PRESCHOOL INCLUSION FOR YOUNG CHILDREN WITH AUTISM SPECTRUM DISORDERS

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Introduction

Purpose of this toolkit

This toolkit is designed to support staff in the development of inclusion-based practices for children with Autism Spectrum Disorder (ASD) in preschool settings. The ideas described in the toolkit are based on principles of naturalistic developmental behavioral interventions (NDBI), which emphasize the importance of purposeful learning opportunities that use the child's interests and motivation. Many of the documents and interventions contained within this toolkit were adopted from content within the manuals, Classroom Pivotal Response Teaching (CPRT; Stahmer, Suhrheinrich, Reed, Schreibman & Bolduc, 2011) and Teaching Social Communication to Children with Autism (TSC; Ingersoll & Dvortcsak, 2010).

It is important to note that many of the practices contained within this toolkit are appropriate for typically developing children while being shown to improve many areas of development for the child with ASD. Each section in the toolkit includes electronic links that will allow you to move to the section you want to review. It is strongly encouraged that this toolkit is read in its entirety prior to implementation. Each section also includes a practice activity and resource page that can be used in a preschool classroom. Within this toolkit, we will refer to the child with ASD as the "child" and the typically developing child as the "peer".

How do I use this toolkit?

This toolkit should serve as an overview of suggested strategies that will assist with including young children with ASD in daily activities and routines of the preschool classroom. It is important to work through each section, in order, as well as the "Let's Practice" activities contained within each section to apply the procedures within daily routines. If available, specialized training in inclusive practices that includes hands-on instruction within the natural setting is encouraged. Teachers have busy schedules so it is important to seek support from your school administrators before deciding to work through the content systematically. It is also important to prepare for the ongoing effort and time required to practice effective inclusion of students with ASD as the curriculum needs to be individualized to the student's needs.

Many of the strategies described in this toolkit involve proactive strategies. This means that these strategies occur before a child has exhibited problematic behaviors. The goal of proactive strategies is to try to develop or reduce the likelihood of the undesirable behavior occurring. For example, if a child has difficulty sharing with other children and is inclined to grab toys from other children, a teacher might provide the child with the appropriate language to request access to the toy or request the teacher's assistance before the grabbing occurs, with the idea that the child will learn to do this independently in the future. Alternatively, reactive strategies occur after the child demonstrates a behavior and include how you or the environment responds to the behavior. For example, a child often swats at a peer when the peer does not let go of a toy. This may lead to access to the toy, or the peer swatting back. Either way, it would be better to avoid the behavior altogether. Our goal is to help you develop a proactive strategy that precedes the swatting; however after the behavior occurs, a reactive strategy can be considered. This toolkit will provide strategies that improve social communication in children with ASD to help integrate them with peers in the classroom and proactively reduce challenging behaviors.

A note on perspective

Differing perspectives and philosophies heavily influence one's approach to educating children. The way you perceive and conceptualize ASD will impact how you implement the strategies outlined in this toolkit. ASD is a condition that does not go away. The disorder is pervasive and affects social-emotional, cognitive and developmental abilities as well as the quality of life for all family members. Many young children with ASD struggle with social interaction, communication and behavior challenges but all of them have incredible attributes and abilities. Like all children, children with ASD learn through repetition and practice. As you read through this toolkit, remember that a child with ASD is first a child, with a unique personality, dynamic character, intense emotions, preferences and dislikes. Remember that teachers have the important job of creating an experience early in life that introduces learning as a fun and inviting experience.

Autism Spectrum Disorder (ASD)

ASD is considered a neurological disorder that impacts many areas of functioning. Each child with ASD presents with a unique collection of skills and deficits along a continuum of social relationships, cognition, and behavior. Young children with ASD will experience varied challenges related to:

- Social communication and social interactions
- Repetitive or restricted interests/patterns of behavior

Within each of these areas, a child's level of functioning can range from mildly to significantly impaired. This is why ASD is considered a "spectrum" disorder. It is important to note that any single behavior is not a sign of the presence of ASD

