>
<td>Muscle tone</td>
</tr>
<tr>
<td>Augmentative Communication</td>
<td>Employment</td>
<td>Balance</td>
<td>Eating</td>
</tr>
<tr>
<td>Fine motor</td>
<td>Assistive technology</td>
<td>Spoken language</td>
<td></td>
</tr>
</tbody>
</table>

3. Describe how you would implement each of the following Communication Strategies to help people with Autism understand what is going on around them and effectively communicate their needs. You may use a specific example to explain your answer.

   a. Modify Language of Support Providers:

   b. Remove Uncertainty:

   c. Set Rules:

   d. Teaching Alternative Skills:

4. Describe the six phases for teaching people with Autism to use the Picture Exchange Communication System (PECS).

   Phase I -
   Phase II
   Phase III
   Phase IV
   Phase V
   Phase VI

5. Describe five benefits of PECS for people with Autism.
6. List two common dietary treatments for Autism-related symptoms.

7. Describe four critical components of social skills training programs for people with Autism.

8. Describe steps of a peer-mediated social skills program.

9. List the steps for teaching a person with Autism to support his or her own use of social skills.

10. Specify four guidelines for writing a social story for a person with Autism.

11. List three ways that a social story could be individualized for a person with Autism who does not read.

12. Learning strengths of many people with Autism include the ability to:
   a. Take in whole _______ of information quickly
   b. _______ information for a long time
   c. Use _______ information
   d. Learn and repeat lengthy _______
   e. Understand _______
   f. Use _______ information
   g. Concentrate on _______ topics of interest
13. Strategies for focusing on learning strengths and maximizing independence include:

a. Be prepared and provide ________ cues. If information which is NOT relevant to the skill is provided, the person will learn the ________ information and remember it for a ________ time.

b. Establish ________ routines. It is important for the steps in a routine to be presented with a clear beginning and end.

c. Provide information about the schedule ________ events occur. Verbal instruction and ________ supports should both be used.

d. Use visual teaching methods.

e. Teach the ________ task.

f. Allow sufficient ________ time. As a general rule, it is important to wait at least ________ for the person before repeating the instruction or using another visual support.

g. Give ________ rather than expecting the person to respond to ________ questions.

h. Use ________ statements. If a person with Autism needs to be redirected, it is better to explain ________ rather than what not to do.

i. Adapt verbal language. People with Autism tend to respond well to ________ and ________ phrases.

14. List six guidelines for communicating with people who have Autism.

15. Before developing a positive behavior support plan, the team must investigate to determine the underlying ________ and perform a ________________ ________.

16. List the four components of a functional (ABC) analysis of challenging behavior.

17. Describe the four areas for intervention in a positive behavior support plan for a person with Autism.

18. ________ and ________ are as important for people with Autism as eyeglasses are to people with visual impairments.

19. ________ routines and schedules provide an optimal learning situation for people with Autism.
20. Because most people with Autism are _______ learners, _______ materials may help them to understand their daily schedule and expectations about their routine.

21. It is important to _______ define when an activity will start and when is _______.

22. List six adaptations and individualized supports that may help people who are not able to tell time to understand the order of events and expectations.

23. Because people with Autism may have difficulty processing _______ directions, they often rely on cues in the environment (stimulus cues) to understand what is going on around them. _______ cues make settings _______ and orderly for people with Autism. They help increase the person’s _______ in everyday activities.

24. What is reinforcing for one person with Autism may be very _______ to another person.

25. Why are desensitization procedures sometimes needed for people with Autism?

26. What are two approaches that might help ease the fear of going to a dental office for a person with Autism?

27. Put an “X” by the statements which provide clear expectations about an activity or schedule for a person with Autism.

   a. _____ “Maybe we’ll go to the library sometime next week.”
   b. _____ “Do two math problems and then recess.”
   c. _____ “It will be time for lunch in a little while.”
   d. _____ “Go to the break room as soon as the timer goes off.”
   e. _____ “Staple some more papers and then we’ll see about having a snack.”
   f. _____ “Check off all of the steps of your job and then you can watch TV.”

28. Put an “X” by the “rehearsal strategies” which would be helpful for a person with Autism who is scared or anxious about a particular activity or object.

   a. _____ “Don’t be so stressed out about getting a Tetanus shot. It doesn’t hurt too much.”
   b. _____ Pictures of the difficult steps of the person’s job
   c. _____ Looking at a dog in the backyard through the kitchen window and watching a staff member pet the dog
   d. _____ “Calm down. It’s just a fire alarm.”
   e. _____ Photograph of a new staff member
Chapter Five: Support Strategies for Adults with Autism

**Purpose:** Adults with Autism have valuable contributions to make to society. These contributions will be maximized when the person is adequately prepared and receives ongoing support. This chapter will describe support strategies for guiding adults with Autism in determining a realistic and meaningful future. With systematic planning and support, people with Autism can be prepared to be successfully included in adult activities such as work, supported living, and community participation.

**Objectives:**

After completing this chapter, staff will be able to:

- Describe why it may be difficult for some parents as their son or daughter with Autism transitions from adolescence into adulthood
- List three core values for supporting adults who have Autism
- Describe the purpose of transition planning
- Explain the meaning of “self-determination”
- Describe ways in which young adults with Autism can access support in college
- Explain why many adults with Autism have negative employment outcomes
- Describe factors that contribute to a good job match for a person with Autism
- Explain the term “job-carving”
- Describe the positive aspects of the supported living movement for people with Autism
- Suggest potential job accommodations to support employment challenges for people with Autism
- Plan for and participate in a Person-Centered planning meeting for a transition age student or adult with Autism

**Outcomes for Adults with Autism**

Families often do not know what to expect as their sons and daughters with Autism grow older. Parents worry about how much independence their child will be able to attain. They also worry about how their son or daughter will cope when they are no longer able to care for them.

Families often face the anxieties and uncertainties of caring for a young adult with Autism with little or no support. Even if families had access to valuable support when their child was younger, these resources are often limited when their son or daughter reaches late adolescence and adulthood.
Quality of life for many adults with Autism is characterized by social exclusion, dependence, and limited opportunities to grow and improve (Howlin, Goode, Hutton, & Rutter, 2004). There is clearly a “disconnect” between what research suggests is possible (Smith, Belcher, & Juhrs 1995) and actual outcomes for adults with Autism (Gerhardt & Holmes, 2005). During their adult years, many people with Autism are often dependent on their families or other support services. Most adults with Autism do not live independently or have permanent employment. Adults with Autism also report having few close friends. These outcomes indicate that quality of life issues (e.g., independence, self-determination, employment, mental health, social support, and meaningful relationships) for adults with Autism must be addressed when planning transition, selecting support services, and determining the overall effectiveness of a support program.

**Core Values of Supporting Adults with Autism**

There are several core values which provide a foundation for supporting adults with Autism. These include the following:

- Adults with Autism are valuable. They are valuable members of their families and they are good friends, classmates, colleagues, and employees. People with Autism play important roles in their communities.
- Adults with Autism should be supported to live and work in the communities of their choice.
- Adults with Autism have unique and complex needs in areas such as communication, social skills, behavior and sensory issues, and environmental needs. These issues are different from people with cognitive disabilities.
- Functional abilities and limitations will vary considerably from one individual to another. To maximize independence, services and supports must capitalize on individual strengths.
- Families play a vital role in supporting adults with Autism. Each family’s unique needs, expectations, resources, values, and priorities must be honored.

**Interventions for Adults**

While there is a vast amount of research on interventions for children with Autism, there are very few studies on support programs for older people with Autism. Most of the literature on supporting adults with Autism focuses on the reduction of problem behaviors and the acquisition of basic life skills. There is evidence, however, that adults with Autism make significant progress if adequate support structures are in place in areas such as transition, post-secondary education and training, employment, and community living.
**Transition**

The transition from school to adulthood is a pivotal time in the lives of all students. For a student with Autism, change can be especially challenging because of the uncertainty and demands associated with this shift. Unfortunately, many people with Autism experience high drop-out rates, high unemployment, low wages, few job options, limited social relationships, restricted living choices, and poor preparation to handle simple daily routines.

To address these negative outcomes, a strategy called “transition planning” is being used to ease the move from school to adulthood for people who have Autism. The persons with Disabilities Education Improvement Act (IDEA) mandates that formal transition planning begins at age 16 for students with disabilities. In practical terms, however, the transition process should begin much earlier, usually by age 14. The transition planning team should include the student, his/her parents, members of the educational team, and adult service providers. The goal of the transition plan is to facilitate the movement of a person with Autism from school to the adult world of work, living, and community participation. The Individualized Transition Plan (ITP) should outline the types of support that the person with Autism will need in areas such as: educational or vocational training, employment, community living and participation. A transition plan should include the following components:

- Goals
- Strategies for achieving goals
- Roles and responsibilities for supporting the person with Autism
- Timelines for achieving goals

There are several considerations which should be addressed during transition planning. These include:

- Goals which reflect real life activities (e.g., cooking, handling personal finances, shopping, using transportation, etc.) for people with Autism so that he or she will be prepared for adulthood.
- Job related skills such as being organized, being prepared, finishing assigned tasks, following instructions, dressing appropriately, and interacting with others.
- Encourage people with Autism to participate in social events to build a network of support for future activities.
- During the person’s school years, provide opportunities for him or her to gain experience in real work settings (e.g., job shadowing, volunteering, apprenticeships, etc.).
- Help the person with Autism to build a resume in an appropriate format (e.g., video, computer, portfolio, etc.).
• Teach behaviors which are appropriate to specific work environments (e.g., social demands and nuances) while the person is in the natural setting.
• Teach a repertoire of social interchanges that the person can use to engage in office small talk and job-related discussions. Use social stories (Chapter Four) if necessary.
• Encourage the development of natural supports (e.g., mentor, co-worker) at the job site. A job coach or other support personnel may be necessary to help with solving problems, handling difficult situations, adapting or modifying a task, and adjusting to changes in the job routine.

Effective transition is central to more independent, involved, and enjoyable lives for people with Autism. Therefore, transition planning for moving from school to adulthood has several important purposes.

• Introduces the family to adult support services
• Identifies gaps in the adult service system and areas in which further advocacy is required
• Determines supports needs for the person to work, live, and recreate in the community during adulthood (e.g., post school options, transportation, medical needs, support networks, advocacy and guardianship, long-term planning, etc.)
• Individualizes services by providing relevant information to adult support providers
• Targets transition goals, responsibilities, and timelines for a smooth transition

The ultimate outcome of transition planning is that adults with Autism will enjoy a good quality life. Because the definition of a “quality life” is subject to individual interpretation, transition plans must be individualized for specific people. The person with Autism should have opportunities to choose their own job, living arrangements, recreation activities, and personal schedule. To avoid planning someone’s life without their input, the person with Autism is the most important participant in the transition planning process.

**Self-Determination**

When a person is involved in making his or her own decisions for a quality life in the future, it is called self-determination. Self-determination involves making one’s own life choices, setting personal goals, and developing a plan of action to achieve those goals. Determining one’s own future should be part of the transition process for people with Autism and involves skills such as:
- Communicating preferences
- Setting realistic goals
- Making choices
- Managing personal time
- Identifying and solving problems
- Accessing resources
- Advocating for oneself

Each day, people make choices that impact their lives. People decide where they will work, with whom they will live, and the types of extracurricular activities in which they will engage. For people with Autism, however, these decisions are often made by others and without input from the person.

Person-centered planning can be used to assist people with Autism to transition successfully from school to adulthood and to achieve self-determination. Person-centered planning approaches support people with Autism in making decisions which reflect their individual preferences, strengths, and personal visions. These planning approaches involve exploring possibilities for the future, brainstorming support strategies to make these possibilities a reality, and identifying outcomes that are beyond what is offered by traditional adult services. Some people with Autism may need support to become full participants in Person-Centered Planning approaches. See the chart below for some examples.

<table>
<thead>
<tr>
<th>Self-Determination and Person-Centered Approaches for Involving the Person with Autism</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For visual learners:</strong></td>
</tr>
<tr>
<td>- Draw pictorial representations of where the person is now, his/her goals, and what is needed to reach those goals</td>
</tr>
<tr>
<td>- Have the person assist in drawing pictures or using clip art to show favorite activities</td>
</tr>
<tr>
<td><strong>For verbal learners:</strong></td>
</tr>
<tr>
<td>- Create a list of activities for which the person needs assistance</td>
</tr>
<tr>
<td>- Brainstorm strengths and possible accommodations</td>
</tr>
<tr>
<td><strong>For nonverbal learners:</strong></td>
</tr>
<tr>
<td>- Use photos or videos to assess interests and preferences</td>
</tr>
<tr>
<td>- Provide actual opportunities for the person to experience different adult options and observe reactions</td>
</tr>
</tbody>
</table>
Through person-centered planning and lifestyle planning, people with Autism are supported by friends, relatives, and professionals to construct a map for his or her life. It is crucial to involve the person with Autism and his or her family members early in planning long term goals in areas such as employment, community living, and recreation activities. This planning is important for identifying necessary supports for making long range goals a reality for people with Autism.

The following questions can be used as a guide for facilitating decisions about long term visions for a person with Autism in several key areas of adulthood. These questions will help people with Autism and members of their support network to identify desired outcomes for their future and chart a course for a meaningful adult life.

Post-Secondary Education
1. Is the person interested in taking classes at the post-secondary level?
2. Is the person interested in taking classes at a vocational training school?
3. Is the person interested in taking adult education classes through community education, the local library, or another adult organization?

Employment
1. Does the person want to be employed either part-time or full-time?
2. Does the person want to work at one job or more than one job?
3. Would the person be interested in volunteering instead of working?
4. Would the person like to work and volunteer?
5. Are wages important to the person?
6. What is the minimum amount of money the person would be willing to accept?
7. Would the person be interested in being self-employed?
8. Does the person want to sample a few different jobs to identify what he or she likes best?

Communication
1. What is the person’s primary method of communication?
2. Should different methods of communication be used at different times?
3. What is the best way for the person to receive information (e.g., seeing written words or pictures, listening, modeling, combination, etc.)?
4. How do others support the person’s communication?
5. Can the person correspond with others (e.g., phone, email, visits, etc.)?

Community Living
1. Where does the person want to live (e.g., apartment, house, duplex, etc.)?
2. Does the person want to have a roommate? How many?
3. Is there someone in particular with whom the person wants to live?
4. Does the person prefer to live in town or out in the country?
5. Does the person want to rent or own?
6. How much can the person spend on rent?
7. Does the person have his or her own furniture and household items?

**Transportation**
1. How does the person get around in the community (e.g., to school, work, restaurants, grocery stores, recreation activities, community events, etc.)?
2. Are some modes of transportation better than others depending upon the time of day? What does the person use for transportation after regular business hours?
3. Is the person eligible for transportation support money?

**Relationships**
1. With whom does the person enjoy spending time?
2. Does the person prefer spending time with many people or a few people?
3. What are the person’s interests?
4. Does the person have opportunities to meet new people that are his or her own age?
   Where?
5. Does the person want a pet?
6. Does the person want to join a club or organizations that reflects his or her interests?
7. Is the person interested in dating?
8. What support does the person need to pursue social interactions and friendships?

**Supports**
1. Does the person want to make all of his or her own decisions?
2. Does the person want others to make decisions on his or her behalf?
3. Who does the person want to be part of his or her decision making team?
4. Does the person want to have times when there is no staff present?
5. Does the person have opportunities to participate in age appropriate activities?
6. How does the person communicate in the community?
7. How much support does the person need in different settings (e.g., home, community, transportation, employment, recreation, etc.)?
8. Are natural supports available in these settings?

Once the person’s support network has a clear understanding of his or her desired path to adulthood, the person’s vision for the future can be identified and a plan of action can be created to achieve it.
Post-Secondary Education and Training

Goals for post-secondary education may be appropriate for many young adults with Autism. Many people with Autism are able to attend college or trade school to continue their education. Post-secondary education also provides opportunities for social interactions and relationships.

The transition to a post-secondary environment can be difficult for many people with Autism. With adequate preparation and planning, however, the process can be individualized to increase the potential for success. Several recommendations have been provided for people with Autism who are pursuing post-secondary education before employment.

- Work with guidance counselors prior to graduation from high school.
- Connect with adult service providers to determine eligibility for programs and benefits.
- Identify post-secondary programs (e.g., university, community college, vocational school, technical institute, community education) that offer training in areas of interest.
- Visit post-secondary programs and request catalogs, financial aid materials, and application.
- Identify support needs and accommodations. Identify disability-related resources to determine if the post-secondary program can provide necessary support and accommodations.
- Complete requirements for entry into post-secondary programs (e.g., tests, application, interview, etc.).

