

Chapter 6: Essential Components of an Instructional Program

In recent years, professionals and families were presented with encouraging data and reports of successful interventions for individuals with ASD. Although research documents a number of programs demonstrating substantial benefits for individuals with ASD, differences exist in reference to funding, location, degree of family and community involvement, available resources, and program content and structure.

The purpose of the following section is to provide educators, administrators, individuals, and families with a framework and structure for program development and evaluation. As noted in this unit’s “Key Areas,” there are a variety of essential components.

Essential Component 1: Family Involvement

This section describes the importance of collaboration between families, individuals on the spectrum, medical and educational professionals, and the community. It includes guidelines for ensuring high-quality communication between families and others that are invested in the success of the individual with ASD. The Family Involvement section is best used in conjunction with the rest of this document. Just as the family cannot be isolated from the various aspects of their child’s life, this section of the document, which addresses family participation, must be considered with all other portions of the document.

The family is the most important part of a person’s life from infancy throughout adulthood. It is within the family context that the individual receives the most support and develops the skills to relate to others beyond the family. Although both families and professionals expect individuals to meet current and future goals, it is the family who will ensure consistent commitment to an individual over time.

Families, educational staff, medical professionals, first responders, state and local agency officials and community members share the responsibility of meeting the needs of an individual with ASD. There must be ongoing collaboration and communication with family members, professionals and community members. Optimally, it is a partnership where everyone’s contributions are valued and respected. Families and professionals bring to the team their own perspectives, responsibilities and strengths.

Sixteen Essential Components:

- ♦ **Family Involvement**
- ♦ **Earliest intervention**
- ♦ **Intensity**
- ♦ **Predictability and Structure**
- ♦ **Generalization of Skills**
- ♦ **Functional Analysis of Behaviors**
- ♦ **Communication**
- ♦ **Assistive Technology**
- ♦ **Sensory Motor Processing**
- ♦ **Social, Emotional, and Sensory Regulation**
- ♦ **Social Development**
- ♦ **Inclusion with Typically Developing Peers**
- ♦ **Progress Monitoring**
- ♦ **Supported Transitions Across Multiple Environments**
- ♦ **Sexuality**
- ♦ **Lifelong Support**

Each team member should begin the planning process with the same general mission to promote the independence and satisfaction of the individual to the extent possible throughout life's transitions, e.g.: to have a purposeful job, a home, friends, and a sense of social belonging. While each team member may bring important pieces of the planning puzzle to the table, incorporating the pieces into a comprehensive plan requires the collective cooperation of all team members. Because of the intense challenge of those with ASD, it is more advantageous for all parties to freely and openly share these challenges and barriers to assure the most creative outcomes.

As the individual with ASD gets older, aspects of family and school communication will evolve. To the extent that the individual is able, he or she needs to be included in all discussions regarding their plan, e.g.: transition process, teaching priorities, etc. As siblings get older, they can be involved at the level they feel comfortable. Often a sibling attends the same school and can lend a unique perspective to the partnership. Peers of the individual may also offer valuable insight and support to the planning process and to the individual's well being.

**Communication
between home
and school is
critical.**

Throughout life transitions, there are many direct service staff and professionals who will come and go as part of the individual's team. The family's role is a constant through much of the individual's life and may represent stability during the changes. Families vary greatly in their ability to meet an individual's needs because of the differing resources they have. Even when an individual receives educational services in a school building, much programming may still need to occur at home. Therefore, the roles and responsibilities of family members, schools, and professionals are ever changing and evolve over time.

Many individuals with ASD are not reliable communicators, so families may struggle to know what went on in other settings. Conversely, teachers and other service providers often lack input about the home setting that affects the individual during the school day. Some families hire people to work with the individual at home using funding made available to them through government sources (such as Medicaid Personal Care) as well as their own resources.

Others coordinate the services but leave the direct program design and implementation to others. Families and professionals should engage in ongoing meaningful communication about the individual and the services being received in order to broker the right supports in the best way to fit the individual and the plan.

The following are guidelines for providing family and professional collaboration:

Effective Communication

- ◆ Families and professionals should display mutual respect, keeping the focus on the individual and his or her strengths, choices, and needs. Communication should be kept respectful, candid, confidential, and constructive.
- ◆ Families and professionals should explore options about how communication channels can best be kept open between home, school, medical, and other outside program settings. These options will vary depending on the ability of the individual with ASD to communicate and his or her age. Commonly used methods include notebooks passed back and forth, home visits, phone calls, e-mail, and scheduled visits to the school by parents or caregivers.
- ◆ Families and professionals should frequently share successes, progress, and strengths of the individual with ASD, as well as problems and deficits.

Team Process

- ◆ Families as well as the individual should always be active members of the multidisciplinary team. The individual's wishes and desires should be considered as part of the self-determination process. Self-determination is defined as a combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior.
- ◆ Families should share their hopes and dreams for their children with the professionals who share their lives (e.g., use of the vision statement on the IEP). Families should be given the opportunity to collaborate in the designing of the individual's program, including through the IEP process (see Appendix 8: Education Best Practice Guideline Checklist). At the age of sixteen, this will include transition planning as well.
- ◆ Because individuals with ASD typically require lengthy planning and training for transitioning from school to work, the transition visioning process should be encouraged before age sixteen.
- ◆ Families should be an integral part of the ongoing assessment of the effectiveness of the individual's program and in any modifications that will be needed.

Information and Advocacy

Advocacy by parents and family members is essential to ensure that children with ASD have an opportunity to achieve their fullest potential. As important as professionals are in furthering the knowledge of individuals with ASD and meeting their needs, parents and family members have a critical role of educating professionals and policy makers. Parents evolve from the first encounter of the concept of ASD. Families and parents need a great deal of information and support to become educated and able to provide support and information to others. Because everyone enjoys the opportunity to talk about what is important personally, parents are natural advocates as they talk with other parents about experiences (see Chapter 10: Advocacy).

Essential Component 2: Earliest Intervention

The standard "earlier is better" may serve as a particular advantage for children with ASD (Lovaas, 1987; McClannahan & Krantz, 1993). However, identifying and diagnosing ASD at any age allows professionals and families to address the challenges associated with ASD and develop an effective program.

Most educators and families agree with the position that intervention programs are more effective when begun at the earliest age possible.