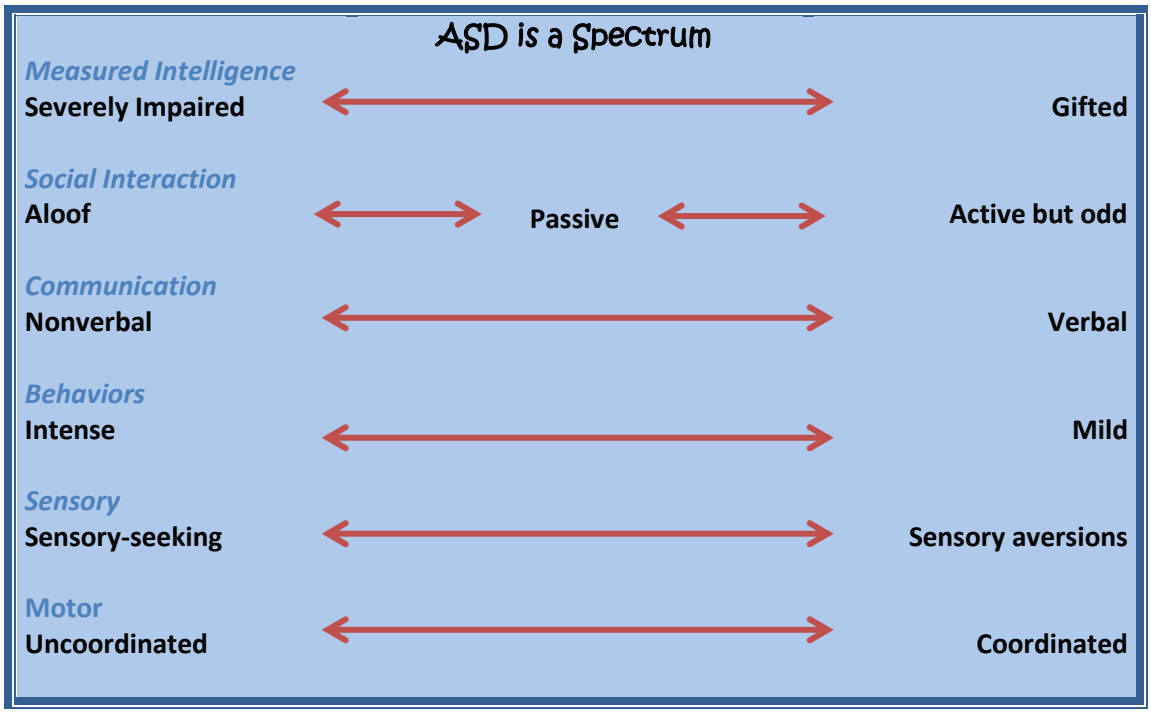


Table created by Amy Esler, PhD, Assistant Professor in the Department of Pediatrics at University of Minnesota

Early warning signs for ASD in young children

While children and adults with ASD are equally represented across regions, cultures, and nationalities, much of the information contained in this section is based upon research conducted within the United States.

Challenges for young children with ASD usually present early in life and the diagnosis can usually be made before a child turns three. Research has shown that families often have worries about their child's development prior to age 12 months, including concerns with vision and hearing (Bolton, Golding, Emond, & Steer, 2012). While of these early red flags are specific to ASD, these red flags can also be areas of difficulty experienced by children with general developmental delays and warrant need for further evaluation.

Research has shown that based upon parent report, at 12 months of age the earliest signs of risk for ASD (Ozonoff, iosif, Baguio, Cook, & Hill, 2010) include:

- Child does not make good eye contact.
- Child does not direct their smiles toward the adult.

- Child does not direct their vocalizations toward the adult.

The clearest signs of risk for ASD at 24 months include:

- Increases in repetitive behaviors and difficulties with imitation (Bolton, Golding, Emond, & Steer, 2012).
- Child not attending to the adult's voice, not spontaneously directing other's attention, or not understanding words out of context (Lord, 1995).
- Preference for geometric patterns (Pierce, Conant, Hazin, Stoner, & Desmond, 2011)

A great resource for identifying developmental differences between children with ASD and their typically developing peers, follow this link to the Autism Navigator located on the Autism Speaks website at http://autismnavigator.com/

Prevalence Rates and Diagnosis

- ASD is considered a neurological disorder with difficulties in social communication and restricted, repetitive behaviors.
- ASD is one of the most common childhood disorders and one of the fastest growing disabilities
- Research reports prevalence to be as high as 1 in 68 children and as high as 1 in 48 boys
- Prevalence of autism in U.S. children increased by 119.4 percent from 2000 (1 in 150) to 2010 (1 in 68).

For more information, please visit the Centers for Disease Control (CDC) website at: http://www.cdc.gov/ncbddd/autism/data.html

Whom do I contact if there are concerns?

Teachers are likely the first individuals to suspect a child is experiencing social communication challenges when enrolled in a preschool program. So, what do you do? Talking to families about potential concerns can be difficult and a delicate process. Autism Speaks provides an excellent resource on how to approach these conversations, including videos and pamphlets of developmental milestones. Please see: Talking to Parents About Autism Kit on

the Autism Speaks website: https://www.autismspeaks.org/what-autism/learn-signs/talking-parents-about-autism-action-kit

The pediatrician is also an individual who may bring up concerns about a delay or with whom parents express their concerns about their child's development. They can be the first step in the early identification process. Concerns frequently involve delays in language or communication skills and therefore, a speech-language pathologist may be the child's first interventionist.

The Individuals with Disabilities Education Act (IDEA) requires every state to implement early identification processes to locate and refer children who may have a disability in order for that child to receive intervention services as early as possible. A child who is suspected of having a developmental delay can receive a free screening or full evaluation through their local Early Intervention (EI) services agency. An Internet search will assist with locating your specific state's "Early Intervention Services" agency or your state's "Part C services" to schedule a screening and determine services, if needed. For children aged 3 -5 years, a referral to their local school district to receive a screening can be made. It is best that families put their request for an evaluation in writing.

There is a two-staged process to seeking a diagnosis of ASD, including a screening followed by a comprehensive diagnostic assessment. Screening often involves using a brief tool designed to identify delays in young children. A comprehensive diagnostic evaluation completes a thorough assessment of the child's functioning levels within a variety of developmental domains. The individual that are most often responsible for providing a diagnosis of ASD include psychologists, pediatric neurologists and developmental pediatricians.