The protections which were once offered by the IEP and transition plan are no longer available as an entitlement to students with Autism in post-secondary settings. Providers of post-secondary education and training are not responsible for identifying students with Autism to determine what supports are needed. Therefore, the following suggestions are provided for accessing support for students with Autism in post-secondary settings.

- Provide information about Autism and how it specifically affects the person with Autism in the post-secondary program. It may be helpful to disseminate a one-page “fact sheet” about Autism and the challenges that the person faces as well as strategies that can be used to assist him or her.
- Locate a student services staff member who can help to advocate for the young adult with Autism throughout his or her post-secondary years. This type of support may include providing information about services on campus, introductions to groups on campus with shared interests, and recommendations about instructors who may be willing to provide accommodations.
- Encourage the person with Autism to use strategies such as written schedules, visual aids, tape recordings of lectures, and other accommodations.
- Explore options for modified assignments and test taking.
**Employment**

Many adults with Autism remain unemployed or served in segregated day support programs or sheltered employment settings, despite the growing evidence that participation in these programs rarely leads to paid competitive employment in integrated settings. With an appropriate job match that maximizes the person’s strengths, people with Autism can be very successful in both supported employment* and competitive employment**. Here is one such story:

_Nancy Henn, winner of 1999 APSE (Association of Persons in Supported Employment) “National Personal Achievement Award” and the 2003 national “Outstanding Individual with Autism” award from the Autism Society of America, was considered by some tests to be in lower 10% of all those with Autism. She uses sign language, gestures, and a few words to communicate and has “severe behavioral challenges.” Today she works 40 hours a week at union scale and receives full benefits. She does this with the support of a full time behavior specialist/job coach, who she pays from her work earnings. She has been employed for over nine years and has lived for 10 years in her own home with three roommates of different abilities. Her parents explain how transition planning, community based supports and creative use of a Social Security PASS plan, helped Nancy achieve employment success in a 2005 article in the Journal of Vocational Rehabilitation. [http://iospress.metapress.com/content/mpv6t5jc76jquw9u/fulltext.pdf](http://iospress.metapress.com/content/mpv6t5jc76jquw9u/fulltext.pdf)_

*Supported employment* programs refer to jobs in the community with a system of ongoing supports. The person with Autism is first placed in the job and then receives training. Historically, wages in supported employment have varied depending on the person’s productivity, but best practice recommends striving for wages and benefits that are at least typical for the community for similar jobs. Supported employment programs are time limited. As soon as the person is performing the job to the standard expected by the employer with minimal support, but no longer than 18 months, the person moves into Extended Services which is the long term follow up to initial job placement, stabilization, and training.

**Competitive employment** refers to jobs in the community with natural supports. Natural supports would be those provided by co-workers and supervisors to every employee in the company. The person with Autism is fully integrated into the general workforce. Employment supports are available if needed. The person receives market wages and the same benefits that other employees receive. People with Autism with the best employment outcomes are those who start their work experience during transition from high school into competitive employment with supports.
Young people with disabilities who work before they leave high school have much higher employment rate than those who do not. During transition, students with Autism who qualify for Developmental Disabilities case management connect with adult service providers that offer employment support through the Department of Human Services case management. When representatives from adult vocational employment service provider agency attend the person’s transition planning meetings, employment needs can be identified and supported as the person transitions to employment. Referrals to Vocational Rehabilitation (VR) can be initiated by the educational team, the Case Manager or the family. VR services are time limited to 18 months.

**Strengths and Challenges for people with Autism**

According to Dr. Stephen Shore, Ed. D, while some symptoms of Autism may present challenges, others can be strengths and advantages for people with Autism.

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>CHALLENGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention to detail</td>
<td>Grasping the big picture</td>
</tr>
<tr>
<td>Often highly skilled in a particular area</td>
<td>Uneven set of skills</td>
</tr>
<tr>
<td>Deep study resulting in encyclopedia knowledge on areas of interest</td>
<td>Difficulty developing motivation to study areas of non-interest</td>
</tr>
<tr>
<td>Tendency to logical (helpful in decision-making where emotions interfere)</td>
<td>Difficulty perceiving emotional state of others</td>
</tr>
<tr>
<td>Usually visual processing (thinking in pictures or video)</td>
<td>Difficulty processing in non-favorite modalities such as aural, kinesthetic, etc.</td>
</tr>
<tr>
<td>Often very verbal</td>
<td>Difficulty summarizing important information for a conversation</td>
</tr>
<tr>
<td>Direct communication</td>
<td>Sensory integration problems where input may register unevenly, distorted and difficulty in screening out background noise</td>
</tr>
<tr>
<td>Loyalty</td>
<td>Generalization of skills and concepts</td>
</tr>
<tr>
<td>Honesty</td>
<td>Difficulty in expressing empathy in ways that others expect or understand</td>
</tr>
<tr>
<td>Nonjudgmental listening</td>
<td>Executive functioning resulting in difficulties planning long-term tasks</td>
</tr>
</tbody>
</table>

Taking these strengths into account, a person with Autism can be productive, successful, and independent in community and employment settings.

**Preparing People with Autism for Employment**

There are several important considerations for preparing people with Autism for employment:

**Consider All Employment Ready.** The concept of “work-readiness” must be redefined so that all people with Autism are considered to be employment-ready. Work-readiness usually refers to a
set of prerequisite skills which are necessary for successful employment (e.g., time on task, minimal challenging behaviors, social competence, etc.). Unfortunately, work-readiness often excludes adults with Autism from the workforce. Employers may be reluctant to hire an employee with Autism because he or she does not have the prerequisite skills for the job. At the same time, it is impossible for the person to gain the prerequisite skills because the opportunity to work is denied. Because many basic employment skills are best learned while on the job, work-readiness often results in a “Catch 22” for many people with Autism. It is necessary to redefine work-readiness to recognize that all adults with Autism are viable candidates for employment and to provide practical, hands-on employment opportunities, training, and support.

View First Jobs as Learning - A person’s first job is usually not their final job. Most typical adults go through a series of jobs before they find their “dream” job. This should be the same for adults with Autism. First jobs are important because they provide opportunities for adults with Autism to develop the skills which are necessary to keep a job. They also allow people with Autism to explore which types of work and working conditions are best for them. Even if a first job is not successful, it can provide valuable information about the person’s needs, abilities, interests, preferences, and behaviors. It is important to consider the following factors:

- Was the job too noisy?
- Were the demands too high?
- Was the work setting confusing or chaotic?
- Was there enough for the person to do?

Match Jobs to Preferences and Needs - The person’s preferences and needs must match the characteristics of the job. This is called “job match” (Ochocka, Roth, & Lord, 1994) or “goodness of fit” (Shalock & Jensen, 1986). A positive job match means that the demands (e.g., production, social, and communication) and environmental characteristics (e.g., noise level, structure, crowdedness, lighting, etc.) of the job are similar to the preferences and needs of the employee with Autism. A paycheck may not be as motivating to them as it is to most people. Their motivation to work will be directly related to their enjoyment of the work that they are being asked to do. A good job match may be the critical factor for determining job satisfaction for employees with Autism.

The factors that contribute to a job match for employees with Autism can be classified into the following components:

<table>
<thead>
<tr>
<th>Physical Components of the Job Match</th>
<th>Social Components of the Job Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Hours of employment</td>
<td>- Acceptable level of interaction with coworkers and supervisors</td>
</tr>
<tr>
<td>- Acceptable noise level at the job site</td>
<td>- Clear job expectations</td>
</tr>
<tr>
<td>- Pay, leave, and other benefits</td>
<td>- Grooming and hygiene requirements</td>
</tr>
</tbody>
</table>
• Acceptable activity levels
• Physical requirements (e.g., lifting)
• Acceptable margin of error (quality control)
• Production requirements

• Communication skill demands
• Personal space available
• Break room available
• Coworker training and support

**Promote Creativity** - Many jobs require some level of technical, social, and organizational skills. This complexity can be advantageous to some adults with Autism through a process called “job-carving”. (Nietupski & Hamre-Nietupski, 2000) which involves “carving out” individual tasks from more difficult, multi-task jobs. Carved-out tasks are then combined to create a job that is specifically designed to meet the needs of an employee with Autism, his or her employer, and the customers. Good job-carving requires these components:

• Thorough knowledge of the employee’s abilities, preferences, and needs
• Direct understanding of the employer’s expectations and needs
• Solid observation and analysis skills
• Effective negotiating skills

**Support and Train Co-Workers** - Most people in the general workforce have a limited understanding of Autism and the potential of a person with Autism to be a productive employee and valued co-worker. In most cases, employers, supervisor, and co-workers will require some degree of training to support work competence and social inclusion. Potential training topics in the workplace may include the following:

• Introduction to Autism and how it may impact the life of their new coworker
• Individual preferences and needs related to job performance
• Effective communication and interaction approaches
• Effective strategies for social inclusion
• Roles and responsibilities of the job coach
• Methods for providing performance feedback
• Basic information about unusual behavior patterns

**Develop Community Ties** - Collaborative partnerships with businesses in the community can promote increased access to employment for adults with Autism by:

• Identifying local hiring trends
• Determining areas of potential job development
• Providing training on how to effectively work with employers to “carve” jobs
• Identifying employer expectations and requirements
• Providing direct access to a pool of possible employees
• Assisting in the development of employer-friendly materials and resources
Providing Accommodations for Employees with Autism

Positive employment outcomes are critical for people with Autism to become participating members of their communities. It is both possible and desirable for adults with Autism to be employed in community jobs and to live quality lives (Bannerman, Sheldon, Sherman, & Harchik, 1990). Inclusive community employment should be a goal for all people with Autism who want to work. Failure to identify the necessary supports is a major reason for underemployment, unemployment, and job loss for employees with Autism (Holmes, 2007). Positive employment outcomes for people with Autism can be achieved when adequate supports are identified, put into place, and evaluated regularly to ensure effectiveness.

People with Autism have unique characteristics. There is significant variability across work skills, interests, and behaviors of people with Autism. It cannot be assumed that all employees with Autism will have the same support needs. It is crucial to be familiar with each person’s work interests and abilities so that support needs can be met on an individualized basis. There are several key factors which must be considered in supporting employees with Autism:

- All people with Autism are different. Each person with Autism has unique skills and abilities as well as support needs. Therefore, one specific strategy doesn’t work for all employees with Autism in all work settings. Accommodations must be individualized.
- In addition to analyzing the characteristics of the employee with Autism, the work setting and its employees must also be examined. A job analysis should include environmental factors (e.g., noise level, lighting, temperature), co-worker supports (e.g., amount of available supervision, social demands of the work place), and types of job tasks (e.g., down time, productivity standards, number of job duties, routine, job complexity, deadlines).
- Information about the person with Autism in natural, inclusive settings (e.g., home, restaurants, stores, school, etc.) is usually more helpful than information that comes from segregated environments (e.g., special education classrooms, sheltered workshops, etc.).
- Appropriate job matches can capitalize on certain behaviors and characteristics which are displayed by the person with Autism (e.g., preference for repetition). In certain job situations, these behaviors and characteristics may be beneficial rather than negative.

Some people with Autism will not need accommodations to perform their jobs; others may need just a few accommodations. The following questions may be used as a guide for considering whether an employee with Autism will need job accommodations.

1. What limitations does the employee with Autism experience on the job?
2. How do these limitations affect the person’s job performance?
3. Are there any job tasks which are difficult because of these limitations?
4. What accommodations could be used to reduce or eliminate these problems?
5. Can the employee provide information about potential job accommodations?
6. Once accommodations are identified, can meetings take place to assess the effectiveness of the accommodations? What additional accommodations are necessary?
7. Would other work staff (e.g., human resources personnel, supervisors, or co-workers) benefit from training about Autism? Can it be provided?

The following tables show job accommodations that have been recommended to support people with Autism (Job Accommodations Network, 2008). As with other types of support services, job accommodations must be individualized for each specific employee with Autism.

<table>
<thead>
<tr>
<th>Speaking/Communicating Challenges</th>
<th>Possible Accommodations</th>
</tr>
</thead>
</table>
| It may be difficult for employees with Autism to communicate with co-workers and supervisors because of limited social skills, lack of experience in the workforce, shyness, intimidation, challenging behaviors, or poor self-esteem. Some people with Autism may be nonverbal or may repeat words or phrases instead of engaging in conversations. Lack of communication skills should not be automatically associated with cognitive limitations and incompetence. | • Use e-mail to communicate about work tasks and to ask questions  
• Provide advance notice of meeting topics  
• Provide advance notice of meeting dates when employee is required to speak  
• Allow employee to provide written responses instead of verbal responses  
• Encourage the employee to bring a friend or co-worker to meetings |

<table>
<thead>
<tr>
<th>Time Management Challenges</th>
<th>Possible Accommodations</th>
</tr>
</thead>
</table>
| Employees with Autism may have difficulty managing their time especially if they are completing a task that is pleasant or exciting. They may be unable to finish a task within the designated time frame. It may be difficult for employees with Autism to transition to less desirable work activities. | • Divide large jobs into several small tasks  
• Set a timer to signal the end of a task  
• Provide a written or picture checklist of assigned tasks  
• Supply an electronic organizer  
• Post a calendar on the wall to highlight due dates |

<table>
<thead>
<tr>
<th>Impulsiveness and Over-activity</th>
<th>Possible Accommodations</th>
</tr>
</thead>
</table>
| Impulsive behaviors and over-activity may be disruptive in the work setting and may hinder the effective and efficient work performance of employees with Autism. | • Provide frequent breaks  
• Teach and reinforce self-management techniques to control impulsivity  
• Allow the employee to work from home  
• Post work rules and conduct policies  
• Provide a private workspace |

<table>
<thead>
<tr>
<th>Concentration Challenges</th>
<th>Possible Accommodations</th>
</tr>
</thead>
</table>
| Because of auditory and/or visual distractions, employees with Autism may experience decreased concentration. People with Autism may become anxious or upset about distractions such as office traffic, co-worker chatter, and typical office noises (e.g., fax machines, telephones, photocopiers, fire alarms, etc.). | To reduce auditory distractions:  
• Provide a noise canceling headset  
• Use sound absorption panels  
• Provide a white noise machine  
• Place employee’s work space away from auditory distractions  
To reduce visual distractions:  
• Use cubicles  
• Reduce clutter in the employee’s work space  
• Place employee’s work space away from visual distractions |
<table>
<thead>
<tr>
<th>Organization and Prioritization Difficulties</th>
<th>Possible Accommodations</th>
</tr>
</thead>
</table>
| Employees with Autism may have difficulty getting or staying organized because of underlying problems with planning, setting goals, and completing tasks. Auditory and visual distractions may also interfere with the person’s organizational abilities. | • Color-code files, projects, or tasks  
• Post visual charts to identify daily work tasks  
• Teach and reinforce organization skills  
• Ask a co-worker/mentor to help the employee  
• Ask the supervisor to prioritize the employee’s tasks  
• Assign new task after completion of previous project  
• Provide written or picture checklist of tasks |

<table>
<thead>
<tr>
<th>Memory Issues</th>
<th>Possible Accommodations</th>
</tr>
</thead>
</table>
| Employees with Autism may have difficulty completing tasks, remembering job duties, and recalling daily schedules. These difficulties may be a result of medication side-effects, problems processing and remembering verbal instructions, difficulty focusing on the relevant details of a task, boredom with the activity, or misunderstanding about the importance of the task. | • Provide written or picture directions  
• Allow extra training time for new tasks  
• Use a task analysis or flow chart to break down difficult tasks into small steps  
• Use voice activated devices to record verbal instructions  
• Post a wall calendar to highlight dates  
• Use post-it notes as reminders of important dates and tasks  
• Use personal organization devices to track important dates and tasks |

<table>
<thead>
<tr>
<th>Difficulties Multi-tasking</th>
<th>Possible Accommodations</th>
</tr>
</thead>
</table>
| Employees with Autism may have difficulty performing more than one task at a time. These challenges may occur regardless of the repetitiveness of the steps, the ease or complexity of the tasks, or the frequency of completing the tasks. | • Provide a clear explanation of performance standards (e.g., completion deadlines and accuracy rates)  
• Use a task analysis or flow chart to break down difficult tasks into small steps  
• Color code tasks in prioritized order of completion  
• Provide written or picture cues  
• Reinforce employee for completing simultaneous tasks  
• Reduce distractions in the work area |