Services provided in these programs achieve the following outcomes for individuals with ASD and their families:

- ◆ Provide the opportunity to intervene to minimize the development of interfering behaviors and secondary disabilities.
- ◆ Facilitate gains in attention, imitation, communication, socialization, cognition, leisure skills, work skills and other essential life skills.
- ◆ Help support the development of a young person with ASD, establish social networks, and reduce family stress.
- ◆ Increase independence and decrease likelihood of social dependence.
- ◆ Teach functional communication strategies.
- ◆ Reduce societal costs for services that will be needed later in life.

- ◆ Include the individual with ASD and the family in intervention planning and implementation to promote generalization and maintenance of skills.

Essential Component 3: Intensity

Although the duration of intervention (e.g., number of hours per day or per week) and number of contexts (e.g., home, school, community) encourages the debate of what constitutes sufficient intensity, what is agreed upon is that more intense quality intervention generally results in better outcomes and that the intensity of interventions is determined by the unique needs of each family and individual.

The following general suggestions may be used to guide decision-making:

- ◆ Assess the individual's needs for year round intervention programming across contexts.
- ◆ Assess the need for individual vs. group programming.
- ◆ Focus on assessment-driven individualized programming and instruction.
- ◆ Assess the individual's and family's strengths and needs in regards to programming.
- ◆ Stress ongoing support and staff development of teachers, support staff, and related services working with individuals with ASD.
- ◆ Provide individuals with ASD continuity of programming across people and settings as agreed upon in the Individualized Education Plan (IEP) or Individualized Family Service Plan (IFSP).
- ◆ Recognize that effective intervention for ASD requires ongoing assessment and ongoing individualized programming.

Essential Component 4: Predictability and Structure

Individuals with ASD benefit from an environment that incorporates a structured program tailored to meet their individualized needs. A thorough structure also enables professionals to stay in tune with daily events that may create stressful situations for the individual. Professionals and families need to collaborate to develop effective goals and objectives to create an environment that promotes continuity, cohesion and consistency to best meet individual needs and enhance their independence. Uniform and comprehensive training of these transdisciplinary teams needs to be ongoing and consistent to support successful educational programming.

To provide the necessary organization in the educational setting, the following components are critical when providing predictability and structure:

Teaching the concept of “Time” and the Passage of Time

- ◆ Use calendars.
- ◆ Create visual daily schedules (to prepare in advance for regular and unexpected changes in routine).
- ◆ Use an analog clock to pair routines, activities, and transitions.

The functional and organizational layout of the environment

- ◆ Provide a safe environment (e.g., adult/child-individual ratio, exit doors).
- ◆ Visually identify all areas of the room (using pictures and/or words).
- ◆ Use natural boundaries, such as desks, files, and partitions, to create specific areas.
- ◆ Clearly define and visually represent “Rules of the Room”.
- ◆ Use environmental modifications to help manage and tolerate sensory stimuli.

Utilize materials that enhance play, leisure, academic and vocational activities

- ◆ Use hands-on materials and manipulatives.
- ◆ Use assistive technology (computers, augmentative devices, switches, assistive listening devices, calculators, etc.).
- ◆ Use multiple modalities (e.g., visual, auditory, tactile) and methodologies to provide information and structure.

Teaching social skills to develop environmental awareness

- ◆ Clearly define and visually represent “Rules of the Room.”
- ◆ Provide social awareness using social skill development activities.
- ◆ Teach how to read “body language” and gestures.
- ◆ Teach the understanding of empathy and humor.
- ◆ Recognize emotions and situations where emotions are expressed.

Essential Component 5: Generalization of Skills

Typically, young individuals will learn incidentally from the activities and persons in their environment and will generalize these observed skills with minimal effort. For individuals with ASD, however, it is difficult to utilize a learned or observed skill in another setting. They do not necessarily model or imitate observed behaviors and may not understand that a “skill” learned in isolation can and should be generalized in other environments. For this reason, programming for appropriate generalized outcomes has long been recognized as a critical component of interventions for individuals with ASD.

The need for generalization should be considered across a variety of circumstances, e.g., across time, settings, persons, and behaviors. Time refers to maintaining the use of a learned skill after the teaching process has stopped. Across settings refers to the use of a learned skill in settings outside the teaching environment. Persons refer to the use of a learned skill with and without the individual who taught the skill and that the skill can be demonstrated with others. Generalization across behaviors refers to changes in untaught skills which are related to the skill being taught, e.g., teaching an individual to say “Hi” not only increases the use of that word upon greeting someone, but also increases other greeting behaviors such as waving, making eye contact, etc., which are not being directly taught.

These forms of generalization all need to be considered in any program designed to teach new skills to an individual with ASD and specific strategies to promote generalization need to be incorporated into the teaching process.

Some individuals, however, may over-generalize, which is an over-application of a concept (product of over-selectivity). For example, if they determine that the critical feature of an animal is four legs and are not identifying with the other features, then the individual will assume that all four-legged creatures are the same animal.

The following are a number of teaching strategies to assist in fostering generalization:

- ◆ Skills taught in an instructional environment should lead to naturally occurring, positively rewarding consequences in everyday environments. For example: learning to make a peanut butter and jelly sandwich results in eating an enjoyable snack at its completion.
- ◆ Teaching a skill in a variety of situations, settings, or with multiple teachers helps promote generalization of a skill. Thus, teaching of toileting skills in a variety of restroom configurations with several different people assisting can increase toileting skills in most community settings.

- ◆ Bringing features or common elements of the everyday environment into the teaching situation, helps to generalize skill use in that everyday environment. For example, teaching shoe tying using the individual's shoe and shoelaces instead of common string or pipe cleaners would promote generalization to the real world task.
- ◆ Once a behavior has been learned to a consistent high level of performance, one can shift to intermittent rewards so that the skill is more resistant to being extinguished if rewards are not given frequently on some occasions in the future.

Teaching self-management techniques can be useful for promoting generalization. Self-management involves learning to prompt and reward one's own behaviors in various situations outside of direct treatment.

Essential Component 6: Functional Analysis of Behaviors

This section describes issues related to the behavior of individuals with ASD. It includes descriptions of common behavioral issues and causes. Because behaviors are functional for the individual, it is important to understand the intent of the behavior before applying an intervention. This section focuses on understanding behavior and intervention strategies.