Research supporting inclusive practices for young children with ASD

Research indicates that early intervention services, provided between birth and 6 years of age, can dramatically improve outcomes for children with developmental disorders including ASD (Odom, 2000). While participation in programming with typically developing peers is beneficial, mere exposure does not improve social and communication skills and often teachers need specialized training to meet the needs of children with autism (Laushey & Heflin, 2000). An examination of the positive impact that inclusive programming provides during toddler and preschool years includes The Walden School (McGee, Morrier, & Daly, 1999), the Learning Experiences and An Alternative Program for Preschoolers and Parents (LEAP) program (Strain, & Bovey, 2011), Project Data (Schwartz, Sandall, McBride, & Boulware, 2004) and Alexa's PLAYC (formerly the Toddler School) (Stahmer & Ingersoll, 2004, Stahmer et al., 2011).

Challenges that interfere with learning in the classroom

Young children with ASD may experience challenges in new environments and with new people. When any child is introduced to a new classroom, it is important to carefully consider how to prepare both the environment and the child for this transition. When preparing a child for something new, an opportunity to explore the physical space either in person or with pictures (Social Stories™) is a good idea. Consideration should also be given to the child's challenges with sensory stimuli. For example, do loud sounds, singing, clapping, etc. upset the child? Does the child dislike play dough, sand, or paint? Does s/he become nervous in crowded places?

As the child adjusts to the environment, continued challenges may be experienced with tolerating, accepting, or adjusting to a busy and evolving setting (e.g., staff changeover, new children entering the room, shifts in schedule due to weather, etc.). The following are areas of challenge for the child with ASD and examples of how they may present in the classrooms.

Communication

Differences in the brain development of young children with ASD (Rogers and Dawson, 2010) impact the development of social-communication skills. There are several purposes for the use of language, including, but not limited to, gaining attention, requesting, protesting, responding, conversing, seeking information, and commenting. It will be important for teachers to create opportunities for a child to use their language while modeling developmentally appropriate language and expanding their awareness of language models in their environment.

In the classroom, children with ASD may:

- Respond inconsistently to their surroundings (e.g., calling of name, ringing of a bell, following directions, etc.).
- Have limited use of words, gestures, or facial expression to get needs met (e.g., does not ask for help, does not point to request, etc.).
- Have repetitive, overlearned or "scripted" language.
- Have limited back and forth conversational skills.
- Use eye contact inconsistently when speaking to another person.

Imitation

Imitation is a precursor for learning in a social environment. Imitation also contributes to learning spontaneous play actions and many social communication skills. Given the differences in brain development in children with ASD, it makes it difficult for the young child to attend to their surroundings and imitate what others are doing.

In the classroom, children with ASD may:

- Not imitate the actions of others during songs/games.
- Show reduced or lack of imitation of other's language.
- Overly repeat what others' say, (parroting or echoing).
- Not attend to peers' actions in play.
- Have reduced or limited referencing of the adult when engaged in an activity.
- Play alone which limits opportunities to imitate what other children are doing.

Functional Play

Most children spend a majority of their time playing. Through play, children learn how to problem solve, think flexibily and creatively, and foster friendships though cooperative skills. Children often gravitate to toys which offer opportunities for socialization. Teachers play an important role in fostering appropriate play with children by introducing new toys, encouraging play and helping where needed.

In the classroom, children with ASD may:

- Struggle to play appropriately with toys, including repetitive or restricted actions on toys (e.g., repeating roll a train/car back and forth, opening and closing the door on the toy barn).
- Have difficulty engaging in imaginative play
- Play exclusively with or show intense interests in certain toys (trains, animals) or insist on keeping a certain object with them.
- Show little interest in object play and prefer more active games.
- Overly conform to the rules of the game or how the child expects the game to be played.
- Avoid play with sensory materials given possible sensory aversions or become overly focused or involved with the sensory aspects of toys.

Socialization

Socialization is one of the core challenges of young children with ASD. In the classroom, young children with ASD will benefit greatly from help to build and sustain friendships. Cooperative arrangements and environmental modifications have proven beneficial to helping children learn to cooperate and take turns. There are many variables to consider when planning activities for the classroom. Teachers are encouraged to consider child centered, strength driven strategies described in the section about improving social motivation.

In the classroom, children with ASD may:

- Desire friendships but make inappropriate attempts to initiate (e.g., hit a peer, give a bear hug, or take their toys in an attempt to initiate play).
- Avoid opportunities to socialize (e.g., prefer to play in an empty sandbox or on a solitary swing).
- Struggle with social awareness and reading social cues.
- Prefer to play with children younger or older than them.
- Show limited awareness of other children or become overly focused on objects in play.
- Have difficulty sustaining engagement with other children (e.g., only a few seconds engaged in peek-a-boo, etc.),
- Not actively participate in classroom routines, such as circle, snack, centers, etc.
- Attempt to initiate but primarily object focused, meaning they want the other child's toy.

Restricted and Repetitive Patterns

A child with ASD may present with challenges related to restriction, repetition and/or rigidity. They benefit from instruction that promotes flexibility and that challenges their restrictions. However the strategies used to address these areas of difficulties need to be applied thoughtfully and with much preparation. Children with autism can present with challenges related to sensory integration and food restrictions. These difficulties should be addressed with the consultation of an Occupational Therapist (OT). An OT will assist children participate in activities that the child wants to and needs to do by using therapy strategies during everyday activities.