<table>
<thead>
<tr>
<th>Stress Management</th>
<th>Possible Accommodations</th>
</tr>
</thead>
</table>
| It may be difficult for employees with Autism to manage stress in the workplace. Although stressful situations vary for each employee, some possible stressors include: heavy workloads, unrealistic expectations and time frames, and conflict among co-workers. | • Allow a modified work schedule  
• Reinforce the employee’s use of appropriate stress management techniques  
• Provide time for the employee to call or e-mail others for support |
**Social Skills Challenges**

<table>
<thead>
<tr>
<th>Social Skills Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>It may be difficult for employees with Autism to exhibit appropriate social skills on the job. Social skills challenges may include: preference for being alone, aloofness, interrupting others who are working or talking, poor listening skills, limited eye contact, crying or laughing for no apparent reason, and inability to read social cues and body language.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Possible Accommodations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On the job behavior:</strong></td>
</tr>
<tr>
<td>- Post rules and policies of conduct</td>
</tr>
<tr>
<td>- Provide concrete examples of inappropriate social skills</td>
</tr>
<tr>
<td>- Provide concrete examples to explain consequences</td>
</tr>
<tr>
<td>- Use training videos to show appropriate workplace behaviors</td>
</tr>
<tr>
<td>- Reinforce appropriate social skills</td>
</tr>
<tr>
<td>- Encourage co-workers to demonstrate appropriate social skills</td>
</tr>
<tr>
<td><strong>Interactions with co-workers:</strong></td>
</tr>
<tr>
<td>- Provide a mentor to help the employee</td>
</tr>
<tr>
<td>- Make attendance at social functions optional</td>
</tr>
<tr>
<td>- Encourage co-workers to move personal conversations away from work areas</td>
</tr>
<tr>
<td><strong>Suggestions for supervisors:</strong></td>
</tr>
<tr>
<td>- Provide detailed feedback on a daily basis</td>
</tr>
<tr>
<td>- Offer skill-specific reinforcement</td>
</tr>
<tr>
<td>- Provide concrete examples of areas in which the employee needs to improve</td>
</tr>
<tr>
<td>- Give clear assignments (verbally and/or in writing), expectations, and consequences</td>
</tr>
<tr>
<td>- Help the employee to set goals</td>
</tr>
<tr>
<td>- Adjust supervisory method as necessary (e.g., the manner in which conversations take place, meetings are conducted, and discipline is addressed)</td>
</tr>
</tbody>
</table>

**Workplace Safety**

Individuals with Autism are capable and valued employees in many businesses and organizations. However, challenges with behaviors and social skills can make some workplace situations difficult to navigate. Adults with Autism can be vulnerable to bullying, isolation, and harassment in the workplace. It takes employer support and partnership to create a positive, effective, and safe environment (Organization for Autism Research, 2014).
Community Living

Living arrangements for adults with Autism range from settings that are quite restrictive to independent living with or without support. Since the deinstitutionalization movement in the 1970s, many people with disabilities have moved from large institutions to smaller residential facilities. People with Autism, however, often remain in larger and more restrictive settings where they are segregated and have limited control over their lives.

Since the middle of the 1980s, there has been a national movement to support people with disabilities to live in their own homes, to become active members of their communities, and to have greater control of their own decisions regardless of the severity of their disability. It is based on the belief that even though people may have needs related to their disability, these needs should not interfere with meaningful adult experiences such as inclusion, choice, and respect (O’Brien, 1987).

The supported living approach is especially responsive to the needs of people with Autism who may have difficulty with unpredictability, inconsistency, chaos, and communication. Supported living provides opportunities for people with Autism to live in their own homes, choose with whom they live and who provides support, and make their own decisions about the activities in which they will participate. Even if a person with Autism does not have all of the skills required to live independently, he or she can still be supported to live in his or her own home and to acquire necessary skills (e.g., housekeeping, cooking, shopping, budgeting and bill paying, and using public transportation). The person may need long-term support for complex problem-solving issues (e.g., managing money, navigating government agencies, etc.). Natural community supports (e.g., bus drivers, waitresses, co-workers, etc.) can meet many support needs. As a result of these supported living opportunities, there have been significant improvements in behavior and sense of life satisfaction for people with Autism (Hulgin, 1996).

People with Autism need opportunities to learn about supported living as an alternative to congregate (group) living arrangements. It is not enough to just ask a person with Autism where he or she would like to live. To make decisions about community living, many people need opportunities to explore their preferences and to receive input from people who are familiar with them. Families also need information about community living options. They may have concerns and fears about their family member living in their own home. People with Autism and their families can learn from others who have been successfully supported to live in their own homes.
Life Skills

People with Autism desire friendships and romantic partners. Due to challenges with social communication, people with Autism may have limited experience dating, healthy relationships, sex, and forming healthy identities. When looking at the five identified areas of youth development/youth leadership in which all youth need, thriving is one of them (Pittman & Cahill, 1991). Thriving includes mental and physical health, preventing secondary conditions, and maintaining overall well-being. Unfortunately, most people do not think about thriving as including dating, healthy relationships, sex, and forming healthy sexual identities.

Throughout adulthood, people with Autism can be supported to master many of the skills associated with independence in the community. Adults with Autism may have mastered some of these skills, but others may be more difficult (e.g., driving a car). As always, the best strategy is to prioritize the skills with the highest functional relevance (e.g., the ones that will be used the most often).

Personal Care Skills – This area includes a wide range of daily living skills such as personal grooming and hygiene, dressing, doing laundry, and shopping for clothes. A task analysis of each of these skills may be helpful for establishing a daily personal care routine. Visual aids can help the learning process by illustrating and describing methods. These tools can include social stories, activity schedules, charts, and videos.

Sexuality and Relationships - Information about physical and emotional changes is needed by people with Autism. Relationships with members of the opposite sex, as well as appropriate social skills related to friendship and dating, must be addressed. In addition, it is crucial to talk about safety issues. People with Autism may not have the skills required for determining if a social interaction is safe. It is important to discuss how to recognize and avoid potentially dangerous situations, including advances from strangers. People with limited verbal comprehension may need training which incorporates pictures and role-playing scenarios.

Myths about Disability and Sex - Common myths about people with disabilities and sex (Kaufmann, Silverberg & Odette, 2003) say that people living with disabilities and chronic illnesses:

- Are not sexual.
- Are not desirable.
- Can’t have “real” sex.
- Are pathetic choices for partners.
- Have more important things to worry about than sex.
- Don’t get sexually assaulted.
- Don’t need sex education.
Because of these beliefs, students with disabilities are often kept out of sex education classes and not taught self-protection. These myths perpetuate the idea that youth with disabilities are less than and different from other youth.

How to Help People with Autism Make Healthy Choices

- Be prepared to give appropriate information even if it is uncomfortable.
- Have open attitudes about expectations and relationships. Be comfortable talking about a person’s needs and wants including sex, dating, and relationships.
- Be available to discuss these topics and concerns an individual may encounter. People with Autism are often vulnerable.
- Be a role model. Positive healthy relationships and positive healthy self-images will promote healthy and positive choices in the people you support.

Supporting Success and Safety in Relationships

Teens and adults with ASD may need support to develop basic dating readiness skills, as well as, safety and social skills related to dating. The following scenarios and strategies demonstrate examples of supporting success and safety in relationships. (Source: at-a-Glance Brief). Chapel Hill: The University of North Carolina, Frank Porter Graham Child Development Institute, CSESA Development Team. Available online [http://csesa.fpg.unc.edu/resources/autism-glance-supporting-success-and-safety-relationships]

Scenario 1: Possible Challenges Associated with Basic Dating Readiness Skills

Sam was interested in dating girls at his high school. He had talked about his disappointment at not having had a date. Sam’s teacher and counselor met with Sam to discuss ways they could help prepare him for dating. They agreed that a potential barrier for Sam might be basic hygiene skills. Sam’s teacher and counselor decided that teaching Sam good hygiene skills and associating those with dating readiness would help motivate Sam and prepare him to be more attractive to girls at his high school.

Scenario 2: Possible Challenges Associated with Lack of Safety Skills

Lenore is a fan of Facebook. She spends a lot of time online and participating in social groups. Lenore’s parents were alarmed to find that she had shared several photos with a stranger on the website. At a team meeting, Lenore’s parents discussed their concerns about internet safety with Lenore’s special education teacher. The team decided that it was critical that they spend instruction time reviewing safe behaviors in different relationships including how to behave with strangers. They wanted to make sure Lenore understood how to protect herself from people who might want to take advantage of her.
Safety Skills

• Identify abusive behavior and illegal sexual behaviors and how to avoid them. Teens with ASD are vulnerable to being abused by others. Due to immaturities in social understanding, some teens with ASD might be more likely to behave inappropriately themselves. Teaching teens to identify abusive and illegal behaviors, as well as the “grey” areas to consider, protects the teen with ASD and others.

• Discuss relationship dangers faced on the internet. Since many teens with ASD have access to the internet and enjoy online communication, it is essential to instruct teens with ASD on ways to avoid danger on the internet.

• Discuss the consequences of sexual activity. Although sex education is typically embedded in middle and high school education, it is important to ensure that teens with ASD have a clear understanding of potential consequences of sexual activity, including STDs and pregnancy.

Scenario 3: Possible Challenges Associated with Lack of Social Skills

Ren wanted to go out on a date with a girl he knew from his physics class. He remembered from his social skills class that it was important to maintain eye contact with people to indicate that you are interested in what they are saying. Ren was careful to remember to look at Stacey when he was in class with her. He frequently asked her questions about herself and about classwork. The third week of class, Stacy complained to the science teacher that Ren talked to her too much and was staring at her all the time. She considered his behavior creepy and wanted to switch classes. Ren’s science teacher met with Ren and his special education teacher to discuss Ren’s behavior. The special education teacher realized that he needed to help Ren understand the social mistake he made with Stacy and find ways to help him evaluate whether a girl is interested in dating him. The special education teacher also helped Ren to work on his social skills, sharing the importance of reading social clues (e.g. facial expressions, body language) and discussing the fact that too much eye contact can be uncomfortable.

Social Skills

• Demonstrate perspective taking and social communication skills for dating. Teens with ASD need instruction and practice in the conversation skills associated with dating including how to express interest, give compliments, share appropriate information about themselves, and understand the communication of others.

• Identify social mistakes related to dating. Dating is a complex social interaction for any person, so it is not surprising that teens with ASD might make social mistakes when dating. Educators can help teens to avoid potential dating mistakes by teaching specific skills such as:
  o identifying appropriate places to meet potential dates
  o evaluating whether a potential partner is
interested in dating
choosing where to go on a date
assessing whether a date was successful
ending a dating relationship.

4 Key Strategies for Supporting Success and Safety in Relationships and Dating

1. Visual supports: visual examples of concepts you intend to teach to support comprehension of target skills.
   • Use photos to provide practice in identifying people’s emotions.
   • Use visual scripts to rehearse key dating concepts like asking someone on a date.

2. Video Models: video examples to demonstrate appropriate relationship and dating behaviors
   • Use video examples to reinforce social skill development such as correct body language used in initiating conversations or flirting.
   • Use video models to demonstrate and reinforce the steps of a complete hygiene routine.

3. Social Narratives: stories that can provide insight into social situations. Narratives emphasize the important social cues in the targeted social situation. The story provides teens with examples of appropriate social responses.
   • Use social narratives to explain the importance of skills like good grooming, being independent, and showing confidence and how these skills can relate to successful dating.
   • Use social narratives to discuss the idea of the “hidden curriculum” to emphasize important dating rules that everyone knows, but no one is taught. This includes assumed rules and social expectations. For example: “When you ask someone on a date and they SAY that they are busy, they often MEAN that they do not want to go out on a date with you, not that you should pick a different time to ask them again. If someone tells you that they are busy, you should not ask them on a date again.”

4. Role Play: practicing key social communication behaviors associated with safety and relationships.
   • Use role play to demonstrate and practice nonverbal communication behaviors.
   • Use “social autopsy” to analyze social errors committed and choose alternative solutions to correct the errors in the future.

People are sexual beings. The best sex education is full of awareness of social skills, boundaries, sexual expression, and expectations. Detailed information about sexuality training for people with developmental disabilities is available in the Sexuality and Developmental Disabilities module in the Community Staff Training curriculum.
Making Friends- Making friends can be difficult for people with Autism. A friend is someone to go out with, talk with about things you enjoy and discuss problems with. A true friend will always make a person feel welcome and talk to you if they have the time and will treat a person the same way that they treat all of their friends. People with Autism have difficulty with social skills which may impact making friends, having a conversation, identifying and expressing emotions, problem solving, tone of voice, and interpreting body language. Role playing, social stories, social skill autopsies, and video modeling are strategies to practice these skills in a safe environment.

Time Management - People with Autism may have difficulty staying organized and managing their time effectively. Visual supports, color coding, auditory reminders or timers, lists, social stories, and electronic reminders are strategies that can all be good ways of helping people with Autism to understand what is going to happen and when. Velcro-fastened activity schedules and electronic personal digital assistants (PDAs) are examples of tools that are available for helping people organize their time more effectively and efficiently. The following recommendations are provided to support people with Autism in time management and organization.

- Break each day into chunks and assign various tasks for each time period. For example, 8:00 am to 4:00 pm is work, 4:00 pm to 5:00 pm is snack and free time, 5:00 pm to 6:00 pm is chores and dinner, and so on. A daily timetable with pictures of a shower, clothes, breakfast, work, dinner, toothbrush, and a bed to indicate what they will be doing, and in what order, that day.
- Create an individualized activity schedule. Develop a “to do” list of daily tasks including homework, chores, appointments, work, and recreation/leisure activities. Encourage the person with Autism to check-off each task as it is completed.
- Use a day planner that can be divided by tabs and include sections for “to do” lists, tasks, and scheduled activities.
- Use an electronic organizer (PDA) that includes a calendar, “to do” list, and pop-up reminders about appointments and assignments.

Managing Money- Sometimes financial matters can be quite complex. Money management skills include keeping money safe, making sure a person has enough to pay for their needs, and stay in control of any payments that need to be made. A person with Autism will need to learn the skills of using a bank account, budgeting, paying bills, saving, borrowing money and taking out insurance.

Hobbies and Recreation - Adulthood is more than just having a job and living in the community. It is also important for people with Autism to have opportunities to participate in hobbies and recreation/leisure activities. Many adults with Autism have certain areas of interest or specific topics that they really like. These individual interests should be used as a foundation for supporting adults with Autism to develop community contacts. Some interest areas (e.g., hobbies) have related organizations or clubs that meet for social activities or events. The ability
to meet new people based upon a similar interest can expand the support networks of people with Autism throughout their adult years.

Recreation is about activities and experiences which produce feelings of enjoyment and satisfaction. Recreation gives opportunities to express creativity, achieve and master new skills. Recreation can be particularly important for people with autism, drawing on opportunities to practice social skills, physical aptitude and increase motivation.

**Benefits of Hobbies and Recreation**
- Recreation is important in promoting inclusion and quality of life.
- Increases self-esteem and confidence.
- Gives people the opportunity to make their own choices.
- Provides satisfaction, enjoyment and pleasure.
- Enables individuals with Autism to become involved and feel like a part of their community.
- Provides the opportunity to gain and develop.
- Sports and exercise programs can improve physical and mental health.
- Reduces reliance on parents and other adults.
- Increases independence which leads to increased opportunities.


See the module: *Friends and Fun – Expanding Leisure Options and Community Connections* in the Community Staff Training curriculum for more information on recreation and friendships.
Chapter 5: Feedback Questions

1. Describe why it may be difficult for some parents as their son or daughter with Autism transitions from adolescence into adulthood.

2. List five core values for supporting adults who have Autism.

3. According to the Individuals with Disabilities Education Improvement Act (IDEA), formal transition planning for students with disabilities must begin at age _____.

4. Describe the purpose of transition planning.

5. List the four components of an Individualized Transition Plan.

6. Transition planning should address these considerations:
   a. Include goals which reflect ______ activities (e.g., cooking, handling personal finances, shopping, using transportation, etc.) for people with Autism so that he or she will be prepared for adulthood.
   b. Include ______ related skills such as being organized, being prepared, finishing assigned tasks, following instructions, dressing appropriately, and interacting with others.
   c. Encourage people with Autism to participate in ______ events to build a network of support for future activities.
   d. During the person’s school years, provide opportunities for him or her to gain experience in real ______ settings.
   e. Help the person with Autism to build a ______ in an appropriate format (e.g., video, computer, portfolio, etc.).
   f. Teach behaviors which are appropriate to specific work environments while the person is in the ______ setting.
   g. Teach a repertoire of ______ interchanges that the person can use to engage in office small talk and job-related discussions. Use social stories if necessary.
   h. Encourage the development ______ ______ (e.g., mentor, co-worker) at the job site.