It is best used in conjunction with the rest of the document because disruptive behavior has a cause and effect relationship with all other areas of development, inclusion in the community and life experiences. Difficulty communicating needs, a lack of understanding expectations, or a negative reaction to the environment, can contribute to disruptive behavior. Appropriate social behavior is necessary for learning, interacting with peers, and involvement in the community.

In our society, behaviors are often only talked about in a negative context. "His behavior is interfering, disruptive, or self-defeating." It should be noted that persons with ASD may have a dramatically narrower repertoire of behaviors, particularly in social situations. The effort to reduce maladaptive behaviors needs to be offset by equal energy to focus on teaching the individual new, functional, and appropriate behaviors.

Behaviors Serve a Function

Disruptive and disturbing behaviors are sometimes manifested by individuals with ASD. It is important to consider that behaviors can be very functional for the individual yet may result in negative outcomes. Understanding the behaviors of any individual is very complex. Behaviors vary as a result of internal factors (e.g., emotion, puberty, maturation, aging, nutritional changes, overall health, sensory sensitivity) as well as external factors (e.g., changes in environment, social pressures, sleep deprivation, behavior of others, changes in school or personnel).

It is important to identify the antecedents of a behavior and the consequences that reinforce it. This information can be used to change the behavior by altering the antecedents and/or the consequences. This operant conditioning approach is often used in combination with other supports and strategies. To better understand the complexities of behaviors and to identify better interventions, one can also use a systematic procedure called Functional Behavior Analysis (or Assessment), which incorporates the operant conditioning approach.

Functional Analysis of Behavior and Behavior Interventions

The premise of a Functional Behavior Analysis (or Assessment) (FBA) is that all behavior serves a purpose. Behavior often achieves some desired goal or goals. The goal or goals may be escape or avoidance, control (including meeting one's own sensory needs), attention, or getting a specific object, as well as an attempt to communicate.

The goal, therefore, of any behavioral intervention program is to teach adaptive behaviors and to prevent the development of unwanted or inappropriate behaviors. Research has shown this to be an effective strategy in individuals with ASD and other developmental disorders. Functional analysis focuses on the "ABCs" of behaviors (antecedent, behavior, consequence) as a means to understand the purpose or function of the behavior. Such analysis facilitates the development of needed skills and, as more functional and socially appropriate behaviors are learned, problem behaviors are reduced or eliminated. The use of behavioral analysis is a mainstay of successful behavioral intervention strategies for individuals with ASD.

Typically, functional analysis proceeds through the following steps:

- ◆ The target behavior (skill to be learned or problem behavior to be eliminated) is defined in terms of observable, measurable behaviors.
- ◆ Identify the behavioral antecedents that are needed for the achievement of a new skill or that can trigger or encourage a problem behavior. Common reasons for the failure to attain a learning goal include absence of foundational skills, lack of understanding of the purpose of the activity, internal or external distractions, or inadequate reinforcement strategies. Factors that underlie problem behaviors may include absence of adequate communication skills, environmental events that trigger the behavior, and adult responses that inadvertently encourage the unwanted behavior.
- ◆ An intervention to teach a new skill or reduce a problem behavior is developed logically from the information gathered during the functional analysis. The strategy should consider the purpose of the desired skill or the problem behavior, the individual's developmental level, the need for structure and consistency, the intervention setting, and the need for collaboration between parents and professionals in addressing the problem.
- ◆ Consequences that strengthen or weaken the occurrence of the target behavior must be identified. Particular attention must be given to individual differences in the effectiveness of reinforcer behavior strategy among individuals as well as the schedule for the occurrence of the consequence.
- ◆ The impact of the intervention strategy is evaluated through regular reviews of objective data. Interventions are then adjusted or revised accordingly (see Appendix 6: Functional Behavioral Assessment).

Teachers and caregivers need to view behaviors as communicative rather than an intentional effort to disrupt.

Behaviors Change Over Time

Challenging behaviors that an individual exhibits as a child may disappear with maturity, or behavioral challenges may become more prevalent due to changing conditions. Sometimes the behaviors an individual exhibits do not change but are perceived differently by others as the individual ages and physically matures.

It is important that the behavioral history of the individual be well understood by all persons participating in the care and education of the individual. His or her unique reactions to common as well as novel situations and intervention strategies that have been successful are important considerations in designing successful interventions.

Influences on Behavior

Behaviors are influenced by the characteristics of ASD and by environmental issues. Some behavioral influences include:

Stress/Anxiety

Stress and anxiety are often key factors triggering behaviors characteristic of people with ASD. There are many worries that lead to stress. Such worries may include changes (or anticipated changes) in schedule, interactions with peers, and pressure to perform. Stressors need to be understood, monitored and controlled with care and respect for the individual's perception and future needs. Individuals with ASD may view causes of stress differently and have varied reactions to stress. All caregivers and providers must be aware of and manage their own stress levels. Individuals with ASD experience awareness of and often negative reactions to the stress of others.

Physiological Factors

Challenging behaviors may occur more frequently or intensely when physiological difficulties are present. These factors may include lack of sleep, medication changes, hunger, and illness (chronic or acute). An individual with ASD may not understand why he is experiencing these difficulties and/or may not be able to express these concerns in a functional manner. The functional analysis must assess if these factors are present and their effect on the behavior.

Sensory Sensitivities

Many individuals with ASD present with sensory sensitivities and/or sensory preferences that are very different from the typical population. Behaviors may occur when an individual encounters a sensory experience that is unpleasant or painful. These sensitivities may be auditory, tactile, taste, visual, or others. Additionally, the sensory experiences that trigger a behavior for an individual with ASD may be subtle and generally uneventful for others. At times, simply the anticipation of the experience can trigger a behavioral response. The functional analysis must consider the unique sensory profile of the individual when determining the function of a behavior.

Finally, successful interventions targeting specific challenging behaviors may vary greatly and include a blend of interaction strategies, structure, and medical support. Some problems may need to be tolerated or set aside for a time while focusing on more dangerous or interfering behaviors (i.e., pick your battles). Successful interventions sometimes require an adjustment period, during which the individual's behavior may seem more challenging than it was prior to intervention. Seek agreement and commitment from all team members and allow interventions to work by implementing them consistently and giving them time.