In the classroom, children with ASD may:

- Exhibit repetitive, stereotypic motor mannerisms, such as hand flapping, body whirling, toe walking, etc.
- Focus on the sensory aspect of a toy, such as repeatedly pressing the same button, listening to the music on a toy repetitively, or watching the lights rather than engaging the whole toy.
- Show distress with minor changes in their routine
- Can show restrictions with food, such as only eating certain chicken nuggets, crunchy textures, or having specific tableware.
- Pace the perimeter of the playground or group. The child may pace about the room, dart back and forth, or engage in ritualistic routines when engaging with materials.
- Show extreme resistance to certain textures, sounds, smell, or touch.
- Have a high tolerance for pain.

In the classroom, teachers can assist the child with ASD by expanding their range of focus and level of sustained engagement with their surroundings.

LET'S PRACTICE: ASD OVERVIEW!

Knowledge survey for staff (begin training)

Resource Page: ASD

Classroom Arrangements: *Structuring the preschool classroom for success*

Oftentimes when setting up a classroom, the first place to start for many preschool teachers involves arrangement of the environment. The same is true when considering including a child with ASD in your classroom. Given the children's areas of challenge, consider all aspects of the environment when attempting to address these deficits.

The Physical Environment

The classroom environment plays an important role in setting children up for success. The physical arrangement of a classroom can foster learning opportunities for young children with ASD. The classroom also provides a sensory rich atmosphere with many sights, sounds, smells, and textures. Sometimes, these experiences interfere with learning or 'trigger' problematic behaviors in young children with ASD. Structuring the environment may include:

- Arranging the furniture and creating "defined spaces" in the classroom. Rearrange the furniture to create new spaces to learn and grow.
- Limiting distractions in certain areas to assist with gaining and maintaining the child's attention.
- Consideration of the child's visual strengths. The use of pictures to represent areas or expectations can also help young children with ASD feel organized in a classroom setting.
- Consideration of an area that promotes spontaneous free play for all children. This is a good area to ensure toy rotation, allow free access, and include an interspersing of easy and difficult activities.

It's important to keep the environment as natural as possible, because preschool and Kindergarten classrooms are living environments. Keep the walls filled with children's art, the letters of the alphabet, decorations, or whatever the child creates. This approach prepares children for the real world. *Accommodations can be made for the child once s/he is enrolled in your classroom.*

EXAMPLE: Classroom Arrangements
In the classroom, Tommy is quite active in exploring his environment, often moving quickly between activities. In addition, he runs within the open spaces in an attempt to engage others in a game of chase. To deter running, the teachers re-arranged the furniture to create smaller defined spaces and limit straight aisles that allowed for running. To help Tommy sustain his attention at an activity, the teacher becomes a part of the activity by positioning herself in front of the entrance/exit to the play area to serve as a natural barrier. She has his preferred toys available, joins his play, imitates his actions, and models language. After several minutes, Tommy approaches the teacher and says, "I want to paint". The teacher models, "Ms. Chelsea, I want to paint" and moves to allow him access to the paint table.

In Sight, Out of Reach

To motivate children to use their language skills, consider putting preferred materials in the child's line of sight but out of their reach. When a child can see but cannot access the desired materials, there is a natural opportunity to request from an adult either verbally (words) or nonverbally (gestures/pointing). When this is a consistent strategy used in the classroom, it allows many opportunities to practice this skill. When the child gains access to the item, the item or game serves as natural reinforcement, alternatively, if a behavior occurs due to limited access to preferred materials refer to the section on behavior management for ideas on how to address these challenges.

Materials that can promote this strategy in the classroom would include:

- Shelving units both at the children's level and slightly out of their reach
- Clear containers with lids with labels and pictures.
- Opaque containers or drawers with labels and pictures.
- Control access to the materials (e.g., Keep the crackers in front of the teacher during snack time so the child needs to ask. The teacher gives a couple crackers to create another opportunity.)

EXAMPLE: In Sight, Out of Reach
When setting up an activity for Tommy, the teacher considers his interest in animals. She creates a scene on the floor or table that includes a toy barn, fences, and people figurines. You have clear twist-top containers containing small toy animals inside and placed amongst the materials. Tommy approaches the toys, picks up the container, hands to the teacher positioned nearby and requests, "Open". The teacher then models "Open jar" and immediately gives the opened jar to Johnny.

Toy Rotations

Novelty is a very useful teaching tool for young children. Rotating toys is a simple and effective way to create opportunities for learning by exposing children to a variety of objects. It is recommended that toys be rotated every 2-3 weeks. Rotating toys may also discourage repetitive, stereotypic play when those items are systematically made available. Systematically, a teacher can have a limited number of preferred items or may rotate the preferred toys every couple weeks. Learning how to play with toys is a prerequisite for socialization with peers as most children meet around toys. Teachers will need to provide continued and appropriate individualized support for the student with ASD to teach functional play with new materials or to acquire new skills.

EXAMPLE: Toy Rotations
The teacher has several clear bins with lids that contain related, thematic play materials for a child with emerging figurine play (beauty parlor, pizza party, and doctor kits). The child is interested in baby dolls and has already shown the ability to put the baby doll to sleep. But now a blanket, a miniature stuffed bear, and a sleeping eye mask is available for the child to use during the baby's nighttime routine or the teacher to model this new play skill. Two weeks later, the bin is exchanged for a pizza party theme. The child is now expected to demonstrate feeding actions with the baby doll.