7. What is self-determination?
8. To avoid planning someone’s life without their input, the ___________ with Autism is the most important participant in the transition planning process.

9. ______________________ approaches support people with Autism in making decisions which reflect their individual preferences, strengths, and personal visions.

10. What six areas should be assessed to prepare for person-centered planning for transition age youth with Autism?

11. Providers of post-secondary education and training _______ responsible for identifying students with Autism to determine what supports are needed.

12. Describe four ways in which young adults with Autism can access support in college.

13. Why are “work readiness” programs in segregated settings often not successful for people with Autism?

14. The concept of “work-readiness” must be redefined so that _____ people with Autism are considered to be employment-ready.

15. A positive job match means that the __________ (e.g., production, social, and communication) and __________ characteristics (e.g., noise level, structure, crowdedness, lighting, etc.) of the job are similar to the __________ and __________ of the employee with Autism.

16. The factors that contribute to job match for employees with Autism can be classified into the following components:

<table>
<thead>
<tr>
<th>Physical Components of the Job Match</th>
<th>Social Components of the Job Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>• _______of employment</td>
<td>• Acceptable level of _______ with co-workers and supervisors</td>
</tr>
<tr>
<td>• Acceptable _______level at the job site</td>
<td>• _______job expectations</td>
</tr>
<tr>
<td>• Pay, leave, and other _______</td>
<td>• Grooming and _______ requirements</td>
</tr>
<tr>
<td>• Acceptable _______ levels</td>
<td>• _______ skill demands</td>
</tr>
<tr>
<td>• _______requirements (e.g., lifting)</td>
<td>• Personal _______ available</td>
</tr>
<tr>
<td>• Acceptable margin of _______ (quality control)</td>
<td>• _______room available</td>
</tr>
<tr>
<td>• _______ requirements</td>
<td>• _______ training and support</td>
</tr>
</tbody>
</table>

17. Explain the term “job-carving”.

111
18. Why is it recommended to provide support and training for co-workers of people with Autism?

19. What are two major reasons for underemployment, unemployment and job loss for employees with Autism?

20. Describe the supported living movement for people with Autism.

21. Why is supported living preferable to group living arrangements for many people with Autism?

22. Describe four strategies that can be used to support people with Autism with organization and time management skills.

23. Opportunities to participate in hobbies and recreation/leisure activities expand the __________ __________ of people with Autism.

24. Suggest a potential job accommodation to support each employment challenge in the table below:

<table>
<thead>
<tr>
<th>Employment Challenge</th>
<th>Job Accommodation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking/Communicating Challenges</td>
<td></td>
</tr>
<tr>
<td>• limited social skills</td>
<td></td>
</tr>
<tr>
<td>• lack of experience in the workforce,</td>
<td></td>
</tr>
<tr>
<td>• shyness, intimidation</td>
<td></td>
</tr>
<tr>
<td>• challenging behaviors</td>
<td></td>
</tr>
<tr>
<td>• poor self-esteem</td>
<td></td>
</tr>
<tr>
<td>• nonverbal</td>
<td></td>
</tr>
<tr>
<td>• repeat words or phrases instead of</td>
<td></td>
</tr>
<tr>
<td>engaging in conversations</td>
<td></td>
</tr>
<tr>
<td>Time Management Challenges</td>
<td></td>
</tr>
<tr>
<td>• difficulty managing their time especially if</td>
<td></td>
</tr>
<tr>
<td>they are completing a task that is pleasant or</td>
<td></td>
</tr>
<tr>
<td>exciting</td>
<td></td>
</tr>
<tr>
<td>• unable to finish a task within the</td>
<td></td>
</tr>
<tr>
<td>designated time frame</td>
<td></td>
</tr>
</tbody>
</table>
- difficult to transition to less desirable work activities
- Impulsiveness
- Over-activity

<table>
<thead>
<tr>
<th>Employment Challenge</th>
<th>Job Accommodation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty Managing Stress</td>
<td></td>
</tr>
<tr>
<td>Concentration Challenges</td>
<td></td>
</tr>
<tr>
<td>• difficulty with auditory distractions</td>
<td></td>
</tr>
<tr>
<td>• difficulty with visual distractions</td>
<td></td>
</tr>
<tr>
<td>Organization and Prioritization Difficulties</td>
<td></td>
</tr>
<tr>
<td>• problems with planning, setting goals, and completing tasks</td>
<td></td>
</tr>
<tr>
<td>• auditory and visual distractions</td>
<td></td>
</tr>
<tr>
<td>Memory Issues</td>
<td></td>
</tr>
<tr>
<td>• problems processing and remembering verbal instructions</td>
<td></td>
</tr>
<tr>
<td>• difficulty focusing on the relevant details of a task</td>
<td></td>
</tr>
<tr>
<td>• boredom with the activity</td>
<td></td>
</tr>
<tr>
<td>• misunderstanding about the importance of the task</td>
<td></td>
</tr>
<tr>
<td>Social Skills Challenges</td>
<td></td>
</tr>
<tr>
<td>• preference for being alone, aloofness</td>
<td></td>
</tr>
<tr>
<td>• interrupting others who are working or talking</td>
<td></td>
</tr>
<tr>
<td>• poor listening skills</td>
<td></td>
</tr>
<tr>
<td>• limited eye contact</td>
<td></td>
</tr>
<tr>
<td>• crying or laughing for no apparent reason</td>
<td></td>
</tr>
<tr>
<td>• inability to read social cues and body language</td>
<td></td>
</tr>
<tr>
<td>Difficulties Multi-tasking</td>
<td></td>
</tr>
</tbody>
</table>
Chapter Six: Additional Support Strategies

Purpose:
The purpose of this chapter is to discuss additional support strategies to keep people with Autism safe and assist support providers to understand the range of issues that confront families when a family member has Autism.

Objectives:
After completing this chapter, staff will be able to:

- List three home security changes that may need to be made for some people with Autism
- Describe environmental adaptations that could be made to support an adult with Autism
- Describe areas in which parents may face challenges when they have a son or daughter with Autism
- Describe three common issues/concerns for families who have a child with Autism
- Explain why is it important for parents to be included as members of the support team for people with Autism
- Describe steps that must be taken to protect the rights of people with Autism before monitoring or tracking devices are used

People with Autism

People with Autism may not fully understand their disability. It may be helpful for some people with Autism to have written information that describes the symptoms and characteristics of Autism. Individuals with Autism have a poor understanding of cause and effect. Emergency situations will increase anxiety. A sample script which provides a concise explanation of Autism (for people with Autism) is included in Appendix C.

Safety and Emergency Preparedness

There are a unique set of safety concerns for people with Autism. In a survey by the National Autism Association, 92% of the parents who responded reported that their son or daughter with Autism had wandered away at one time or another. Wandering by people with Autism can occur anywhere at any time. It is critical to prepare for wandering by completing the following steps.

- Becoming familiar with police, fire, and ambulance agencies
- Asking the 911 call center to “red flag” wandering information in the 911 data base
- Developing a “wandering” plan with local law enforcement personnel.

Survey and Secure the Home. It may be necessary to make some of the following changes in the home of the person with Autism. It is important to note that although these changes will
ultimately result in more independence for people with Autism, due to their restrictive nature they may require approval by the person’s team, the human rights committee and behavior intervention committee and informed consent of the person and guardian.

- Install dead bolt locks that require keys on both sides
- Install a home security alarm system
- Install inexpensive battery-operated alarms on doors and window
- Place hook and eye locks on all doors above the person’s reach
- Fence the yard with locked gates
- Electronic monitoring with either sensors or cameras

Create an Informational Handout. It is crucial to have accurate information about people with Autism in case of an emergency. This handout should include pertinent identification information as well as a current photograph of the person. Contact information (e.g., name, address, and phone number) for the person’s parents or support providers should also be included. The handout should be kept in central locations such as the person’s home, place of employment, school, vehicle, etc. The person with Autism should also carry a copy of the information in his or her wallet, purse, or pocket. It should also be distributed to family members, neighbors, friends, and co-workers. Support providers should follow the emergency procedures which have been developed by the agency at which they work. Support providers should also use forms provided by their agency to record emergency information about the people with Autism they support. These forms may be filled out and provided to the local police or fire and rescue departments, either in preparation for possible emergencies or to be ready at their arrival in an emergency. Sample emergency forms are provided in Appendix D.

Medical ID Bracelet. Medical ID bracelets or necklaces may be appropriate for some people with Autism (especially those who are non-verbal). A medical ID bracelet/necklace includes information about the person as well as whom to contact in case of an emergency.

Technology. There are a variety of personal tracking devices which can be used to monitor the location of people with Autism. These include:
- A small unit in the person’s pocket or backpack that monitors the person’s location through a mobile phone or computer
- A handheld unit that tracks the location of the person through a wristband that he/she wears
- A unit that is connected to law enforcement and rescue personnel

Vulnerabilities. Children are vulnerable to various dangers and threats. Related safety concerns come in many forms and circumstances. Some dangers exist in nature and the environment. Others come from people, the community, and modern life. Autism presents its own set of vulnerabilities—whether a toddler, tween, teenager, or an adult. In some cases, behaviors and traits may make them more susceptible to everyday safety concerns. In other cases, the characteristics
of Autism create the vulnerability. Either way, safety becomes a bigger issue because of challenges with:

- **Situational awareness and recognizing danger.** Individuals with Autism are less likely to grasp things intuitively. Compounding this, people with Autism are often too trusting. In some cases, people in the position of authority take advantage of this.

- **Sensory issues.** In an effort to escape from sensory overload, individuals with Autism may unintentionally wander away from their family during a fireworks celebration or parade, run into traffic or through busy parking lots to “escape” the overload of their senses.

- **Communication.** Some people with Autism are unable to ask for help when needed. Some individuals with Autism are nonverbal. It is common for communication abilities to develop later than those of their typical peers. Other individuals may be able to speak quite well but are not able to communicate their experiences or express their feelings.

- **Fixation with objects or narrow interests.** Do not attempt to remove a favorite object and take extra precautions around favorite interest areas. A fascination with favorite object or interest could pose safety risks.

Safety skills need to be practiced continuously in real world settings and different environments (Organization for Autism Research, 2014).

The Threat Spectrum—This graphic represents some of the safety issues that are commonly encountered among individuals with autism, and when they typically arise during the individual’s lifespan. It does not indicate how long the safety threats last, as these threats can significantly vary in duration from one person to another. Source: Life Journey Through Autism: A Guide to Safety available online [http://www.researchautism.org/resources/reading/index.asp]
Communication Strategies in Emergency Situations

A person with Autism will often find unexpected or unusual situations very difficult. Do not expect an immediate response to questions or instructions, as a person with Autism needs time to respond. Avoidance of eye contact by the person with Autism should not cause suspicion. Personal space is not a notion understood by people with Autism, so they may invade your personal space or may need more personal space than average. (The National Autistic Society 2011)

- Remain calm, talk in a quiet voice. Do not restrain-they may respond with agitation due to heightened and acute sensitivity.
- Approach slowly and calmly
- Limit talking to direct statements. Use the person’s name if possible so they know who is being addressed.
- Ask yes/no questions. Allow time for the person to respond.
- Do not attempt to take away a favorite personal possession if the person is carrying one-removing it may cause anxiety and distress.
- Do not try to stop the repetitive behaviors; they are a calming mechanism for the person with Autism.
- Minimize sensory stimuli such as sirens, flashlights, walkie-talkies, loud yelling-these items and others may cause alarm and distraction.

Environmental Modifications

There are several things that support providers can do to prepare the physical aspects of a setting for people with Autism. The table below provides suggestions for setting up an environment based on the specific behaviors, sensitivities, and traits of people with Autism; however, the setting should be individualized based on the person’s unique characteristics and support needs.

<table>
<thead>
<tr>
<th>Traits</th>
<th>Environmental Adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for sameness</td>
<td>• Define specific areas in the setting (e.g., work stations, free time, open areas) using furniture or dividers</td>
</tr>
<tr>
<td>Difficulty with transitions</td>
<td>• Keep setting consistently organized</td>
</tr>
<tr>
<td></td>
<td>• Assign a designated seat</td>
</tr>
<tr>
<td></td>
<td>• Post daily schedule in a consistent location</td>
</tr>
<tr>
<td></td>
<td>• Use a visual agenda</td>
</tr>
<tr>
<td>Acting out behaviors</td>
<td>• Provide an area where the person can go when he or she is upset or anxious</td>
</tr>
<tr>
<td>Traits</td>
<td>Environmental Adaptation</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Distractibility (by sensory  | • Position the person in low traffic areas  
| input)                        | • Install carpeting  
|                               | • Face desk/work station away from windows and doors  
|                               | • Cover the computer and other materials when not in use  
|                               | • Seat the person away from distracting items in the setting (e.g., books, toys, computers, work materials, etc.)                                  |
| Sensitivity to touch         | • Avoid touching the person at first  
|                               | • Teach tolerance to appropriate touch  
|                               | • Verbally reinforce the person for increased tolerance to appropriate touch                                                                      |
| Sensitivity to smell         | • Avoid using heavy perfumes or lotions  
|                               | • Seat the person near an open door or window  
|                               | • Use unscented cleaning supplies                                                              |
| Sensitivity to sounds        | • Position the person away from loud sounds  
|                               | • Use a soft voice when possible  
|                               | • Provide ear plugs or headphones when appropriate  
|                               | • Install carpeting  
|                               | • Prepare the person in advance for specific sounds (e.g., fire alarm, smoke detector, bells, etc.)  
|                               | • Teach tolerance to sounds  
|                               | • Verbally reinforce the person for increased tolerance to loud noises  
| Sensitivity to lights        | • Lower the light levels  
|                               | • Turn off overhead lights (especially fluorescent)  
|                               | • Try different colored lights  
|                               | • Have the person wear sunglasses or a baseball cap  
|                               | • Use bulbs that do not flicker                                                               |
| Wandering                    | • Smart Home technologies including remote monitoring and sensors  
|                               | • A string of bells on or around windows and doorknobs to alert the opening of windows and doors  
|                               | • Fenced yard with locked gates                                                               |
| Perseveration                | • Timers  
|                               | • PDAs with reminders or cues for next steps                                                   |

**Wandering**- Wandering behaviors usually have a reason. Once the reason has been identified, strategies can be created to prevent wandering incidents and teach people with Autism about dangers.
Sample Scenario: Child is drawn to water

Emily loves playing in water. She loves splashing water, watching it pour out of a cup, swimming in it, and she loves bath time. On walks, she often wants to go look at the pond, water fountain, or cries for these things when passing them in the car.

Strategy: Allow the child to enjoy water time in an adult-supervised, controlled setting. For any child who wants to reach water for any given reason, try scheduling consistent “water play” times each day, or at the same time each week. Schedule around times easily recognized, such as after dinner or before bath time. Make sure the child sees that each water-play activity has an end time and is “all done.” Swimming lessons are a must. Swimming lessons each week can also act as way for the child to reach their goal of playing in water. Be sure to take a picture of the swim instructor and place this into the schedule. Knowing what to expect may satisfy your child’s desire to reach water, as well as give him/her a tool to communicate their desire with a trusted adult before attempting to reach a destination on their own.

Picture Schedule Tips: Take pictures of your child doing a water-play activity, or water-play setting that is safe.

Sample Scenario: Child has a unique fascination

Alex loves road signs, especially highway exit signs. He often cries or reacts to signs when passing them on the highway. He verbally stims on highway exit numbers. He will leave home or school to find his item of interest.

Strategy: Allow the child to explore fascinations in an adult-supervised, controlled setting. Try to find ways to incorporate the focus/fascination into daily activities so the child knows when to expect it. Use drawing, pictures, games and other creative ways to satisfy the child’s need to touch or explore items of obsession.

Picture Schedule Tips: Create ways for your child to explore an item of focus through their own creativity, or use the item in a social story.
**Family Support**

Oftentimes, families experience high levels of stress related to the demands of raising a son or daughter with Autism. Because most families do not plan on having a child with Autism, the entire family is on an unexpected journey. Families may experience feelings of uncertainty, anxiety, fear, grief, anger, and sadness when a child is diagnosed with Autism.

**Recognizing Family Issues**

All family members (e.g., parents, siblings, grandparents, and extended family) are impacted by a child with Autism. When a child is diagnosed with Autism, parents often shift their time and monetary resources toward finding and providing effective interventions. Challenges in the following areas may result when parents/caregivers focus primarily on helping their child with Autism and exclude other priorities.