Positive Behavior Support

Positive Behavior Supports (PBS) work hand in hand with the Functional Behavior Analysis process described above. PBS is an approach or process that can be utilized to develop individualized interventions for children presenting with more complex or severe behaviors. The strategies used within a PBS plan to bring about positive behavioral changes in children, include the teaching of new skills, preventing the occurrence of the challenging behavior, and supporting the child in achieving meaningful, long-term outcomes. This is a much more proactive approach to dealing with difficult behaviors in that it is a proactive versus a reactive strategy and is also focused on long-term interventions as opposed to a quick fix.

The PBS process begins with the formation of a team of individuals who have concerns about a child's behavior. PBS is most effective when it is implemented across all environments – consistency and continuity are key. The next step in the process is to conduct a FBA. After the function of the behavior

is identified the team can begin formulating the behavior support plan (see Appendix 6: Functional Behavioral Assessment).

It is within this plan that:

1. Specific strategies for modifying the curriculum, environment or activity are identified,
2. Specific procedures for teaching the new skills are identified, and
3. Strategies are implemented to ensure that the new skills are learned and that the challenging behavior is not maintained. Each of these steps will be further explained in the following paragraphs.

Frequently, modifications can be made to the environment, curriculum, delivery of instructions etc. to reduce the likelihood that the child will need to rely on the challenging behavior for whatever function it serves. Some strategies and modifications to consider are reviewing rules, allowing for the child to make choices, reducing distractions, using visual supports such as visual schedules and instructions, using timers to help facilitate transitions, and providing the child with verbal and visual strategies to assist with self-regulation strategies.

The second step in the PBS process is the actual teaching of replacement skills that serve the same function as the challenging behavior but are more appropriate and desirable. It is critical the replacement skills be efficient and effective. They need to work as well or better than the current undesired behavior that they are engaging in. It is also important to consider the child's current skill level including cognitive level and communicative abilities when determining replacement behaviors. Ensure that the replacement skill being introduced addresses the function of the challenging behavior. For example, if the child wants out of an activity then teach the child to communicate the concept of finished or break.

The final step in the PBS process is to ensure that the challenging behavior is not maintained and that the new skills are learned and applied. It is vital that all adults interacting with the child respond in a consistent manner that will make the challenging behavior ineffective. In addition, rewards for appropriate behavior need to be equal to or exceed the rewards the child gives themselves through the use of the challenging behavior. A good rule of thumb is that the appropriate behavior needs to be positively reinforced four times for every one display of the challenging behavior. Data needs to be gathered on the frequency of occurrence of the challenging behavior and the effectiveness of the replacement behavior to determine the success of the PBS plan.

A majority of the information in the above PBS section was adapted from the Center of Social and Emotional Foundations for Early Learning. Their web site contains many help sheets and training modules on behavior, FBAs and PBS plans. For additional support and information on this subject, go to www.vanderbilt.edu/csefel/contact.html.

Behaviors Require Brainstorming and Teamwork

Successful intervention for challenging behaviors requires all persons involved with the individual (the team) to work together to meet the needs of the individual with ASD. Flexibility is required on the part of all team members to establish and maintain communication with each other and to apply consistency in implementing the agreed upon intervention(s).

The team must assess the situation, identify the individual's needs and abilities and implement strategies to assist the individual in learning and using appropriate behaviors. The process of assessing, teaching and learning appropriate behaviors may sometimes proceed quickly or may require a long period of time, the involvement of many people to assist, and the systematic testing of a variety of strategies.

There is a dynamic relationship between the educator, parent, others involved and the person with ASD. Priorities and goals of each are contributors to problems (lack of unity and confusion) and successes (cooperation, compromise, and consistency). Individuals working together as a team must be willing to share resources and personal limitations. They must be willing to compromise. They must be willing to make the most of the creativity that can exist within the team. Be prepared to do things differently.

Essential Component 7: Communication

The Communication section describes the unique patterns of communication associated with individuals with ASD. Included are ideas on how to assess the purpose of communication and strategies for improving communication. This section is best used in conjunction with the rest of the document because the ability to communicate affects all other areas of learning, socialization, and behavior, and they in turn are affected by communication abilities.

The ability to communicate one's feelings and thoughts to others has a profound effect on quality of life both immediately and long term. Without an effective communication system, it is very difficult to navigate through life. In addition to individuals who have obvious communication challenges, there are many individuals with ASD who may only appear to be capable communicators. In fact, those individuals may not be effective communicators and that can limit their ability to meet their potential.

Supporting all forms of communication—verbal, signing, pictorial, augmentative devices—(and often a combination of more than one) promote learning.

Communication difficulties in both verbal and nonverbal are inherent to the diagnosis of ASD. The normal developmental sequence of communication is disrupted in persons with ASD. Communication skills can range from nonverbal, gestural, the use of single words to verbal conversation and may include the following communication difficulties:

- ◆ Perseveration (repetitive verbal and physical behaviors),
- ◆ Echolalia (immediate and/or delayed “echoing” of words, music, phrases or sentences),
- ◆ Hyperlexia (precocious knowledge of letters/words or a highly developed ability to recognize words without full comprehension) and to a lesser degree,
- ◆ Dactolalia (repetition of signs), pronoun reversals, inappropriate responses to yes/no questions, and difficulty responding to “WH” questions.

Communication difficulties impact all other areas of learning, socialization, and behavior. When designing appropriate intervention strategies, it is important to understand the individual's receptive (comprehension) and expressive communication skills. Stressful situations that increase anxiety often interfere with the individual's ability to communicate. Difficulty understanding humor, idioms (“keep your eye on the paper”), sarcasm and other complex forms of verbal and written expression is common.

Even the highly verbal individual may understand and use literal (concrete) language but have difficulty with abstract concepts. A person's communication ability usually changes over time; therefore, it is important to maintain an ongoing communication assessment from diagnosis through adulthood as this provides current information, which is necessary to support appropriate communication strategies.

It is important to understand the individual's unique communication style and/or skills which leads to development of a method for communication. Supporting all forms of communication - verbal, signing, pictorial, augmentative devices (and often a combination of more than one) promote learning.

In addition to the development of an effective communication system, consider use of the following modifications and strategies.

Modifications

- ◆ The communicating partner needs to fully understand that situations, certain individuals, sensory issues and stress will affect the quality of communication and the communication intention.
- ◆ Modify the speaker's language and provide visual supports if there is no response or undesired response to a direction or question.
- ◆ Allow time for auditory processing and formulation of information. For example, instruction and conversation may need to move at a slower rate.
- ◆ Develop a protocol to gain the individual's attention. The protocol should include how to initiate joint focused attention.