Group instruction

It is important to consider providing small and large group, instructional opportunities in the classroom. During small group instruction, a teacher can facilitate engagement amongst the children while teaching and modeling new skills. A small group would involve 3-5 peers and allow for structured, adult facilitated interactions and engagement. Small group instruction can occur anywhere, including during center time, within free play, on the playground, and even during mealtime. In this smaller setting the teacher can help the child with ASD engage in the activity and provide immediate reinforcement to increase motivation. Small group instruction is a nice way to bridge the gap for the student with ASD allowing them time to practice group responding skills and interact with peers before expecting them to generalize this to a larger group (e.g., six or more peers).

It is also important to provide opportunities for young children with ASD to participate in large group activities involving six or more peers. One of the main large group activities that occur in a classroom involves "circle time" where attention and participation skills are important. Adaptations to the environment may also need to be made to encourage the child's attention and participation. Some adaptations that may prove helpful include specialized seating (chair, cube chair, bean bag), sensory-based materials (e.g., lap pad, fidget, seating cushion), or opportunities for movement through songs and dance.

LET'S PRACTICE: ENVIRONMENT!

Draw a sketch of physical classroom arrangement

Checklist: Is the environment creating multiple learning opportunities?

Resource Page: Environment

Increasing Motivation: *Improving a student's desire to engage in the classroom*

STRENGTHS OF A CHILD WITH ASD

Although young children with ASD suffer from many challenges that impact learning and development, many young children with ASD demonstrate areas of strength. Individuals who have been diagnosed with ASD have shown:

- Talents in music, academics, acting, and sports.
- A tendency toward highly prescribed interests, such as letters, numbers, cars, etc. These areas can serve as a source of motivation and create opportunities for teaching varied skills (Kluth, 2012).
- Impeccable memory skills, often remembering promises made by caregivers, facts surrounding strong interests, or the rules of games or of the classroom
- Strengths in visual processing. Young children with ASD have benefitted from visual support systems to aid with understanding, communicating, socializing, and playing.

Observing the child and interviewing significant others may provide insight into the strengths that can be capitalized on to enhance learning in the classroom.

HOW DO STUDENT'S WITH ASD LEARN?

It is most effective to think of teaching the child with ASD through a method called, **SAY SHOW DO**.

SAY: Tell them what you want them to do in simple language

SHOW: Use a picture and/or model the action

DO: Help them perform the action by helping

You can say and show at the same time in the classroom or during various routines. Teachers may use a visual strip of pictures to represent schedules of activities that are required to complete an activity. Or, circle time is also good time to describe an activity while modeling the steps.

INCREASING ENGAGEMENT AND MOTIVATION

Preschool teachers have a genuine love for children's intuitive drive to learn. They specialize in using play to make learning fun and inspiring. Young children with ASD may struggle to engage or become motivated by the environment of a traditional classroom. By using the child strengths, we can capitalize on their interest and create momentum in learning.

ENGAGING THE CHILD: *Incorporating preferred materials*

In the classroom, following the child's lead is good way to determine a child's interest while joining them within the activity in which they are engaged. "Following their lead" means to get down at eye level, become a part of their play, and follow their lead. Remember, by understanding the child's interests, it allows us to capitalize on his/her motivation. We know that if children are motivated, they are more likely to participate in the activity or task. The teacher should consider incorporating the child's preferred interests or materials into the activity. By choosing the materials, you are offering controlled choices as well and providing opportunities to inadvertently impact the direction or skill you want to teach with the materials available. Once again, teaching using the capitalizing on the child's motivation. It is also important to share control of the materials, which involves allowing the child a choice of activities, toys, materials, etc. By allowing the child a choice, you are giving the child the chance to have control over the interaction, which increases motivation as well. A reinforcement inventory may also be helpful to determine the child's interest. When using elements of child's choice, shared control or following the child's lead, research has shown that there has been a decrease in disruptive behaviors.

When interacting with a child with ASD:

- Be sure to remain face-to-face with the child.
- Be enthusiastic in your actions, facial expressions, and verbalizations. This increases the likelihood the child will reference the adult or activity, as well as encourages the child to attend to the face.
- Play with the toys that the child finds interesting and motivating.
- Move with them when the child changes the activity.
- Incorporate preferred materials to increase motivation to remain with a non-preferred activity.

- Incorporate non-preferred materials with preferred materials to help increase opportunities to manipulate and use the non-preferred materials. Exposure is the first step!

EXAMPLE A: Following the Lead & Shared Control
Johnny is 2 years old and shows an intense interest in transportation toys. The goal is to teach primary colors. The teacher can consider using different colored tape to create various roads and using several cars, planes, or trucks, of varying colors. The teacher joins the activity with Johnny and invites several peers to join the activity. She gets down at eye level and gives him a choice of transportation toys. While he plays, she takes a moment to watch how he plays with the materials to determine his level or his type of play. The teacher begins to follow Johnny's lead by imitating his actions with a toy and while talking about the different colors on the track. She encourages his peers to imitate her and to show him some new actions. She also mimics his language and remains animated in her sounds and gestures. The teacher focuses on the colors red and orange, although there are a variety of colors presented. After several minutes of following his lead, the teacher gains control of some of the items to once again, provide Johnny a choice of toys. Once she has Johnny's attention, she models the request by stating, "Tell me, 'I want the red car'." Johnny states "I want the red car" and the teacher gives him the car. She facilitates similar interactions with peers, having them race cars with Johnny, drive cars into a garage, and encouraging him request cars by color.