- Marriages
- Other family relationships, especially siblings
- Finances
- Fulfilling work responsibilities

Although each child with Autism is different and each family will have unique experiences, there are many issues and concerns that are similar among families who are raising a son or daughter with Autism. These issues may include:

- Difficulty understanding the child’s needs because of communication challenges
- Challenging behaviors due to sensory overload in the environment (e.g., overwhelming sights, sounds, smells, and other sensory information)
- Social skill deficits and limited play skills that make it difficult to take the child out into the community
- Unusual sleeping and eating patterns that disrupt family routines

Raising a son or daughter with Autism requires an array of resources. It is important for support staff to provide information to families about resources that are available in their community. Through awareness of common themes and issues, professionals will be able to provide effective support to people with Autism and their family members. Sometimes all that is needed is a good listener. Parents need to be accepted and supported where they are at in their journey. Support providers can also assist families by providing information about research supporting various interventions and modeling effect supports.
Detailed information about providing support to families who have a son or daughter with developmental disabilities is available in the *Working with Families* and *Working in Family Support Settings* modules in the Community Staff Training curriculum.

**Recognizing Parents as Members of the Support Team**

It is important to select interventions that include families as members of the team of support providers for people with Autism. Parents must have opportunities to provide input in the selection of training goals so that:

- Their son or daughter learns skills that will enable them to fit in with their family and the community
- Training goals are compatible with the cultural and religious values of the person’s family
- Monetary resources and adequate time is available for implementation of the targeted intervention
Chapter 6: Feedback Questions

1. List six home security changes that may need to be made for some people with Autism.

2. What three types of information should be included on an emergency form for a person with Autism?

3. List two personal tracking devices which could be used to monitor the location of people with Autism.

4. Describe four environmental adaptations that could be made to support an adult with Autism who has difficulty with loud machinery noises in his work setting.

5. Describe five environmental adaptations that could be made to support a worker with Autism who is distracted by the other employees and surroundings in her office job.

6. List four areas in which parents may face challenges when they have a son or daughter with Autism.

7. Describe four common issues/concerns for families who have a child with Autism.

8. Give three reasons why is it important for parents to be included as members of the support team for people with Autism.

9. What steps must be taken to protect the rights of people with Autism before monitoring or tracking devices are used?
Chapter Seven: Asperger Syndrome – General Information Across the Life Span

**Purpose:**

This chapter provides information on how traits of Asperger Syndrome impact outcomes for people across the life-span. Under the new DSM-5 criteria, Asperger is no longer a spectrum disorder. However, those with an established diagnosis are ‘grandfathered’ in to their diagnosis. Those not meeting the criteria for an ASD but have an impairment in the area of social skills should be evaluated for a Social (Pragmatic) Communication Disorder. This disorder is considered to be the “new Asperger’s”.

**Objectives:**

After completing this chapter, staff will be able to:

- Identify areas of strength and challenges experienced by people with Asperger Syndrome
- Describe criteria for a diagnosis of Asperger Syndrome
- Explain how the traits of Asperger Syndrome affect adult outcomes
- Choose appropriate accommodations to increase independence and quality of life for people with Asperger Syndrome

Asperger Syndrome was originally described in the 1940’s by Hans Asperger, a Viennese pediatrician. Asperger Syndrome (AS) was officially recognized in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders which was published in 1994.

Asperger Syndrome represents a neurologically-based disorder of development. People with Asperger Syndrome usually have milder symptoms and fewer difficulties than other people with Autism. The ultimate prognosis for people with Asperger Syndrome is generally better as well. In most cases, the cause of Asperger Syndrome is unknown. Asperger Syndrome involves abnormalities in three areas of development:

1. social relatedness and social skills
2. use of language for communicative purposes
3. perseverative (repetitive) behaviors.

Symptoms related to these three areas may range from mild to severe.

Asperger Syndrome is characterized by higher cognitive abilities and more typical language function compared to other people with Autism. Many researchers believe that these two areas of relative strength distinguish Asperger Syndrome from other Autism diagnoses.
Because many people who meet the criteria for Asperger Syndrome display mild symptoms, they may receive no diagnosis at all and are just viewed as “different” or “unusual”. These people may also be misdiagnosed with conditions such as Attention Deficit Disorder or emotional disturbances. The inclusion of Asperger Syndrome as a separate condition in the DSM-IV with clear criteria for diagnosis should result in greater consistency in diagnosis.

The DSM-IV criteria for a diagnosis of Asperger Syndrome include the following characteristics:

1. Impaired social interactions
   - Limited use of nonverbal behaviors in social interactions
   - Failure to develop age-appropriate peer relationships
   - Lack of interest in sharing experiences with others
   - Minimal social or emotional give-and-take
   - Inability to “read” others and respond appropriately

2. Language use
   - Strong use of language that has been memorized
   - Unusual voice volume, tone, and rate of speech
   - Literal interpretation of others’ comments
   - Better understanding of concrete language
   - Difficulty understanding humor, slang, puns, and word games

3. Unusual patterns of behavior, interests, and activities
   - Inflexibility
   - Obsession with particular topics
   - Repetitive motor movements

The DSM-5 criteria for a diagnosis of Social (Pragmatic) Communication Disorder include the following characteristics:

A: Difficulties in use of verbal and nonverbal communication:

- Deficits in using communication for social purposes
- Impairment of the ability to change communication to match contexts or the needs of the listener
- Difficulties following rules for conversation and storytelling, such as taking turns in conversation, and knowing how to use verbal and nonverbal signals to regulate interaction
• Difficulties understanding what is not explicitly stated (inferences, ambiguous meanings, idioms, humor, or metaphors)

B: Deficits result in functional limitations in effective communication, social participation, social relationships, academic achievement, or occupational performance.

C: The onset of the symptoms is in the early developmental period but deficits may not become fully manifest until social communication demands exceed capacities.

D: The symptoms are not attributable to another medical or neurological condition and are not better explained by autism spectrum disorder.

Asperger Syndrome through the Lifespan

Even though the symptoms and difficulties of Asperger Syndrome may change over time, the condition is usually not outgrown. In the early years, children with Asperger Syndrome may have difficulty with social skills and with learning certain skills. When a child with Asperger Syndrome goes to school, these difficulties may cause learning and behavior problems. In adolescence and adulthood, the same difficulties may result in problems with friendships, job performance, and social and marital conflicts.

The Preschool Child

It is usually difficult to diagnose Asperger Syndrome in the first three to four years of a child’s life. Some children may have early language delays with rapid “catch-up” between three and five years of age. Some of these children (especially the brightest ones) may only have motor clumsiness during their early years. By age five, a comprehensive evaluation can usually point to an Autism diagnoses. Characteristics of Asperger Syndrome may be more apparent when the child begins preschool because of difficulties with social interactions, language, and behaviors. Compared to other children with Autism, however, children with Asperger Syndrome are more likely to show some interest in adults and other children. They may not have abnormal language and may not be as obviously “different” as other children with Autism. Areas of strength during the early years may include letter and number recognition, memorization of various facts, and ability to complete routines.

Elementary School

Many children with Asperger Syndrome do not have a formal diagnosis when they begin kindergarten. In some cases, there may be concerns about the child during the preschool years in several areas (e.g., unusual behaviors, immature social skills and interactions, etc.). Oftentimes,
children with Asperger Syndrome are relatively strong in academic areas such as rote reading and calculation skills. Teachers may note that the child is obsessed with particular topics and that the child has difficulty making and keeping friends.

During the elementary years, children with Asperger Syndrome usually receive their education in regular education classrooms. If they are experiencing significant difficulties at school, special education services may be recommended.

The Upper Grades

During middle and high school, students with Asperger Syndrome usually attend regular education classes. Most people with Asperger Syndrome continue to have difficulty with social interactions and behavioral adjustment during their teenage years. Because these students are often quite bright and they usually do not act too “strange”, however, they are often misunderstood by their teachers and classmates. Oftentimes, teachers blame the student’s behavior issues on emotional or motivational problems. In unfamiliar or less structured settings (e.g., cafeteria, playground, commons area, physical education class, etc.) students with Asperger Syndrome may get into power struggles with teachers or students who do not understand their style of interacting with others. This may result in anxiety and more serious behavioral flare-ups.

Students with Asperger Syndrome may experience the greatest difficulty during middle school. This is the age when peer pressure is the greatest and tolerance for differences is the least. Middle school students with Asperger Syndrome may feel left out, misunderstood, teased, and bullied. Even though these students want to fit in and make friends, they may withdraw and become depressed. Academic performance is usually strong, especially in areas of specific interest. Students with Asperger Syndrome may have difficulty with attention and organization.

During the high school years, peer tolerance for individual differences usually increases. Students with Asperger Syndrome may be respected for their academic excellence by other students. Adolescents with Asperger Syndrome may be friends with other students who have similar interests (e.g., computer or math clubs, science fairs, etc.). With sufficient support, many of these students will have adequate coping skills, “social graces”, and the ability to fit in with their peers.

General Guidelines for Supporting People with Asperger Syndrome in School

It is important for school staff to recognize that students with Asperger Syndrome have a disorder which causes them to behave and respond differently than other students. These students are not being “manipulative”. They just respond to the world and its stimuli in a different way than their peers who do not have Asperger Syndrome.
The educational approach must be individualized for each student with Asperger Syndrome. It does not work to treat all of these individuals exactly the same. Many students with Asperger Syndrome can be included in general education classes. Related service staff may provide helpful consultation to regular education teachers in the following areas:

<table>
<thead>
<tr>
<th>Related Service Staff</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special education teacher or tutor</td>
<td>Individualized explanation and review</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>Motor skills</td>
</tr>
<tr>
<td>Speech therapist</td>
<td>Pragmatic language</td>
</tr>
<tr>
<td>Social worker or school counselor</td>
<td>Social skills training and emotional support</td>
</tr>
<tr>
<td>Paraprofessional</td>
<td>Behavior support</td>
</tr>
</tbody>
</table>

The following guidelines are useful for supporting students with Asperger Syndrome in school settings.

1. **Keep classroom routes as consistent, predictable, and structured as possible.** People with Asperger Syndrome usually do not like surprises. Advance warnings should be given (when possible) for transitions and schedule changes (e.g., breaks, assemblies, field trips, vacation days, etc.).

2. **Apply classroom rules carefully.** Many people with Asperger Syndrome interpret rules very literally. Rules should be individualized for students with Asperger Syndrome because their needs and ability to follow rules are different than other students. It may be helpful to post written rules in the classroom.

3. **Capitalize on a student’s area of special interest when teaching.** Students with Asperger Syndrome will learn best and be motivated and attentive when an area of high personal interest is presented. The student’s special interest can also be used as a reinforcer for successful completion of less desirable tasks or for following rules/behavioral expectations.

4. **Use visual aids** such as schedules, charts, lists, and photographs.

5. **Use direct instruction** for skills such as organization, studying, and time management.

6. **Simplify abstract concepts and language.** Avoid language that may be confusing for students with Asperger Syndrome such as sarcasm, jargon, slang, and figurative speech.

7. **Provide training for other school staff members** such as bus drivers, cafeteria workers, librarians, playground monitors, etc. It is important for these individuals to understand the learning style and needs of students with Asperger Syndrome.

8. **Avoid power struggles.** People with Asperger Syndrome do not understand rigid authority and anger. If these people are confronted in anger, they may become more rigid.
and stubborn and their behavior may quickly escalate. If possible, it is preferable to anticipate difficult situations and avoid confrontations by remaining calm, negotiating, presenting choices, and redirecting the person’s attention.

A team approach is crucial for putting a comprehensive teaching and management plan into place at school for students with Asperger Syndrome. Parents must be included on the educational team because they are usually most familiar with their child’s unique abilities and support needs as well as what has worked in the past for their son or daughter. An Individual Educational Plan (IEP) should be developed so that progress can be monitored and carried over from year to year. If may also be helpful to consult with other professionals (behavioral consultants, psychologists, physicians) who have experience supporting people with Asperger Syndrome.

Adulthood

Information about outcomes for adults with Asperger Syndrome is limited. This data, however, does suggest that adult outcomes for people with Asperger Syndrome are more positive than for adults with other Autism diagnosis in areas such as employment, marriage, family, and community living. In most cases, however, adults with Asperger Syndrome will continue to have difficulties in social relationships and may experience depression and anxiety.

People with Asperger Syndrome may have a “normal” adult life. Many people with Asperger Syndrome complete college and graduate school. Oftentimes, these adults will gravitate to a job that capitalizes on their own area of personal interest. Compared to adults with other diagnosis of Autism, people with Asperger Syndrome are more likely to get married and have a family.
Chapter 7: Review Questions

1. What three areas of development are typically abnormal in people with Asperger Syndrome?

2. What areas of relative strength distinguish Asperger Syndrome from other Autism diagnosis?

3. Fill in the blanks in the criteria for a diagnosis of Asperger Syndrome:

   Impaired social interactions
   a. Limited use of __________ behaviors in social interactions
   b. Failure to develop age-appropriate __________ relationships
   c. Lack of interest in __________ experiences with others
   d. Minimal social or emotional __________
   e. Inability to “read” others and __________ appropriately

   Language Use
   f. Strong use of language that has been __________
   g. Unusual __________ volume, tone, and rate of speech
   h. __________ interpretation of others’ comments
   i. Better understanding of __________ language
   j. Difficulty __________ humor, slang, puns, and word games

   Unusual patterns of behavior, interests, and activities
   k. __________ (flexibility/inflexibility)
   l. __________ with particular topics
   m. __________ motor movements

4. Symptoms and difficulties of Asperger Syndrome may result in problems for adults in the areas of __________; __________; __________ and __________ conflicts.

5. Many children with Asperger Syndrome __________ have a formal diagnosis when they begin kindergarten.

6. Most people with Asperger Syndrome continue to have difficulty with __________ and __________ adjustment during their teenage years.
7. Students with Asperger Syndrome may experience the greatest difficulty during _________ _________ when peer pressure is the greatest and tolerance for ____________ is the least.

8. It is important for school staff to recognize that students with Asperger Syndrome have a ________________ which causes them to behave and respond ___________ than other students.

9. Explain how you would use each of these guidelines in supporting a person with Asperger Syndrome:
   a. Keep classroom routes as consistent, predictable, and structured as possible
   b. Apply classroom rules carefully
   c. Capitalize on a student’s area of special interest when teaching
   d. Use visual aids
   e. Use direct instruction
   f. Simplify abstract concepts and language
   g. Provide training for other school staff members
   h. Avoid power struggles

10. Adult outcomes for people with Asperger Syndrome are more __________ than for adults with other Autism diagnoses in areas such as ____________, __________, ____________, and ________________ ____________.

11. In most cases, adults with Asperger Syndrome will continue to have difficulties in __________ ________________ and may experience depression and anxiety.
Appendices
Appendix A: Suggested Developmental History Questions for Parent Interviews

Play

1. Describe your child’s play when he/she was a baby. What was it like to play peek-a-boo or patty cake with your child?

*Parents of children with Autism often indicate that their infant did not enjoy typical baby games and would usually resist these types of interactions.*

2. What things did your child like to play with and how did he/she play with them?

What is his/her play like now?

*Children with Autism may have unusual play objects or be extremely attached to a particular toy or object. An object or toy may be preferred because of its visual, auditory, or tactile features rather than its usefulness as part of imaginary play. Play time may also involve unusual interests for the child’s age, such as obsessions with advertisements, musical jingles, calendars, or mechanical objects.*

3. What are your child’s interests? How does he/she spend leisure time? How have your child’s interests changed as he/she has grown older?

*Play and leisure interests are usually limited. While parents often report that their child’s interests changes with age, the restrictedness of leisure activities remained. Children with Autism usually do not ask for help in structuring their free time because they are content to play alone.*

4. What is/was your child like when playing with other children or with adults?

How does your child do in group games?

*Infants and young children with Autism often prefer to play alone. During interactions, adults or younger children may be preferred to same-age peers. When children with Autism do play with others, the peers may be used as “mechanical aids” for the child’s own interests and activities. Children with Autism usually do not do well in group games. For example, although they may have the skills to kick, run, and catch a ball, children with Autism usually do not do well in a formal game of kickball.*

Social

1. How did your child respond to you and other family members as an infant? How did that change as he/she grew older? What did your child like to do with each family member?
Infants with Autism may not show that they are aware of the presence of others. They may not stretch out their arms in anticipation of being picked up. They may not be aware when their mom or dad leaves the room. As the child gets older, interactions may increase but they are still more restricted than their peers.

2. How did your child respond to strangers as an infant? How did your child respond to strangers as a young child? How does your child respond to people he/she sees occasionally? How does your child respond to people he/she sees frequently?

*Children with Autism* often show little fear or shyness toward strangers. Their interactions with someone they see every day may be the same as with those they meet for the first time. Children with Autism may completely avoid contact with others or they may be overly friendly.