Strategies

- ◆ Encourage meaningful imitation. Since imitation is one of the precursors to the development of functional language, build in ample opportunities for activities to develop imitative skills.
- ◆ Help the individual focus attention on the speaker. This will maximize the impact of any direction, question, or information.
- ◆ Determine the communicative intent and other possible functions of non-verbal and verbal behaviors to establish their meaning. For example, if a person hits when frustrated, teach an appropriate behavior that communicates that they are frustrated, reduce the frustration or both.
- ◆ Integrate communication strategies into all daily activities. Teaching communication strategies in a step-by-step approach, starting in an organized environment, will assist generalization to other environments.
- ◆ Use vocabulary and grammatical structure at the individual's comprehension level.
- ◆ Consider using rhythm and music.
- ◆ Teach turn-taking and joint attention.
- ◆ Provide the individual with multiple opportunities to initiate interactions, make choices, and have peer-to-peer contact on a daily basis across all environments.
- ◆ Consider supporting receptive communication as well as expressive communication through both nonverbal and verbal methods: visual supports (object boards, pictures, gestures, sign language) and voice output communication devices.
- ◆ Facilitate the initiation of conversation and provide opportunities to practice language rather than waiting for the individual to initiate contact.
- ◆ During transitions from classes, buildings, work: offer a summary of successful communication strategies to appropriate personnel.

Essential Component 8: Assistive Technology

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

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

Caution should be taken not to limit the consideration of assistive technology to expressive communication only. While augmentative communication devices can support a significant “breakthrough” for some individuals with ASD, there are many other ways in which to use technology within an educational program for individuals with ASD. These are categorized in several categories. (see Appendix 14 section on Assistive Technology.) Examples follow.

“No” Tech Tools

- ◆ No tangible item or material is involved
- ◆ Clear physical and visual boundaries
- ◆ Elimination of extraneous visual stimulation
- ◆ Proximity of staff to individual

Low Tech Supports

These require the individual or staff person to utilize an item that typically is not electronic or battery operated. These items are typically low-cost and easy to use.

- ◆ Dry Erase Boards
- ◆ Clipboards
- ◆ Three-ring binders
- ◆ Picture Symbol Cards
- ◆ Choice Board (no voice output)
- ◆ Ear Plugs
- ◆ Use of a pointer
- ◆ Visual Schedules and Routines

Mid-Tech Tools

These include battery-operated devices or simple electronic devices requiring limited advancements in technology.

- ◆ Tape recorder
- ◆ Timers
- ◆ Calculator
- ◆ Head Phones
- ◆ Assistive Listening Devices
- ◆ Portable Word Processor
- ◆ Simple Voice Output Devices

High Tech Tools

These complex, typically high cost devices require some training for effective use.

- ◆ Computer Software and Adaptive Computer Hardware
- ◆ Video Cameras
- ◆ Complex Voice Output devices
- ◆ PDA, I-Pod

Educational teams should consider carefully the advantage of assistive technology in all aspects of the individual's program. Inclusion of "low tech," as well as "high tech" tools should be considered. Finally, teams should identify how technology may assist the individual not only to effectively communicate, but also to access the general curriculum and to make progress on individual goals and objectives.

Essential Component 9: Sensory Motor Processing

This section describes issues in sensory motor processing for individuals with ASD. It includes a definition and explanation of terminology in order to provide a common understanding of the issues involved. It also includes practical strategies and guidelines for developing sensory supports in all environments. This section is best used in conjunction with the rest of the document because the individual's ability to process sensory input from the environment affects all other areas of learning, socialization, and behavior.

Sensory motor processing challenges limit the experiences and environments in which an individual with ASD can function successfully. The identification of strategies to address these challenges can expand the opportunities for relationships, work, and leisure in which individuals with ASD can participate.

Sensory motor processing involves the ability to take in information from the environment, organize it, make sense of it, and formulate a response. Normally, this happens automatically. When the system is working well, we can screen out unimportant stimuli, pay attention, respond appropriately and move through the environment fluidly. When the sensory system is not functioning well, (regardless of the reason), an individual may find it difficult to pay attention and formulate responses that make sense. In addition, people may shut down or overreact to incoming stimuli and have difficulty moving safely and freely.

The senses that the brain uses to take in information include the well-known senses of sight, hearing, taste, and smell, and three other systems that are very powerful - the tactile, proprioceptive and vestibular systems. The tactile system involves information that comes from contact with the skin. Light touch can activate the fight-flight-fright response and deep pressure touch can calm the nervous system. The proprioceptive system registers where your body is in space through the joints, muscles and tendons. The vestibular system assists in balance, coordination and movement.

It is important to be aware that individuals with ASD will likely have difficulty in one or more of these sensory systems. For example, over-sensitivity to sounds, light, touch, or movement can indicate sensory defensiveness. This may be characterized by unexplained emotional outbursts, stereotypic behaviors such as rocking and pacing or fearful avoidance of contact with people and objects in the environment.

Recommended strategies for working with individuals who demonstrate defensiveness include:

- ◆ Avoid touching the individual without giving a verbal cue first.
- ◆ Make boundaries around the individual's workspace and establish each individual's space as part of the classroom rules, using carpet squares, masking tape or furniture.
- ◆ If the individual needs to be touched, use a firm but kind touch, rather than a light tap.

- ◆ Decrease the amount of visual and auditory distractions in the room.
- ◆ Provide structure and predictability.
- ◆ Provide additional support during transitions between lessons and between places in the building.

Other sensory challenges may result in problems filtering incoming stimuli, organizing the information and developing a response to it. This may be characterized by difficulty directing and shifting attention, maintaining alertness for a task and executing a sequence of steps to complete a task. Specific strategies must be tailored to the individual’s needs and challenges.