TURN TAKING: *Expanding the child's awareness and skills*

Now that you have identified the child's interests, imitating and taking turns with the child will help increase engagement, imitation skills, reciprocity, and spontaneous language. "Imitating" the child simply means to imitate a child's appropriate facial expressions, language, and actions. "Turn taking" is another way to "share control" with the student. It creates a back and forth interaction between the teacher and child, or peer and the child with ASD. Taking turns also provides opportunities to model new skills for the child while the object is in your possession. "Expanding" in this sense involves increasing the complexity of the child's current levels of language, play, communication, etc. Expanding is best when taking a turn with the child. Note: Many children with ASD have a history of turn taking meaning the toy goes away. Make sure you start with short turns (and having peers take short turns) and ALWAYS return the toy.

When interacting with a child with ASD:

- Adjust your language to meet the needs of a child with ASD, typically, less is better
- Draw the child's attention to keywords that you want to teach.
- Model one language level higher or one play action higher. This means if the child is speaking in one word, you speak using two words. If the child is nonverbal, you may want to model one word or the beginning sound of the word.

- Prepare the child for the opportunity to take a turn by asking, using a gesture, or helping them anticipate the exchange with a countdown.
- For the child whose attention is fleeting, it is best to make sure the teacher's turn with the toy is very brief and to be very animated in your actions, voice and gestures while playing with the toy.

EXAMPLE B: Imitating, Turn Taking, & Expanding
A goal for Johnny is for him to take turns with peers. It is important to control access to some of the toys by limiting the number of cars that are available so to create opportunities for turn taking. After joining the activity and imitating Johnny's actions, the teacher models how to request for a turn by asking one of the peers, "Can I have a turn?" After several minutes, she directs her request to Johnny to trade a toy. He struggles to share, so the teacher provides a gestural prompt to help by pointing to her hand. Johnny places the toy in her hand and asks for the car back right away. The teacher immediately returns the toy right after rolling the car and saying "beep, beep". After several more minutes of playing alongside his peers, the teacher encourages a peer to request a turn from Johnny. With encouragement from the teacher, Johnny passes the toy to the peer. The teacher praises Johnny, as well as the peer with a High 5 and descriptive praise. Johnny states, "I want car" and the teacher replies with "I want the red car." The peer replies with "One more minute".

NATURAL & EFFECTIVE REWARDS: Keeping it Natural

Behavior impacts the environment and the environment impacts behavior. This interaction will either increase or decrease behaviors based on the response they get. Natural rewards are rewards that are directly related to desired behavior. For example, if the child requests a cracker then they should receive the cracker instead of a sticker or praise. This approach has shown to improve generalization of skills. Generalization is the ability to demonstrate learned skills with new people and places. Young children with ASD do not always respond to social praise and attention in the same way as typically developing peers. Using a vague "good job!" may not carry the same significance because the child may not connect the specific behavior to the praise. In order for verbal reinforcement or "praise" to be effective, it should be descriptive ("good job lining up!") and immediately follow

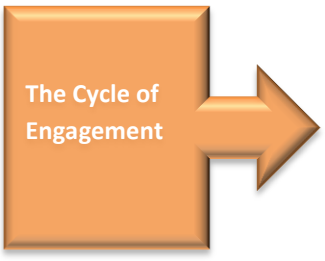
EXAMPLE C: Natural Rewards
Johnny is playing with trains while linking the tracks together. He likes to have all parts of the train, such as the locomotive, the flatbed, caboose, etc. The teacher structures the activity to have a couple of peers hold onto (control access) some of the trains. The hope is that this strategy will encourage the child with ASD to request the trains from the other children and that receiving the specific train would naturally reward the child with ASD. The teacher should provide specific and descriptive praise for using language and sharing, as well as provide support where needed.

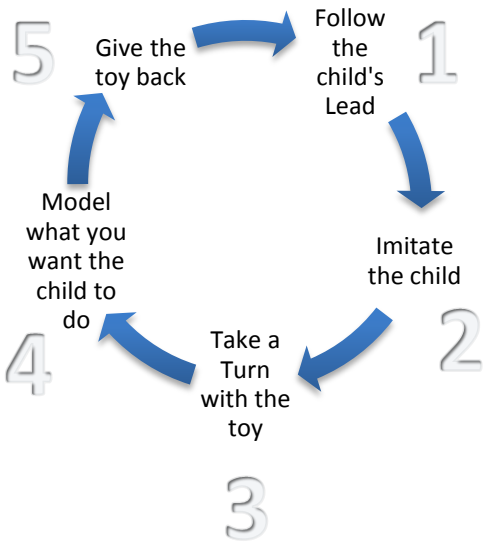
the desired behavior (e.g., within 2-3 seconds of the behavior).

PLANNING ACTIVITIES

Systematic and carefully planned instruction allows for the creation of activities that help learning for young children with ASD alongside typically developing peers. To start, what is your goal? What do you want the child to learn from the activity? Do you want the child to learn new play skills, new language, or social skills? The creation of activities should always consider what is motivating to the child with ASD and what aspects can be changed to encourage peer-to-peer engagement.

Click here for Sample Goals.





Children learn a great deal from each other but research shows us that young children with ASD will not learn from their peers just by being in the same classroom. Young children with ASD will learn from being around their peers with specialized instruction. (Gresham, 1984)

LET'S PRACTICE: MOTIVATION!