3. Who were your child’s friends growing up? What did they enjoy doing together?

Who are your child’s friends now?

Frequently, children with Autism do not have interactions with their same-age peers. The child may seem uninterested in others. Interactions in structured play settings may be more appropriate.

4. How has your child reacted to changes in normal routines, people, and in things around him/her?

*Children with Autism* may be distressed by seemingly minor changes in their physical settings and typical routines.

**Communication**

1. What sounds did your child make as an infant?

*It has been reported that infants with Autism are unusually quiet and do not babble and coo like other young children their age.*

2. What were your child’s first words? How old was he/she? How did speech develop after that?

*Some parents reported that their child’s speech development was normal until about 18 months of age and then a loss of verbal skills occurred. The first words of children with Autism may be unusual. Children with Autism may use language that only their parents can understand. They may also exhibit echolalia.*
3. Were you ever concerned that your child might be deaf? What sounds did your child enjoy listening to?

*Parents often suspect that their child has hearing problems. Children with Autism may attend to certain sounds but may not hear or attend to someone who is talking to them.*

4. What gestures did your child use to help say he/she wanted something? What kind of facial expressions were used?

*It may be difficult for children with Autism to use nonverbal gestures and facial expressions to communicate. They may not point to what they want. Their facial expressions may not match the message they are trying to convey.*

5. How did/does your child get the attention of other children and adults?

*Children with Autism may have difficulty requesting help or initiating interactions with others.*

6. Does it seem easy for your child to talk with other children and adults? It is easy for others to talk with your child?

*Children with Autism may have difficulty or lack of interest in communicating with others.*

7. Does your child imitate things he/she hears? Does he/she imitate movements and gestures of others?

*Children with Autism may have echolalia which means they immediately or later repeat words or phrases that they have heard. It may be difficult for children with Autism to imitate gestures and facial expressions. Imitation during pretend play may also be difficult.*

**Sensory**

1. As an infant and up until now, what things has your child been really interested in? What did he/she do with these objects or interests?

*Children with Autism may be interested in items that provide repetitive visual, auditory, or tactile stimulation. They may be upset if attempts are made to shift their attention to other objects. While typically developing children play with these toys in unique and different ways across time, children with Autism do not vary in how they play with these objects.*

2. How did/does your child react when he/she is hurt?

*Children with Autism may be overly sensitive or under-sensitive to pain. When they are hurt, they may become aggressive rather than seeking comfort.*
3. How did/does your child react to lights and sounds?

*Children with Autism may show extreme reactions to light. They may be overly sensitive to certain sounds and seemingly unaware of other sounds.*

4. What things did/does your child like to look at?

*Children with Autism may show an unusual interest in a particular feature of an object (e.g., the wheels on the toy car).*

5. How did/does your child react to different textures and temperatures?

*The child may be extremely interested in certain textures or show a great deal of aversion to a specific texture. Physical contact may also be offensive. Parents also report that their child does not react to extreme hot or cold temperatures.*

6. Describe your child’s eating habits as an infant. What are they now?

*Children with Autism may be picky eaters. They may insist on a particular eating routine, resist trying new foods, unwilling to feed themselves, and have an extreme dislike for certain food textures.*

7. How does your child explore new things?

*Children with Autism may be upset by change and new things (e.g., new furniture in the house, a new route to the grocery store, etc.). They may be upset by changes in their daily schedule. They may be reluctant to explore a new environment or to try a new activity.*

**General**

1. What do you think is the most important thing for me to know about your child?

*It is useful to give parents an opportunity to share additional information about their child and to put into perspective all of the information that they have provided. Parents are a vital link in providing information about deviances in their child’s developmental patterns and this information is critical in working with families and children with Autism.*
Appendix B: Additional Tips for Teaching Students with Autism

In addition to effective interventions for school age children with Autism, the following teaching tips may also be useful.

- People with Autism may have difficulty with organizational skills. Even an individual with a “photographic” memory can forget to bring a pencil to class or forget a due date for an assignment. Strategies which could be used to help the student remember these items could include a picture of a pencil on the front of his or her notebook or a written checklist with assignment deadlines. It is important to reinforce the person when he or she remembers something that was forgotten in the past.

- Abstract and conceptual thinking may be difficult for people with Autism. It may be helpful to combine visual cues (e.g., drawings, written words, pictures) with abstract ideas.

- Verbal interactions with people who have Autism should be as concrete as possible. For example, vague questions such as “Why did you just do that?” should be avoided. Instead, it may be more helpful to say “I did not like it when you slammed your book on the desk when it was time to go to gym. Next time, put the book down quietly and tell me you are angry. Were you showing me that you didn’t want to stop reading or that you didn’t want to go to gym?”

- Because of difficulties with abstract concepts, it is important to provide skill specific reinforcement to people with Autism. It is usually not enough to say “Good Job” after a person with Autism exhibits a correct response because he or she may not make the connection between what was done correctly and the generic verbal praise. It is important for the support provider to refer back to the correct response (“Good job ________.” “I like the way you ________.” “Thank you for ________.”) when he or she is verbally reinforcing a person with Autism.

- When a person with Autism is exhibiting an increase in unusual or challenging behaviors, it probably means that he or she is experiencing an increase in stress. Stress may be caused by a loss of control. Sometimes stress can be alleviated when the person physically removes him or herself from the stressful situation or setting.

- Challenging behaviors by people with Autism should not be taken personally by support providers. People with Autism are not manipulative and scheming individuals who are just out to make life miserable for others. Challenging behaviors are usually attempts to cope with events and settings that are confusing, disorienting, and scary. People with Autism are often unaware of the effect that their behavior has on others.

- Language use and interpretation is often very literal for people with Autism. Because of this, it is important to avoid certain forms of speech such as:
  - Idioms (e.g., “save your breath”, “jump the gun”, “run to the store”, etc.)
- Double meanings (e.g., jokes)
- Sarcasm (e.g., saying “Great” after the person has spilled a carton of milk)
- Nicknames
  - “Cute” names (e.g., Pal, Buddy, Wise Guy, etc.)

- It may be difficult for people with Autism to interpret body language, facial expressions and other social cues.
- Tasks may need to be broken down into smaller steps for some people with Autism. Tasks may be presented in a variety of ways as well (e.g., verbally, visually, modeled, physically).
- It is important to avoid verbal overload. Verbal instructions should be clear and concise.
- People with Autism should be prepared for changes in the environment and/or routine (e.g., special event, change in schedule, substitute, etc.). It may be helpful to use visual or written schedules to prepare these individuals for changes.
- People with Autism may be more or less sensitive to sensory input than other people. For example, the hum of fluorescent lighting may be extremely distracting and annoying to some people with Autism. Other individuals may not be affected at all by extreme hot or cold temperatures or they may have an extraordinarily high level of tolerance to pain.
- Uneven skill development is a common characteristic of Autism. A person with Autism may be a “whiz” in Algebra but may be unable to figure out how much money he needs to pay for his or her groceries at the store. Or, he or she may have a photographic memory about books, movies, speeches, and sports statistics, but may be unable to remember to bring his or her workout clothes to the YMCA. People with Autism may need written or visual reminders for certain details.
Appendix C: Disability Information for Someone Who Has Autism

(Indiana Resource Center for Autism)

You are one of many people in the United States who has a developmental disability which is called “Autism”. Having Autism means that you are still like everyone else in most ways.

- You eat and sleep.
- You brush your teeth.
- You wear your favorite clothes.
- You go to places like the grocery store.
- You visit your doctor for a check-up.
- You enjoy special activities like listening to music or working on the computer.
- You learn to do new things.

Having Autism also means that your body and your brain sometimes work differently than other people. You may do or experience things differently from people who do not have Autism.

- You may hear sounds that are louder or bothersome only to you.
- You may like to spend long periods of time watching unusual things such as the spinning of a fan or movements you make with your fingers.
- You may rock your body to help yourself relax when you feel nervous or confused.
- You may get upset when people talk too fast and you do not understand their message.
- You may like to make lists of unusual things that are important to you.
- You may have a hard time making friends.
- You may have difficulty figuring out how other people feel and why they act a certain way.
- You may like to talk about topics that are boring to other people.
- You may feel more comfortable when things always stay the same.

Colds and measles are sicknesses. Autism is different. Autism is a developmental disability and it will always be with you.

No one knows why your brain developed differently. The differences may have occurred before you were born when your mom was pregnant with you. She did not do anything wrong; neither did anyone else. The differences just happened.

You can be successful at home, school, or work. You may need to use pictures, schedules, rule books, communication boards, relaxation programs, or medications to help you learn better. Many people care about you. They will be glad to help you become a happy person who just happens to have a developmental disability called Autism.
Appendix D: Emergency Forms for People with Autism

**Emergency Medical Form**

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Birth / /</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Type</td>
<td>Age</td>
</tr>
<tr>
<td>Eye Color</td>
<td>Height</td>
</tr>
<tr>
<td>Weight</td>
<td>Gender</td>
</tr>
<tr>
<td>Allergies</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>City</td>
</tr>
<tr>
<td></td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Zip</td>
</tr>
<tr>
<td>Home Phone ( )</td>
<td>Cell Phone ( )</td>
</tr>
</tbody>
</table>

**Current Medications**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dosage</th>
<th>Schedule</th>
<th>Reason</th>
<th>Prescribing Physician or Over The Counter (OTC)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Emergency Contact Information**

<table>
<thead>
<tr>
<th>Emergency Contact Person</th>
<th>Relation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Address</td>
<td>City</td>
</tr>
<tr>
<td></td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Zip</td>
</tr>
<tr>
<td>Daytime Phone ( )</td>
<td>Cell Phone ( )</td>
</tr>
<tr>
<td>Evening Phone After 5 p.m. ( )</td>
<td>Alternative Phone ( )</td>
</tr>
<tr>
<td>Work Address</td>
<td>City</td>
</tr>
<tr>
<td></td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Zip</td>
</tr>
</tbody>
</table>

**Primary Physician Information**

<table>
<thead>
<tr>
<th>Name of Primary Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Phone ( )</td>
</tr>
</tbody>
</table>

**Other Physicians/Specialists**

<table>
<thead>
<tr>
<th>1. Physician/Specialist</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>City</td>
</tr>
<tr>
<td></td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Zip</td>
</tr>
<tr>
<td>Phone ( )</td>
<td>Emergency Phone ( )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Physician/Specialist</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>City</td>
</tr>
<tr>
<td></td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Zip</td>
</tr>
<tr>
<td>Phone ( )</td>
<td>Emergency Phone ( )</td>
</tr>
</tbody>
</table>

**Other Information**

- Disabilities or Other Conditions
- Primary Language
- Primary Method of Communication
- Adaptive Equipment
- Special Notes or Considerations

**Insurance Information**

<table>
<thead>
<tr>
<th>Insurance Company</th>
<th>Policy Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Subscriber Name</td>
<td>Group Number</td>
</tr>
</tbody>
</table>
Information for Emergency Responders

Name of Person with Autism ________________________________________________________
Home Address ___________________________________________________________________
Date of Birth ___________________________ Home Phone ____________________________
Cell Phone ____________________________ Work Phone _____________________________
Emergency Contact Name _________________________________________________________
Relationship to Person with Disability _____________________________________________
Home Phone________________________ Cell Phone _________________________________
Work Phone __________________________
Name and telephone of support staff if emergency contact cannot be reached.________________
______________________________________________________________________________

Is the person able to communicate with speech? ______________________________________

Does the person understand receptive language (what is being said to him/her)? Yes / No
If not, describe his/her method of communication.
______________________________________________________________________________
______________________________________________________________________________

Would the person be able to communicate his name, address, and telephone number in a high
stress situation? ____________________________
______________________________________________________________________________

Does the person engage in any unusual behaviors that might seem disrespectful or threatening
(e.g., yelling, giggling, standing too close to people)? If so, please describe.
______________________________________________________________________________
______________________________________________________________________________

In a high-anxiety situation, how would the person most likely communicate? _____________
______________________________________________________________________________

Is the person prone to respond in an unusual manner to sensory input (sounds, lights, smells,
etc.)? Yes / No
Circle what may result: seizure panic flight fight withdrawal other (please describe)

What might trigger what is circled above (e.g., dog bark, siren, touch)?
______________________________________________________________________________

Does the person have any specific fascinations (e.g., tree climbing, water)? If so, please describe.
______________________________________________________________________________

Is the person threatened by any physical traits (e.g., whiskers, hats, uniforms)? If so, please
describe.______________________________
Does the person have an accurate sense of danger? _________________________________

Does the person have any other medical conditions or is he/she taking medication? If so, please describe.________________________________________________________
________________________________________________________
________________________________________________________

Please describe anything else that would be helpful to emergency personnel (police, fire, EMT) who may have to respond to your household and interact with the person. ________________
________________________________________________________
________________________________________________________

Adapted from Jackson County Sheriff Department, Jackson, MI.
Appendix E: Additional Resources*

Chapter 1: An Introduction to Autism


Autism Speaks: First 100 Days Kit (2008)
http://www.autismspeaks.org/docs/family_services_docs/100_day_kit.pdf

First Signs ASD Video Glossary (video clips showing kids with “red flag” signs of Autism)
http://www.firstsigns.org/asd_video_glossary/asdvg_about.htm

LEND Brief: ASD and Culture (Spring 2015) MN LEND Program Leadership Education in Neurodevelopmental & Related Disabilities
https://lend.umn.edu/docs/ASD_and_Culture_FINAL.pdf

NIHCY Connections to Autism Resources
http://old.nichcy.org/resources/autism.asp

Understanding Autism Spectrum Disorders (ASDs). American Academy of Pediatrics

Chapter 2: Educational Supports for Students with Autism

http://books.nap.edu/openbook.php?record_id=10017&page=R1

Chapter 3: Intervention Options for People with Autism

Effective Practices for Students with ASD

Identifying and Using Effective Methods with Learners with ASD
Chapter 4: “Related Service” Strategies to Support People with Autism

An Introduction to Social Stories
http://www.polyxo.com/socialstories/introduction.html

Autism PDC: National Professional Development Center on Autism Spectrum Disorder
autismpdc.fpg.unc.edu/

Autism Speaks Family Services Challenging Behavior Toolkit
https://www.autismspeaks.org/family-services/tool-kits/challenging-behaviors-tool-kit

Picture Exchange Communication System
http://www.polyxo.com/visualsupport/pecs.html

What is the Picture Exchange Communication System or PECS?
http://www.iidc.indiana.edu/irca/communication/WhatisthePEC.html

Chapter 5: Support Strategies for Adults with Autism

Autism Speaks
https://www.autismspeaks.org/family-services/community-connections/have-some-fun-today-recreation-community-activities-clubs-and-

Autism Through the Lifespan
http://www.autism-society.org/site/PageServer?pagename=life_lifespan

Transition to Adulthood: Guidelines for Individuals with Autism Spectrum Disorders (ASD)


Chapter 6: Additional Support Strategies

http://www.nationalautismassociation.org/safetytoolkit.php
http://www.autismspeaks.org/docs/family_services_docs/100_day_kit.pdf

http://www.researchautism.org/resources/reading/index.asp

Chapter 7: Asperger Syndrome – General Information Across the Life Span

NICHCY Connections to Asperger Resource http://old.nichcy.org/resources/asperger.asp

Autism Websites

Autism Society of America www.Autism-Society.org

Autism Speaks www.AutismSpeaks.org

First Signs www.FirstSigns.org

Interactive Autism Network www.ianproject.org


Unlocking Autism www.UnlockingAutism.org

*Listing of additional resources in this document does not indicate an endorsement by the North Dakota Center for Persons with Disabilities. The North Dakota Center for Persons with Disabilities is not responsible for the content of these resources. Website addresses were current at the time of publication but may change at any time.
Module: Self-Management

Figure 2. Sample recording sheet for a frequency criterion

Instructions: Each time the student raises her hand to ask a question, she circles the picture of the girl raising her hand. She starts at 4 and counts down to 1 (for a total of 4 hand raises). When she gets to 1, she earns a reinforcer.