The following suggestions serve as guidelines when developing sensory supports in all environments:

- ◆ Determine an individual’s tolerance or comfort with input from various sensory channels.
- ◆ Identify behavioral indicators of excessive stimulation (e.g., covering ears or eyes with hands, body rocking, hand flapping, withdrawing).
- ◆ Conduct an environmental assessment to identify problem stimuli (e.g., lighting, noise, odors, textures, and limitation of personal space).
- ◆ Proactively modify the environment to accommodate sensory motor processing needs (e.g., reduce noise with sound absorbing materials, keep visual stimuli to a minimum, create study carrels and clear boundaries for work areas).
- ◆ Determine the need for appropriate sensory input throughout the day (e.g., deep pressure, movement, and materials to manipulate during instruction or work time).
- ◆ Provide opportunities for heavy work (e.g., activities requiring exertion) throughout the day. Examples include stacking/un-stacking, pushing carts/trash cans, holding doors, washing chalkboards, crushing aluminum cans for recycling, and sweeping floors.
- ◆ Provide access to suspended equipment (e.g., swing in corner of classroom or gym) if indicated.
- ◆ Incorporate movement activities and manipulative materials into instructional time and provide breaks for additional physical activities and/or sensory input as needed (e.g., exercises, walks, mini-trampoline).
- ◆ Schedule regular “sensory breaks” during the day as needed. Activities during these times may include joint compression/traction, using hand held objects that provide vibratory or pressure touch input, movement, or calming music.
- ◆ Provide opportunities for the individual to indicate a need for strong sensations or access to equipment at times other than what is regularly scheduled as part of the routine.
- ◆ Determine environmental/task modifications that may help in reducing the motor challenges facing the individual (e.g., desk/chair height, writing utensils, position/type of work materials).
- ◆ Allow the individual to stand at the chalkboard or an easel to work. Standing will provide needed input into trunk musculature that will help the individual stay alert and focused on the task.

Essential Component 10: Social, Emotional, and Sensory Regulation

Social, emotional, and sensory regulations (modulation) are skills difficult for individuals with ASD. These skills lie at the core of an ASD, making interpersonal interactions overwhelming, frustrating, and stressful. Often, these difficulties portray the person with autism as “choosing” to be disengaged from social interactions due to a lack of interest or desire, even when that is not the case. Communication difficulties

combined with atypical visual and auditory perception in ASD makes traditional learning challenging. Strategies such as those of the *Incredible Five Point Scale* (Dunn Buron & Curtis, 2003) and *How Does Your Engine Run?® A Leaders Guide to the Alert Program® for Self-Regulation* (Williams & Shellenberger, 1996), help persons with autism learn; social, emotional and sensory regulation skills.

How Does Your Engine Run helps address the parent and professional concern of what to do and more importantly increases the person with ASD understanding of how they can manage themselves, and come to know what to do, and when to do it.

The 5-point scale is a technique used to help a child break down an abstract concept into a visual system that is easier to understand. For example, a concept such as using appropriate voice volume can be broken down into a 5-point scale, with 1=no voice, 2=whisper, 3=normal voice/dinner time, 4=loud voice/playing outside, and 5=screaming. A visual representation of the scale is used as the scale is introduced and explained to the child. It is reviewed repeatedly so it becomes very familiar.

A picture of the scale is later used as a visual support to remind the child to use an appropriate voice level. The teacher points first to the level the student is using, and then slides her finger down to the appropriate level for a given situation. For example, if the child was screaming while the family was in the store, the parent would point to number 5, then move her finger down to 3 – an acceptable level.

A professional who is knowledgeable about sensory motor processing should be consulted for specific strategies for any individual. Generally, this professional is an Occupational Therapist.

Essential Component 11: Social Development

Impaired social development is one of the three core challenges in individuals with ASD. Social development is dependent on other areas of development, especially communication and sensory motor processing. Socialization requires communication skills in order to have successful social interactions and group experiences. In addition, the ability to seek out and enjoy the social interaction is dependent on the individual's ability to focus on the interaction rather than coping with the environment. Being capable in social situations allows the individual to successfully engage in activities such as holding a job, maintaining a living situation and taking care of basic needs while improving the quality of life.

The social challenges in ASD are influenced by the individual's age and severity of impairment. Usually the challenges are most severe in the young child with variable improvement over time that, in part, is influenced by cognitive potential, underlying etiology, if known, and comorbid conditions. The lack of social understanding affects all social aspects of work, school, interpersonal relationships, recreation and community involvement that all play a part in the building of self-esteem.

Social skills may not generalize without specific training; therefore, it is important that social competence be reinforced in all environments (including the workplace), especially for those individuals who are in transition. Specific strategies and supports for social development and related skills must be provided to individuals with ASD.

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Specific strategies and supports for social development and related skills must be provided to individuals with ASD.

There are several levels to consider when providing social strategies and supports. When assessing the social competence for individuals with ASD, it is important to look at the quality (content and meaning) of the social interactions vs. the quantity (amount) of social interactions. One individual may have difficulty

tolerating others in their personal space while others may “get in your face” and talk incessantly on one or two self-interest topics. Supports need to be developed based on the strengths and interest of the individual. That is, one individual may need to learn social skills to initiate social communication in a one-on-one setting with introduction to social situations in small steps; whereas, an individual with Asperger Syndrome may need to have a repertoire of social topics to learn how to reciprocate and maintain social communication.

Assessment of social competence should include considerations, for example:

- ◆ Age of individual
- ◆ Sensory motor processing challenges
- ◆ Imitation skills
- ◆ Receptive and expressive language skills
- ◆ Cognitive abilities
- ◆ Individual’s interests and skills
- ◆ Environment where socialization occurs

When developing social goals, the following areas need to be addressed:

- ◆ Imitation and joint attention (attending with others)
- ◆ Understanding personal space
- ◆ Asking for help and assistance
- ◆ Acceptable environmental behaviors, such as not picking nose in public, bathroom etiquette, etc.
- ◆ Emotions of self and others
- ◆ Identification of emotions and where they occur
- ◆ How individual actions affect others
- ◆ Initiating, maintaining and reciprocating social interactions
- ◆ Listening and attention skills
- ◆ Ability to abstract and infer language
- ◆ Understanding perspective taking
- ◆ Getting the Big Picture
- ◆ Humor, slang, sarcasm, joking, teasing
- ◆ Accepting rejection by peers
- ◆ Playing games, winning and losing graciously
- ◆ Turn-taking, waiting for turn
- ◆ Understanding non-verbal communication (includes body language, facial expression, proximity or personal space, gestures and eye contact).
- ◆ Age appropriate behavior with the opposite sex, e.g., recognizing unwanted sexual advances and dealing with them appropriately, understanding appropriate sexual expression and seeking privacy for any sexual expression, finding appropriate ways of seeking and giving affection.
- ◆ Typical peers’ understanding and successful ways to interact and support the individual with ASD.