Develop an activity that incorporates your student's interests and natural rewards

Checklist: Am I motivating my student?

Resource Page: Motivation

Activity Planner

Peer to peer engagement: *Fostering friendships for students with ASD*

SOCIAL DEFICITS IN CHILDREN WITH ASD

In a classroom setting, there are several *challenges* experienced by a child with ASD related to social engagement, communication and play, some of which include:

- Initiations and spontaneity. A young child with ASD may struggle to initiate an interaction or task, or may try to engage another person inappropriately. These children may also require or wait for additional assistance before acting. *For example*, a child may take a peer's toy to begin the interaction or touch a child's hair to show interest. They may wander about the classroom or playground rather than starting to play. They may wait for the teacher's instruction rather than asking or requesting or may walk away rather than asking for help.
- Solitary Play. A child with ASD is inclined to *play alone* and may not *ask others to join their play*. Often, you find a child playing away from the group, preferring activities that allow for independent play, or engaging in highly preferred interests that can isolate them from other children. When with a group of peers, the child's body may not be positioned toward the peers but slightly turned away and making limited eye contact.
- Restricted focus. Children with ASD can become overly *focused on their interests or agenda*. This tendency toward being self-directed creates a stilted interaction and limits reciprocity in conversation and social interaction.
- Reading cues: Young children with ASD struggle to understand facial expressions, body proximity, and use of natural eye contact during communication. This may make it difficult to read the cues of others. For example, the child with ASD may continue to pursue an interaction after a peer has clearly moved away, is exhibiting a frown, and no longer shows interest. Research has shown that children with ASD do not consistently attend to the communicative aspects of the face, such as the eyes, but rather attend most frequently to the mouth (Neumann, Spezio, Piven, & Adolphs, 2006).
- Reciprocity. Within social interactions, young children with ASD may have a *hard time responding to other children* who initiate with them. There may be challenges related to prolonged response time by the child with ASD or difficulty understanding the peer's verbal or nonverbal communication. If the child does respond, there may be the inability to flexibly change from one activity to the next or limited back-and-forth interactions.
- Communication. A child with ASD may have *language delays* or *use language that can sound different.* They may speak *less frequently than other children* their same age or only talk to get their needs met. They may use pronouns incorrectly, speak in third person and use *limited eye contact*.
- Literal interpretation. Some individuals with ASD may *interpret things literally*. They may not understand phrases like "hit the road jack", "button your lip", or "you're a peanut!'. They could have difficulty responding to phrases such as "you're moving fast like a race car!", "let's walk slow like snails", "hands down" so it is

important to use speech the child can relate to and interpret literally to understand social interactions and expectations.

SETTING UP ACTIVITIES TO ENCOURAGE INTERACTION

Don't forget to follow the child's lead and share control. You don't want to lose motivation!!

Setting up activities to encourage interactions will be one of the core components of creating a successful interaction amongst the children. Cooperative arrangements require children to work together in order to complete the tasks and should be equally enjoyable for all of the children involved. Cooperative arrangements are effective for many children and within many preschool classrooms. Many times children with ASD are avoidant of social situations, often trying to escape or refusing to participate. Gentle persistence is a good approach. Maybe the child can stay there for 30 seconds, and then let's try encouraging play one minute.

Once an activity is planned or a child is engaged in an activity, the strategies outlined under the Motivation section of this toolkit will allow the facilitation of social engagement amongst the children. When working with young children with ASD, there are several social skills that can be addressed. See Sample Goals

When working with a child with ASD, It is also important to provide time for independent play ("breaks"). Given that socialization is a challenge for young children with ASD, to work on socializing constantly is likely exhausting. When creating activities that involve cooperation between a child with ASD and their peers, there are several strategies or interventions teachers should consider implementing.

1. Adult facilitation: An adult-facilitated activity involves a task in which the teacher directs, assists and models the behaviors expected from the children within a social interaction. The adult is an active partner within the group. When involved, the adult is able to provide opportunities to facilitate conversation, demonstrate how to play with a toy, request a turn from a peer, etc. The teacher is also available to provide support to the child with ASD by helping and expanding appropriate skills (e.g., referencing, responding, or initiating with a peer).

Example: Adult Facilitation.
The teacher is sitting at a table with a group of 3-4 peers (4-5 years old), including a child with ASD. The group of children are playing a game of Zingo!®, which requires the children to match pictures and words to a "bingo-like" card. The teacher directs the routine by dispensing the tiles and calling out the picture. She is positioned in front of the child with ASD and directs the child's attention to his peer's cards, assists the child with placing a daub on the correct picture, encourages communication to request a daub from a peer, or cues the child help his neighboring peer to locate the picture on their card.

2. Peer facilitation: A peer-facilitated activity involves a task in which the peer directs, assists and models the behaviors expected from the child with ASD within a social interaction. Having typically developing peers prove to be excellent models and by providing cues/directions to the child with ASD can improve engagement, play and social communication skills. The peer will likely need coaching in the moment.