For more information on self-management strategies, refer to the Evidence-Based Practice Brief: Self-Management by the National Professional Development Center on Autism Spectrum Disorders available online [http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/imce/documents/Self-management-Complete-10-2010.pdf]
Appendix F: Feedback Answer Key

Chapter 1

1. Level 1 (Requiring support), Level 2 (Requiring substantial support), Level 3 (Requiring very substantial support)
2. People with Autism have a wide range of symptoms and levels of severity. Each person’s will display unique characteristics and often very uneven skill development even within the same skill area.
3. a. Doesn’t snuggle
   b. Passive acceptance of affection
   c. Avoidance of eye contact
   d. Doesn’t point at desired items or bring objects to show others
   e. Doesn’t have appropriate facial expressions
   f. Doesn’t use social signals
   g. Indifference toward others
   h. Limited friendships
4. are
5. a. Doesn’t reach language milestones on time (e.g., single words by 15 months; two word phrases by 24 months)
   b. Repeats what others say (parroting or echolalia)
   c. Doesn’t respond to name
   d. Uses pronouns (“I” and “you”) incorrectly
   e. Doesn’t initiate conversations
   f. Lack of reciprocity (give and take)
   g. Doesn’t participate in pretend play or interact with others during play
   h. Good rote memory (e.g., numbers, songs, TV jingles, specific topics)
   i. Literalness
   j. Bluntness
   k. Flat intonation or sing-song tone of voice
   l. Lose language (regression)
   m. Inability to understand body language, tone of voice, or expressions of speech during interactions
   n. Facial expressions and gestures may not match what the person is saying
6. a. Rock, spin, sway, twirl fingers, flap hands (stereotypic behaviors)
   b. Preference for structure, routines, order and rituals
   c. Obsession with an activity or topic
   d. Play with parts of toys instead of whole toy (e.g., wheels on truck)
   e. Increased tolerance of pain
   f. Very sensitive or not sensitive at all to smells, sounds, lights, textures, and touch
   g. Look at objects from unusual angles
   h. Unusual or intense interests
7. unknown
8. Autism
9. 25%
10. as early as possible
11. a. there is no medical or lab test for Autism
    b. parents’ concerns are not taken seriously by professionals
12. a. An evaluation by a team of specialists
    b. An Autism screening tool such as the Modified Checklist of Autism (MCHAT).
    c. Parental reports of differences in their child’s developmental patterns
    d. Observing parent-child interactions during play
13. three; six
14. boys
15. no
16. Sensory input that seems “normal” to other people can be experienced as overwhelming, confusing, painful, or unpleasant to people with Autism.
17. more; less.
18. Sensory integration differences; higher incidence of seizure disorders; genetic disorders; gastrointestinal disorders such as constipation or diarrhea, vomiting, abdominal pain; sleep problems including sleep apnea; eating disorders such as pica, overeating, or unusual food preferences.
19. 24 months
20. a. Increased publicity and awareness of Autism
   b. Improved screening tools and services
   c. Changes in how Autism has been defined and diagnosed
   d. Identification of more children with mild symptoms.
21. a. communication
   b. Using gestures
   c. Responding to others
22. a. Myth
   b. Fact
   c. Myth
   d. Fact
   e. Myth
   f. Fact
   g. Myth
   h. Fact
   i. Myth
   j. Fact
   k. Myth
   l. Fact
   m. Myth
   n. Fact
   o. Myth
   p. Fact
   q. Fact

Chapter 2

1. Individuals with Disabilities Act (IDEA)
2. As soon as the diagnosis is made
3. The child should be placed in the environment in which he or she has the most opportunities to participate in the general education curriculum and to interact with peers who do not have Autism.
4. a. Active participation of the child for at least 25 hours a week
   b. Low student-to-teacher ratio to allow individualized instruction
   c. Opportunities for interactions with typically developing peers
   d. Ongoing documentation and monitoring of progress
   e. Consistent structure with predictable routines, visual schedules, and clear physical boundaries
   f. Opportunities to apply learned skills in new situations to promote generalization and maintenance
   g. Inclusion of a family support component
5. Individual Family Service Plan (IFSP)
6. a. Consider the developmental level and specific needs of each child and include long-term outcomes
   b. Use visual cues, routines, schedules, and predictability
   c. Use strategies such as teaching in the natural environment and incidental learning approaches
   d. Implement systematic instructional procedures based on Applied Behavior Analysis Coordinate transitions between service providers
   e. Use functional behavior assessments and positive behavior supports
   f. Involve families in training and support activities
7. a. Provides the child with instruction that focuses on his or her strengths to build new skills, improve behavior, and address areas of weakness
   b. Presents information to help understand the child’s needs and behaviors
   c. Offers resources, training, and support to enable families to teach and play with their child more effectively
   d. Improves outcomes for children with Autism
8. Individualized Education Plan (IEP)
9. a. Exceptional skills in specific areas
   b. Extraordinary rote memory skills
   c. Difficulty with activities that require comprehension
   d. Difficulty with changes in routine or environment (e.g., transitions across activities, settings, and people)
   e. Difficulty tuning in to important cues or tuning out things that aren’t important
   f. Difficulty with unstructured time or excessive waiting
   g. Difficulty generalizing skills from one environment/situation to another (e.g., learning to use toilet paper at home, but not be able to use it correctly at school)
   h. Delays in processing information or initiating motor responses (there is wait time from the time an instruction is given until the child acts on the instruction)
10. a. Functional, spontaneous (natural) communication
    b. Social skills
    c. Functional adaptive skills
    d. Positive behavioral supports
    e. Cognitive skills
11. People with Autism learn best when information is presented based on their personal learning styles.
12. A task analysis is a breakdown of an activity into smaller steps.
13. Simulations and mock settings do not prepare students with Autism to complete activities in real life settings.
14. a. Work closely with families so that skills can be practiced in the community with family members.
    b. Provide sufficient time to teach each
    c. Use a team approach with related service staff
    d. Provide necessary supports even after the person has mastered a skill
    e. Make sure that the person understands the expectations for a specific activity
    f. Provide concrete examples and hands-on activities
    g. Intersperse easy tasks within difficult tasks
    h. Implement strategies which the person can use during transitions
    i. Adapt instruction to meet the needs of all individuals
    j. Provide clear information about the beginning and ending times of an activity
    k. Embed communication into the entire school day. People who are nonverbal must have access to their communication system at all times
    l. Complete a functional assessment to determine why challenging behaviors may be occurring
    m. Positive behavior support should be used to teach alternative ways to respond to challenges
n. Teach skills during natural times of the day

15. **Pacing**
   - **Extend** time requirements
   - **Vary** activity often
   - Allow **breaks**
   - **Omit** parts of assignments
   - Provide a set of materials for review at **home**

15. **Self-Management/Follow Through**
   - Use **visual** daily schedule
   - Use personal **calendar**
   - Have individual **repeat** directions
   - Use “**first**, then” statements
   - Teach in **real life** settings
   - Plan for **generalization**

15. **Environment**
   - **Plan** seating
   - **Alter** room arrangement
   - Define areas **concretely**
   - **Reduce** distractions
   - Teach **rules** for use of space

15. **Social Supports**
   - Create opportunities for **interactions**
   - **Cooperative** activities
   - **Social** stories
   - Written protocols/**scripts**
   - **Rehearse** social skills
   - Teach **social** communication skills (e.g., greetings, turn taking)

15. **Presentation of Content**
   - Teach to individual’s **learning style**
   - **Cooperative** learning groups
   - **Specialized** curriculum
   - Give **extra** cues
   - **Demonstrate/model**
   - Use **visual** sequence

15. **Motivation and Reinforcement**
   - **Verbal** reinforcement
   - **Nonverbal** reinforcement
   - Provide **choices**
   - **Intersperse** difficult and easy tasks
   - Capitalize on **strengths/interests**

15. **Assignments**
   - Give verbal directions in **small steps**
   - Use **picture** or **written** directions
   - Lower **difficulty** level
   - **Shorten** assignment
   - Provide **alternative** assignment
   - Use **hands on** activities
   - Allow student to **tape/type** assignment

15. **Testing Adaptations**
   - Give test **orally**
   - **Read** test to individual
   - **Modify** test (shorten # of questions, provide word bank, change format)
   - Extend **time**

16. a. Provide training to educators
    b. Welcome all students as members of the school community
    c. Design a schedule which capitalizes on the students’ strengths
    d. Implement peer-support programs
    e. Provide instructional assistants (paraeducators)
    f. Give students information about rules and expectations

17. a. Greater understanding and appreciation of individual differences
    b. Development of typical, age-appropriate social behaviors
    c. Expanded social networks
    d. Improved quality of life

18. Relationship facilitation strategies; Social skill instruction

19. a. Skills and instruction should be age appropriate
    b. Instruction should use verbal and visual cues
c. There should be multiple opportunities for the person with Autism to practice the skills with various individuals in a variety of settings
d. The training should focus on the development of discrete skills as well as complex skills

20. Answers will vary and should reflect the individual characteristics and support needs of the person selected.
21. Answers will vary.
22. Answers will vary based on the learner. This is one way the task could be broken down into teachable steps.
   1. Decide which DVD to buy
   2. Get money ready for purchase
   3. Watch for traffic walking from the car to the store
   4. Enter the store
   5. Get a cart
   6. Locate the DVD section of the store
   7. Find the desired DVD
   8. Say “hello” to friends, acquaintances, store personnel
   9. Pay for DVD
   10. Exit the store
   11. Watch for traffic on the way back to the car

Chapter 3

1. a. There is disagreement in the field of Autism about which interventions are most effective.
   o The elements of effective and scientifically-based interventions are vague and undecided
   o There are limited practical guidelines to help families and professionals make decisions about interventions
2. They often promise dramatic improvements and sometimes even “curing.” Even if these approaches are not scientifically validated, parents and support staff may be willing to “take a chance” and consider using treatments that usually have little benefit.
3. a. What are the expected outcomes of a particular intervention and do these outcomes match the needs of the person with Autism?
   b. What are the potential risks associated with the intervention?
   c. How will the intervention be evaluated?
4. a. Reported outcomes and effects of the intervention
   b. Qualifications of the people who are implementing the intervention
   c. How, where, and when the intervention is best administer
   d. Possible risks related to the intervention
   e. Costs associated with the intervention
   f. Methods for evaluating the effectiveness of the intervention
5. a. Scientifically based
   b. Promising practices
   c. Practice with limited supporting information
   d. Not recommended
6. Applied behavior analysis (ABA); Discrete trial training; Pivotal response training
7. Applied behavior analysis uses five steps to teach new skills or to reduce problem behaviors. These include:
   a. A cue/signal (from the environment or another person) that tells the person it’s time to complete a skill or activity (e.g., dirty hands or a verbal cue “It’s time to wash your hands Sara”). The term for this cue is “discriminative stimulus”
b. A prompt – A verbal or physical prompt (instruction or request) that comes from another person (e.g., “Sara, pick up the soap” or the support provider pointing to the soap).
c. A resulting behavior – The person’s response or lack of response (e.g., Sara picks up the soap or does not pick up the soap).
d. A consequence –
   - Positive reinforcement following the desired response (e.g., a meaningful reinforcer if Sara picks up the soap)
   - No reinforcer (extinction) for an incorrect behavior if Sara does not pick up the soap
e. A short break before initiating a new trial.

<table>
<thead>
<tr>
<th>Learning Difficulty Experienced by Many People with Autism</th>
<th>How Discrete Trial Training Addresses Learning Difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short attention span</td>
<td>• Breaks down task into <strong>small</strong>, <strong>simple</strong> trials</td>
</tr>
<tr>
<td></td>
<td>• Support provider gives short, concise <strong>instructions</strong></td>
</tr>
<tr>
<td>Limited motivation to learn</td>
<td>• Correct responses are <strong>immediately</strong> followed by <strong>meaningful</strong> reinforcers and social praise</td>
</tr>
<tr>
<td>Difficulty recognizing important stimuli</td>
<td>• Support provider provides clear and consistent <strong>prompts</strong> (stimuli)</td>
</tr>
<tr>
<td></td>
<td>• Individual receives reinforcers only for <strong>correct</strong> responses to those prompts (stimuli) so he or she distinguishes between what is relevant and what is unimportant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning Difficulty Experienced by Many People with Autism</th>
<th>How Discrete Trial Training Addresses Learning Difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalization – difficulty applying skills across different environments and support providers</td>
<td>• <strong>Prompt</strong> changes over time (e.g., the wording of the instruction as well as <strong>who</strong> gives the instruction, <strong>where</strong>, and <strong>when</strong> it is given) so that the person learns to respond in a variety of settings with different people</td>
</tr>
<tr>
<td>Cause-effect/observational learning – difficulty “picking up cues” from the environment</td>
<td>• Uses <strong>concrete</strong> instructions so that individuals are not required to pick up abstract cues from the environment or support provider.</td>
</tr>
<tr>
<td>Communication – difficulty with expressive and receptive language</td>
<td>• Uses short, concise instructions to <strong>minimize</strong> support provider’s words</td>
</tr>
</tbody>
</table>

9. The TEACCH approach focuses on the strengths of people with Autism and capitalizes on their preferences for visual processing of information. During Floortime, the parent or support staff enters the activity at the child’s level and moves him or her toward more complex interactions.

10. Answers will vary. Should be age-appropriate, respectful, and relate to teaching social interaction and communication skills.

**Chapter 4**

1. In reality, communication and fine/gross motor skills are not used in isolation from other activities. Therefore, it is more effective to embed related service goals within the context of other instructional goals and activities.
2. Indicate the related-service professional who is most likely to work on the following skills with a person who has Autism.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Related-Service Professional</th>
<th>Skill</th>
<th>Related-Service Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination</td>
<td>PT</td>
<td>Exercising</td>
<td>PT</td>
</tr>
<tr>
<td>Using signs</td>
<td>SLP</td>
<td>Muscle tone</td>
<td>PT</td>
</tr>
<tr>
<td>Augmentative Communication</td>
<td>SLP</td>
<td>Employment</td>
<td>OT</td>
</tr>
<tr>
<td>Balance</td>
<td>PT</td>
<td>Eating</td>
<td>OT</td>
</tr>
<tr>
<td>Fine motor</td>
<td>OT</td>
<td>Assistive technology</td>
<td>SLP</td>
</tr>
<tr>
<td>Spoken language</td>
<td>SLP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. a. Modify Language of Support Providers: Make instructions very specific with only one step instructions  
   b. Remove Uncertainty: provide a picture, gesture, or modeling prompts in addition to verbal information  
   c. Set Rules: If it isn’t possible to eliminate all attention for inappropriate behavior, it may be necessary to set rules about when a behavior can and cannot occur  
   d. Teaching Alternative Skills – identify and systematically appropriate behaviors to replace inappropriate behaviors. It isn’t enough to just suppress an inappropriate behavior  

4. Phase I – Individual is supported to exchange a picture of an item in exchange for the item. Support is faded  
   Phase II – Individual has to move a longer distance to get the communication partner or the picture. Individual is also encouraged to use picture with other people and in additional environments  
   Phase III – Increase the number of pictures so individual has to pick between a number of items to get what he/she wants  
   Phase IV- Individual is taught to use sentence strips for more complicated requests.  
   Phase V- Adjectives are added so the person can be more specific in requests – number, color, etc.  
   Phase VI- Person is taught to make comments about self.  

5. a. Communication is initiated by the person in natural settings and events.  
   b. When the person hands someone a picture or sentence strip, the request or comment can be easily understood.  
   c. Reinforcement for communication is natural because the person’s request or comment is rewarded.  
   d. Materials are inexpensive, easy to prepare, and portable. A PECS symbol can be as simple as a hand-drawn figure, a snapshot, or a picture made on the computer.  
   e. PECS involves an unlimited number of communication partners. Because PECS can be used with anyone who will accept a picture (not just people who know sign language or can understand the person’s verbal speech), people with Autism are able to generalize communication to a wide circle of people.  

6. Two common dietary treatments for Autism-related symptoms include removal of gluten (a protein found in grains such barley, rye, wheat, and oats), and removal of casein (a protein found in dairy products).  

7. a. Creating opportunities for social skills to be used across the day - identify the natural socialization opportunities which occur in the person’s everyday routine. Create a skills matrix to remind support providers to prompt the person to use the skill in everyday routines.  
   b. Preparing peers to support the use of social skills – Individual’s peers prompt and reinforce appropriate social skills in natural settings.  
   c. Planning direct instructional time to teach new social skills. The person has multiple opportunities to practice and perfect the skill.
d. Self-monitoring. After a social skill has been learned through direct instruction, the person is taught to monitor their own use of social skills.