- ◆ Appropriate workplace behavior as a part of the transition from school to work. This includes the use of vocational language, how to take work breaks, dealing with the public, and working with superiors, subordinates and work peers. In many cases, the degree to which a person with ASD “fits in” with, and is accepted by, their work peers will determine their long-term job success. The employer may require assistance with appropriately introducing the person with ASD to the workplace and educating the workers with how to have a meaningful work relation with that person. On the other hand, once acceptance is gained from work peers, the person with ASD often has a very strong, vocal support network that greatly enhances the probability of their long-term job retention and success.

A number of strategies and supports are available to teach appropriate socialization and social understanding. Based on the assessment of social abilities, teaching of these social skills may occur in one-on-one, small group, large group or a combination of these teaching environments. Due to generalization issues, a plan should be developed and supported to expand socialization and social understanding into multiple environments.

Several broad categories of strategies and supports to consider include:

- ◆ Rehearsal – Scripting, Modeling and Practice
- ◆ Role Play
- ◆ Social Curriculums
- ◆ Social Skills Manuals
- ◆ Visual Supports
- ◆ Peer Models
- ◆ Structured Peer Supports
- ◆ Social Narratives
- ◆ Video modeling

Regardless of the environment used or the strategies selected, instruction in socialization and social understanding must be provided in a well-planned and systematic manner.

Essential Component 12: Inclusion with Typically Developing Peers

Models of language and social interactions are an important component of a successful program for individuals with ASD; however, the mere presence of typical peers does not constitute successful social-communicative interactions. Coordinated efforts across school, home, and community environments can assist to promote natural peer interactions. Families and professionals may focus on the implementation of a variety of strategies in these environments, including activities, routines, and situations to promote peer-peer interactions.

When selecting strategies and coordinating a plan to support the individual with ASD in inclusive activities, the IEP team should consider the following guidelines:

- ◆ Assess the person’s individual need for inclusion with typical peers. Provide a natural progression of inclusion (e.g., individual to segregated classroom to small group to large group instruction).
- ◆ Plan and schedule activities that promote inclusion and prevent segregated grouping.
- ◆ Continue to emphasize the acquisition of skills that will allow the individual to benefit from inclusive experiences.

- ◆ Include in the transition plan the commitment of all team members, assessment of placement options (evaluation of a individual's learning style and teachers' instructional style), skills the individual needs for integration, and training for instructor and support staff.
- ◆ Provide specific guidance to peers to recognize and respond to verbal and nonverbal communicative behaviors of the individual with ASD. Include strategies that focus on the peer's ability to initiate, respond to, and maintain social-communicative interactions with the individual.
- ◆ Incorporate environmental supports (such as charts, cue cards, directions) in conjunction with peer models or as alternatives to direct adult support.
- ◆ Assessment of the amount of time the individual can be successful in an inclusive setting.

Essential Component 13: Progress Monitoring

Assessment is vitally important to determine the effectiveness of any intervention. The Individualized Family Service Plan (Birth through Two program, DSHS) or Instructional Education Program team (Three-21, OSPI) must determine how often the data will be collected, recorded and the criterion for determining when a particular intervention is successful or unsuccessful. In order to make collecting data easier, the University of Washington's Experimental Education Unit has developed *Show Me the DATA!* a workbook of forms and a CD which is available for purchase at <http://depts.washington.edu/dataproj/>.

Essential Component 14: Supported Transitions Across Multiple Environments

Transition Overview

Individuals with ASD typically have difficulty handling even minor transitions and environmental changes in their day-to-day life. These can cause significant behavioral outbursts and regression in learning if they are not negotiated in a planned manner. Transition to a new service system leads to many changes for the individual and family including changes in service providers, location and, in most cases, service procedures.

Considering the potential impact of these changes on the individual, family, providers, and educators, certain steps need to separate to make the transition as smooth and problem free as possible.

The following provides guidance for accomplishing successful transition.

- ◆ Awareness of the problem and appropriate planning are key to making successful transitions for individuals with ASD. It is important to know when an individual with autism has particular difficulties with transitions and under what circumstances these occur. Some individuals will have difficulty with transitions that involve changing physical locations, some have difficulty with changes in activities, and others have difficulty with transitions among adults or people with whom they are unfamiliar. Once the circumstance is understood, the plan for supportive, preventive measures can be put in place.
- ◆ Individuals with ASD should be informed several times about upcoming changes several times before transitions are made. Explain “when” and “what” the transition will be in terms they understand. Major changes in daily schedules should be announced the day before, the morning of and just before the actual change. Providing a “transitional” object or picture may help some individuals. This is usually done with a small object or picture uniquely associated with the next activity or physical location where the individual is transitioning.

For example, a ball typically used at recess, given to the individual upon leaving the classroom may ease the transition to the playground.

- ◆ Some individuals have difficulty transitioning from a preferred activity to a less preferred activity. Transition to the less preferred activity may be facilitated by indicating to the individual that he will have an opportunity to return to the preferred activity. Depending on the individual, return to the preferred activity may need to take place immediately or may be delayed until a later time. In addition, clearly explain the expected transition to the individual.

This may be done verbally, using pictures, written words, or schedules to indicate the activities and in what order the individual will be expected to participate. As activities are completed, the individual removes them from the schedule list. This not only adds predictability to the individual's life, but also begins building steps towards early self-management skills.

- ◆ Major transitions such as entering a new classroom with a new teacher present transitional issues for everyone involved. The teacher should attempt to know as much as possible about the individual before the transition. This is particularly important for individuals with ASD, because many teachers have limited experience with these individuals, and individuals with ASD vary widely in their educational needs. The family and the individual may also need increased supports for making this a successful transition. Complete planning and obtain resources before the transition occurs. It may be helpful to have the individual and parent visit the new classroom and teacher before classes begin.

Planning, which begins by the sixteenth birthday or earlier, is the key to a positive outcome and obtaining a job.

Parents should be given as much information about the new setting and its activities so that they may feel comfortable and prepare the individual more fully for the new expectations. Some individuals may need increased staffing support for a brief period at the beginning to provide instructional, prompting, and behavioral management assistance. It is important to provide such supports in a preventative and proactive manner instead of waiting until the individual has difficulty and thus develops an aversion to the new environment.

- ◆ The transition from school to work is often considered the most significant transition that an individual will face during the school years. Proactive planning, which begins by the fourteenth birthday or earlier, is the key to a positive outcome and obtaining a job. Situational assessments and vocational experiences in real settings are key to enhancing this probability. The training of parents, administrators, school staff, and others to assist in this transition is critical. Full participation of the individual who is transitioning from school to work also promotes a successful outcome and minimizes anxiety.

Essential Component 15: Sexuality

“It is a paradox that the individuals about whom we have the most ambivalence regarding sex education are the persons who most need it” (Sgroi, pg. 204). *“I believe that sexuality education begins at birth”* (Monat- Haller, pg. 41).

This section describes issues relating to the sexual development of individuals with ASD. It includes an understanding of all of the areas that are affected by a person's developing sexuality. This section is best used in conjunction with the rest of the document, because sexuality is associated with the ability to communicate, to process sensory stimulation and to behave appropriately in private and social situations.

Sexuality is a natural part of life that everyone has the right to express in appropriate ways. A healthy sexual life contributes to personal dignity, interpersonal relationships and a full participation in life. Many individuals with ASD have social, communication and sensory difficulties that can impede the development of a healthy sexuality; therefore, it is important not to overlook this area of development.

Characteristic behaviors and communication barriers displayed by individuals with ASD pose many challenges in the classroom, the community and at home. These same challenges may cause difficulty for the individual with ASD in the expression of sexuality. Often the individual's behavior is misunderstood by others.

Knowledge of the characteristics of ASD will enable caregivers to better understand these behaviors as they relate to sexuality, as well as to maintain a positive approach to learning and living; therefore, comprehensive educational programs for individuals with ASD must address the issues of sexuality.

An ongoing hierarchy of skills training should be included in any educational program for individuals with ASD. This training may begin in the early childhood years with developing an understanding of one's body, how it works, and how it changes. As the individual develops, educational programs should teach skills for appropriate social interactions, as well as assist the individual to understand that successful relationships must be mutually fulfilling.

Individuals with ASD need to:

- ◆ Have the opportunity to make friends.
- ◆ Learn skills that will assist in making friends.
- ◆ Care for their personal health and hygiene.
- ◆ Understand how to interpret changes in their bodies as they develop.
- ◆ Learn the social consequences of inappropriate behaviors.
- ◆ Have outlets for their sexuality.
- ◆ Have help in understanding these needs and in understanding the needs of others.

All parties associated with the effective social-sexual development of persons with ASD must resolve all concerns and communication challenges associated with sexual subject matters. There is much we do not know about the feelings, desires and drives of individuals with ASD. It is clear, however, that many persons with ASD have a sex drive and most often express it through solo masturbation rather than through sexual experimentation with others. Families need to recognize the importance of this in order to remove the taboo atmosphere that surrounds masturbation behaviors. There is a time and a place and there needs to be some reasonable dignity and privacy associated with it.

Common Concerns Regarding Sexuality and ASD

- a. Public or inappropriate displays of sexual behaviors (exposing self, public masturbation, etc.)
- b. Self-injurious masturbation
- c. Social contact or touching problems
- d. Problems with privacy issues
- e. Inability to empathize with others
- f. Inability to distinguish exploitative behaviors either towards others or by others

Sexuality Teaching Techniques

It is necessary that teaching techniques regarding sexuality be holistic, functional and concrete. Efforts to address sexuality will include a broad range of issues and objectives.

A holistic approach will consider all aspects of social preparedness for relationships. It includes:

- ◆ An understanding of one's own body, its function and its appropriate care.
- ◆ The development and use of concrete language for body parts and functions.
- ◆ Special scripts and rules to aid in the understanding of the feelings and needs of others.
- ◆ Similar scripts and rules for the appropriate time and place for behaviors of sexual expression.

Once the individual with ASD develops social understanding and awareness, generalizing the information from one situation to the next can be difficult, especially if the rules are unclear; therefore, it is best to develop rules for appropriate behavior that are functional. Many times, rules are stated as expectations with defined consequences. Most people attempt to follow these rules, as they help in successful relationships and in life. As required, individuals will also modify rules and behavior to fit the situation.

For example, people generally use eye contact with others as a way to indicate interest and respect. In certain situations, such as in elevators, this rule changes; in elevators, eye contact is not welcomed and can be considered threatening. Individuals with ASD will have difficulty predicting these type of expectations unless they are specifically taught about, and supported in, these confusing situations.

Temple Grandin (1995) organized situations by categorizing them into three categories: really bad (stealing, property destruction and hurting others), sins of the system (smoking, public sexuality, cursing, etc.) and illegal but not bad (speeding, double parking, or jay walking). Temple described that she does not have any social intuition and she relies on pure logic. She categorizes rules according to their logical importance and not by her emotion. Her insight is helpful in understanding that persons with ASD may not draw from common sense but from rote memory of their repertoire of social rules.

Concrete lessons delivered in a very structured way provide the best vehicle for learning for those with ASD. *Social Stories*, the work of Carol Gray, provides a non-threatening vehicle for rehearsal of appropriate behaviors. Rules scripts as described by Mirenda and Erickson (2000) provide similar channels for facilitating social cues that aid the individual in novel situations. Using strategies, such as those described above, enables the teacher to give thought to specific terminology and its potential for confusion. Specifically, discussions of a personal or sexual nature are often rich with confusing messages. For example, using the phrase, "the barn door is open" as a reminder that an individual's zipper is down could turn out to be a confusing and unsuccessful interaction for an individual with ASD.

Essential Component 16: Lifelong Support

The mandated educational services for individuals with disabilities including ASD end at age 22; however, there is a continued need for support for these individuals throughout their lifetime. These needs are highly individualized and are influenced by changes in environment, health, social, and employment situations. Continued supports will assist in maintaining stability for the person with ASD and facilitate successful inclusion in the community.

Using self-determination as the guiding principle, services and supports should be delivered according to indicated interest and choices of the individual (see Appendix 5: Inclusion).

Supports may be needed in the areas of:

- ◆ Employment
- ◆ Education
- ◆ Independent Living
- ◆ Community Living: Residential
- ◆ Extracurricular Activities
- ◆ Community Participation
- ◆ Health services and professionals
- ◆ Communication
- ◆ Social relationships (at all levels of intimacy)
- ◆ Finances