8. a. Recruit individuals who are willing to be natural supports
   b. Discuss what it means to provide social skills training
   c. Assist in the selection of social skills that will be taught (e.g., initiating conversations, making comments, complimenting, asking questions, etc.)
   d. Watch a support provider demonstrate appropriate social skills teaching methods
   e. Implement social skills teaching approaches
   f. Prompt and reinforce the person’s use of appropriate social skills
   g. Participate in team meetings to make necessary modifications to the training program

9. a. Recognize when he or she is using a specific behavior in social situations
   b. Record his or her own behavior
   c. Set social goals and reward himself or herself for achieving those goals
   d. Seek feedback from others about their social behavior
   e. Adjust behaviors for different social interactions

10. a. Use a ratio of three to five descriptive or perspective sentences for every one directive sentence.
    b. Fade directive sentences as the person becomes more skillful at coming up with desired responses on his or her own.
    c. Avoid the use of absolutes by replacing phrases such as “I can” and “I will” with “I will try” or “I will work on” in directive sentences.
    d. Use age-appropriate vocabulary and fonts

11. a. Illustrations or photographs of the person in social situations with his or her peers.
    b. Simple line drawings or PECS symbols can be substituted for written words.
    c. Audio recordings
    d. Video
    e. Story boxes

12. a. Take in whole chunks of information quickly
    h. Remember information for a long time
    i. Use visual information
    j. Learn and repeat lengthy routines
    k. Understand rules
    l. Use concrete information
    m. Concentrate on narrow topics of interest

13. a. Be prepared and provide relevant cues. If information which is NOT relevant to the skill is provided, the person will learn the wrong information and remember it for a long time.
    b. Establish predictable routines. It is important for the steps in a routine to be presented with a clear beginning and end.
    c. Provide information about the schedule before events occur. Verbal instruction and visual supports should both be used.
    d. Use visual teaching methods.
    e. Teach the whole task.
    f. Allow sufficient response time. As a general rule, it is important to wait at least 45 seconds for the person before repeating the instruction or using another visual support.
    g. Give choices rather than expecting the person to respond to open-ended questions.
    h. Use positive statements. If a person with Autism needs to be redirected, it is better to explain what to do rather than what not to do.
    i. Adapt verbal language. People with Autism tend to respond well to key words and simple phrases.

14. a. Give one direction, prompt, or request at a time in the order that they will happen.
b. Use concise language.
c. Don’t phrase directions, prompts, or requests in the form of a question
d. Use pauses to allow the person to process and respond to the request.
e. Use normal voice volume and varied intonation.
f. Combine verbal directions, prompts, and requests with visual supports

15. cause(s); functional behavioral analysis.

16. Antecedent, Behavior Consequence, Hypothesis
17. a. Prevention Strategies - Support staff consider if they can change the environment so that they can eliminate, block, neutralize, or otherwise change the triggers or ‘antecedents' that lead to problem behavior.
b. Teaching New Behaviors - If a challenging behavior is going to be reduced, it must be replaced with an alternative behavior that serves the same function as the challenging behavior.
c. Responding to New Behaviors - This part of a behavior intervention plan directs the team on how to reinforce the new behavior, so that the person will continue to use the new behavior.
d. Responding to Challenging Behaviors - this section of a behavior intervention plan teaches the team how to respond to a person when the problem behavior does occur. The goal is for the person to learn that the challenging behavior will not produce the desired result; and remind the person that the replacement behavior will result in the outcome that the person wants. The role of the crisis management plan is to keep the person and others around them safe, not to attempt to change behavior with punitive or reactive management.

18. Adaptations and individualized supports
19. Consistent
20. concrete; visual
21. clearly, finished
22. a. timers
   b. specific set of supplies – when the supply is gone it creates a signal the activity is done
   c. Visual templates with the steps in a routine
   d. A checklist of steps which can be marked off as they are completed
   e. A picture of the reinforcer which the person will receive at the end
   f. “First _____, then _____” statements

23. verbal; stimulus; predictable; independence.

24. offensive
25. People with Autism may have heightened fears and anxiety when their routine is disrupted or when they are facing new or unusual situations, people, or places. These unusual concerns and obsessions may prevent them from enjoying many aspects of everyday life.
26. a. Desensitization by gradually exposing the person to spending time at the dentist office and different aspects of the exam and reinforcing him/her for remaining calm.
   b. Rehearsal strategies – looking at pictures of a dental routine.

27. b, d, f

28. b, c, e

Chapter 5

1. Parents worry about how much independence their child will be able to attain. They also worry about how their son or daughter will cope when they are no longer able to care for them.
2. a. Adults with Autism are valuable. They are valuable members of their families and they are good friends, classmates, colleagues, and employees. People with Autism play important roles in their communities.
   b. Adults with Autism should be supported to live and work in the communities of their choice.
c. Adults with Autism have unique and complex needs in areas such as communication, social skills, behavior and sensory issues, and environmental needs. These issues are different from people with cognitive disabilities.
d. Functional abilities and limitations will vary considerably from one individual to another. To maximize independence, services and supports must capitalize on individual strengths.
e. Families play a vital role in supporting adults with Autism. Each family’s unique needs, expectations, resources, values, and priorities must be honored.

3. 16

4. The goal of the transition plan is to facilitate the movement of a person with Autism from school to the adult world of work, living, and community participation.

5. a. Goals
   b. Strategies for achieving goals
   c. Roles and responsibilities for supporting the person with Autism
   d. Timelines for achieving goals

6. a. real life
   b. job
   c. social
   d. real work
   e. résumé
   f. natural
   g. social
   h. natural supports

7. Self-determination involves making one’s own life choices, setting personal goals, and developing a plan of action to achieve those goals

8. individual

9. Person-centered planning

10. Postsecondary education, employment, communication, community living, transportation, relationships, and supports

11. are not

12. a. Provide information about Autism and how it specifically affects the person with Autism in the post-secondary program
   b. Locate a student services staff member who can help to advocate for the young adult with Autism throughout his or her post-secondary years.
   c. Encourage the person with Autism to use strategies such as written schedules, visual aids, tape recordings of lectures, and other accommodations.
   d. Explore options for modified assignments and test taking

13. Because many basic employment skills are best learned in the natural setting. People with Autism have difficulty generalizing skills learned in one setting to another. Learning a skill in a day supports program or sheltered work program will not prepare them to perform at a job site.

14. all

15. demands; environmental; preferences; needs

16. The factors that contribute to job match for employees with Autism can be classified into the following components:

<table>
<thead>
<tr>
<th>Physical Components of the Job Match</th>
<th>Social Components of the Job Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hours of employment</td>
<td>• Acceptable level of interaction with co-workers and supervisors</td>
</tr>
<tr>
<td>• Acceptable noise level at the job site</td>
<td>• Clear job expectations</td>
</tr>
<tr>
<td>• Pay, leave, and other benefits</td>
<td></td>
</tr>
</tbody>
</table>
• Acceptable activity levels
• Physical requirements (e.g., lifting)
• Acceptable margin of error (quality control)
• Production requirements

• Grooming and hygiene requirements
• Communication skill demands
• Personal space available
• Break room available
• Coworker training and support

17. Individual tasks are “carved out” from more difficult, multi-task jobs. Carved-out tasks are then combined to create a job that is specifically designed to meet the needs of an employee with Autism, his or her employer, and the customers.

18. Most people in the general workforce have a limited understanding of Autism and the potential of a person with Autism to be a productive employee and valued co-worker. In most cases, employers, supervisor, and co-workers will require some degree of training to support work competence and social inclusion.

19. Lack of opportunity to work due to “work readiness” requirements; failure to identify the necessary supports.

20. People with disabilities live in their own homes, become active members of their communities, and have greater control of their own decisions regardless of the severity of the disability.

21. The supported living approach is especially responsive to the needs of people with Autism who may have difficulty with unpredictability, inconsistency, chaos, and communication.

22. a. Break each day into chunks and assign various tasks for each time period. For example, 8:00 am to 4:00 pm is work, 4:00 pm to 5:00 pm is snack and free time, 5:00 pm to 6:00 pm is chores and dinner, and so on.
   o Create an individualized activity schedule. Develop a “to do” list of daily tasks including homework, chores, appointments, work, and recreation/leisure activities. Encourage the person with Autism to check-off each task as it is completed.
   o Use a day planner that can be divided by tabs and include sections for “to do” lists, tasks, and scheduled activities.
   o Use an electronic organizer (PDA) that includes a calendar, “to do” list, and pop-up reminders about appointments and assignments.

23. Support networks

24. Speaking/Communicating Challenges
   - limited social skills
   - lack of experience in the workforce
   - shyness, intimidation
   - challenging behaviors
   - poor self-esteem
   - nonverbal
   - repeat words or phrases instead of engaging in conversations

   • Use e-mail to communicate about work tasks and to ask questions
   • Provide advance notice of meeting topics
   • Provide advance notice of meeting dates when employee is required to speak
   • Allow employee to provide written responses instead of verbal responses
   • Encourage the employee to bring a friend or co-worker to meetings

Time Management Challenges
   - difficulty managing their time especially if they are completing a task that is pleasant or exciting
   - unable to finish a task within the designated time frame

   • Divide large jobs into several small tasks
   • Set a timer to signal the end of a task
   • Provide a written or picture checklist of assigned tasks
   • Supply an electronic organizer
   • Post a calendar on the wall to highlight due dates
| **difficulty to transition to less desirable work activities** | **Impulsiveness**  
**Over-activity** |  
| Provide frequent breaks  
**Teach and reinforce self-management techniques to control impulsivity**  
**Allow the employee to work from home**  
**Post work rules and conduct policies**  
**Provide a private workspace**  
| **Difficulty Managing Stress** |  
| Provide a modified work schedule  
**Reinforce the employee’s use of appropriate stress management techniques**  
**Provide time for the employee to call or e-mail others for support**  
| **Concentration Challenges**  
**Difficulty with auditory distractions**  
**Difficulty with visual distractions** |  
| To reduce auditory distractions:  
**Provide a noise canceling headset**  
**Use sound absorption panels**  
**Provide a white noise machine**  
**Place employee’s work space away from auditory distractions**  
To reduce visual distractions:  
**Use cubicles**  
**Reduce clutter in the employee’s work space**  
**Place employee’s work space away from visual distractions**  
| **Organization and Prioritization Difficulties**  
**problems with planning, setting goals, and completing tasks**  
**Auditory and visual distractions** |  
| **Color-code systems for files, projects, or tasks**  
**Post visual charts to identify daily work tasks**  
**Teach and reinforce organization skills**  
**Ask a co-worker/mentor to help the employee**  
**Ask the supervisor to prioritize the person’s tasks**  
**Assign new task after completing previous project**  
**Provide written or picture checklist of tasks**  
| **Memory Issues**  
**problems processing and remembering verbal instructions**  
**difficulty focusing on the relevant details of a task**  
**boredom with the activity**  
**misunderstanding about the importance of the task** |  
| **Provide written or picture directions**  
**Allow extra training time for new tasks**  
**Use a task analysis or flow chart to break down difficult tasks into small steps**  
**Use voice activated devices to record verbal instructions**  
**Post a wall calendar to highlight dates**  
**Use post-it notes as reminders of important dates and tasks**  
**Use personal organization devices to track important dates and tasks**  
| **Social Skills Challenges**  
**preference for being alone, aloofness** |  
| **On the job behavior:**  
**Post rules and policies of conduct**  
|
- interrupting others who are working or talking
- poor listening skills
- limited eye contact
- crying or laughing for no apparent reason
- inability to read social cues and body language

- Provide concrete examples of inappropriate social skills
- Provide concrete examples to explain consequences
- Use training videos to show appropriate workplace behaviors
- Reinforce appropriate social skills
- Encourage co-workers to demonstrate appropriate social skills

### Interactions with co-workers:
- Provide a mentor to help the employee
- Make attendance at social functions optional
- Encourage co-workers to move personal conversations away from work areas

<table>
<thead>
<tr>
<th>Social Skills Challenges (Continued from previous page)</th>
<th>Suggestions for supervisors:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Provide detailed feedback on a daily basis</td>
</tr>
<tr>
<td></td>
<td>• Offer skill-specific reinforcement</td>
</tr>
<tr>
<td></td>
<td>• Provide concrete examples of areas in which the employee needs to improve</td>
</tr>
<tr>
<td></td>
<td>• Give clear assignments (verbally and/or in writing), expectations, and consequences</td>
</tr>
<tr>
<td></td>
<td>• Help the employee to set goals</td>
</tr>
<tr>
<td></td>
<td>• Adjust supervisory method as necessary</td>
</tr>
</tbody>
</table>

### Difficulties Multi-tasking

- Provide a clear explanation of performance standards
- Use a task analysis or flow chart to break down difficult tasks into small steps
- Color code tasks in prioritized order of completion
- Provide written or picture cues
- Reinforce employee for completing simultaneous tasks
- Reduce distractions in the work area

**Chapter 6**

1. a. Install dead bolt locks that require keys on both sides
   b. Install a home security alarm system
   c. Install inexpensive battery-operated alarms on doors and window
   d. Place hook and eye locks on all doors above the person’s reach
   e. Fence the yard with locked gates
   f. Electronic monitoring with either sensors or cameras
2. a. photograph
   b. pertinent information about the person
   c. contact information
3. a. A small unit in the person’s pocket or backpack that monitors the person’s location through a mobile phone or computer
   b. A handheld unit that tracks the location of the person through a wristband that he/she wears
   c. A unit that is connected to law enforcement and rescue personnel
4. a. Position the person away from loud sounds
   b. Provide ear plugs or headphones when appropriate
   c. Teach tolerance to sounds
   d. Verbally reinforce the person for increased tolerance to loud noises
5. a. Position the person in low traffic areas
   b. Install carpeting
   c. Face desk/work station away from windows and doors
   d. Cover the computer and other materials when not in use
   e. Seat the person away from distracting items in the setting (e.g., books, toys, computers, work materials, etc.)
6. a. Marriages
   b. Other family relationships, especially siblings
   c. Finances
   d. Fulfilling work responsibilities
7. a. Difficulty understanding the child’s needs because of communication challenges
   b. Challenging behaviors due to sensory overload in the environment (e.g., overwhelming sights, sounds, smells, and other sensory information)
   c. Social skill deficits and limited play skills that make it difficult to take the child out into the community
   d. Unusual sleeping and eating patterns that disrupt family routines
8. Parents must have opportunities to provide input in the selection of training goals so that:
   a. Their son or daughter learns skills that will enable them to fit in with their family and the community
   b. Training goals are compatible with the cultural and religious values of the person’s family
   c. Monetary resources and adequate time are available for implementation of the targeted intervention
9. The plan may need to be submitted for review by the person’s team, the human rights and behavior intervention committees and informed consent of the person and his/her guardian.

Chapter 7

1. social relatedness and social skills, the use of language for communicative purposes, and repetitive or perseverative behaviors
2. higher cognitive abilities and more typical language
3. a. nonverbal
   b. peer
   c. sharing
   d. give-and take
   e. respond
   f. memorized
   g. voice
   h. literal
   i. concrete
   j. understanding
   k. Inflexibility
l. obsession
m. repetitive
4. friendships, job performance, and social and marital conflicts.
5. Do not
6. social interactions and behavioral adjustment
7. middle school; differences
8. disorder; differently
9. a. Keep classroom routines as consistent, predictable, and structured as possible. People with Asperger Syndrome usually do not like surprises. Advance warnings should be given (when possible) for transitions and schedule changes (e.g., breaks, assemblies, field trips, vacation days, etc.).
b. Apply classroom rules carefully. Many people with Asperger Syndrome interpret rules very literally. Rules should be individualized for students with Asperger Syndrome because their needs and ability to follow rules are different than other students. It may be helpful to post written rules in the classroom.
c. Capitalize on a student’s area of special interest when teaching. Students with Asperger Syndrome will learn best and be motivated and attentive when an area of high personal interest is presented. The student’s special interest can also be used as a reinforcer for successful completion of less desirable tasks or for following rules/behavioral expectations.
d. Use visual aids such as schedules, charts, lists, and photographs
e. Use direct instruction for skills such as organization, studying, and time management.
f. Simplify abstract concepts and language. Avoid language that may be confusing for students with Asperger Syndrome such as sarcasm, jargon, slang, and figurative speech.
g. Provide training for other school staff members such as bus drivers, cafeteria workers, librarians, playground monitors, etc. It is important for these individuals to understand the learning style and needs of students with Asperger Syndrome.
h. Avoid power struggles. People with Asperger Syndrome do not understand rigid authority and anger. If these people are confronted in anger, they may become more rigid and stubborn and their behavior may quickly escalate. It is preferable to anticipate difficult situations and avoid confrontations by remaining calm, negotiating, presenting choices, and redirecting the person’s attention.
10. positive; employment; marriage; family; community living
11. social relationships
Bibliography

http://www.autism-society.org/site/PageServer?pagename=life_lifespan_early

http://www.autism-society.org/site/PageServer?pagename=about_whatis_factsstats

http://www.autismspeaks.org/docs/family_services_docs/100_day_kit.pdf


https://lend.umn.edu/docs/ASD_and_Culture_FINAL.pdf