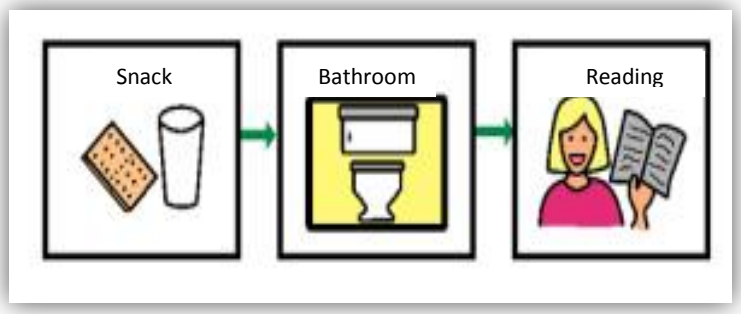
Example: Peer Facilitation.
The peer is leading a group of 2-3 peers (ages 3-4 years old) and an adult in an art activity. She is having all the children using foam paint to paint pictures. She instructs the children to spray the paint onto the paper. The child with ASD requests a bottle of paint by saying "paint, please" to the peer with the paint. If needed, the teacher sitting remind the peer to follow though with the request, or helps Tommy get the peer's attention. The peer approaches and hands him the bottle of paint. The child with ASD does not know what to do, so the peer places the can in the child's hand and helps him push the dispenser. Tommy places his hand in the paint and the peer says, "oh no, wipe your hands" and gives him a paper towel. She tells him to fold the paper in half and he does so. The peer says, "You did it Tommy!" and opens the paper for him.

3. Buddy system: Pairing young children with ASD up with a typically developing peer is another way to encourage social interactions in the classroom. This can be done formally by systematically teaching a typically developing peer how to interact with a child with ASD. For example a small study demonstrated that a buddy system increased overtures made by both the typically developing children and child with ASD (Kohler, Greteman, Raschke, & Highnam, 2007) or is taught to give a directive, assist the child, and provide feedback (Kamps, Barbetta, Leonard, & Delquadri, 1994).

   Or, a buddy can also be fostered informally by coaching a typically developing peer in the moment of the interaction by suggesting to the peer to perform a particular behavior. For example, a peer may be encouraged to hold another child's hand, request a child to join and play a game, or ask the peer to model and direct appropriate play within center time. BE SURE to always praise the peer for helping out!

Example of a play schedule

4. Visual schedules: Visual supports are an invaluable resource for young children with ASD given their strength at visual processing and impeccable memory skills. A visual schedule includes sequences of pictures/words that help the child with ASD organize their experience. *Play schedules* provide predictability for the child with ASD, ultimately minimizing disruptive behaviors. Be sure to intersperse preferred and non-preferred toys or routines, offering the child a choice of preferred activities. Play/Toy schedules can provide a series of materials that the child is expected to manipulate. *Social schedules* can list of series of social activities/games that child would be expected to participate in with other children. *Daily schedules* will have a sequence of daily activities (e.g., free play, centers, music, outside, bathroom, etc.) that the child will be going through during their day at school.



Example of a Daily Schedule

Images from the Internet or an intervention package, Picture Exchange Communication System (PECS) can be used to generate schedules.

Other visual supports.

Choice board: Choice boards can be used to help a child stay on task and increase variety in play, especially for children who tend to play with the same toys/activities day after day. A choice board is usually one page with several pictures on it; the pictures can be placed on with Velcro and only include the toys/activities available. Another option is to have a laminated sheet with all the choices and use a dry erase marker to put an X through the items that are NOT a choice at that time.

Example of a Choice Board

First/Then: Find a sample "First, then" board at: https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&ved=0ahUKEwjZiZ6gm_7MAhUM7WMKHcAdDkgQjB0IBA&url=https%3A%2F%2Fwww.erinoakkids.ca%2Fgetattachment%2FResources%2FGrowing-Up%2FAutism%2FVisual-Supports%2FFirst-Then-

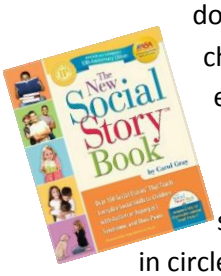
Board.pdf.aspx&psig=AFQjCNF_JzsGObkQ9n0QQCJMB91qBMMOog&ust=1464574472169271&cad=rjt

Example of a Play Schedule: Sarah is a 4-year-old girl who tends to wander on the playground. The teacher decides to create a 3-piece play schedule that provides 3 different activities for Sarah to play. The teacher allows some shared control with the options by providing Sarah with 6 different activities to choose from. The teacher gets one choice while Sarah has two choices. They create a strip of pictures involving a preferred choice of dollhouse, then Strawberry Shortcake pretend play with a peer (less preferred, more complex), and lastly, dinosaur play with construction items. Sarah is expected to play in each activity for 3 minutes each and provided with a 5-minute break in between each opportunity. The teacher provides help for Sarah during the 2nd activity, which is more challenging for Sarah.

Sarah's play schedule

The concept of "first/then" is one all parents and teachers of young children should adopt. First you do this, and then you get that or can do that. This only works when the second item is something the child wants. For example, First you play with the dollhouse, and Then you play with trains. You can use pictures on a first/then card to present a contingency. Edibles are often used to encourage children to perform an action. Such as, First circle time, and then M&M. Edibles should be used wisely and faded immediately if used. It is important to watch out for satiation. Satiation can involve a reduction in a child's interest/motivation/liking of the items given repeated exposure. This can happen with toys, activities, foods, etc.

5. Social stories™: Carol Gray's Social stories™ can be used to help young children with ASD understand what to do in complex social situations. A situation is presented in the form of a story featuring the child. This can be done using words and pictures and is often read by an adult to the child or even listened to on tape. Once the child successfully demonstrates the skills or appropriately responds to the social situation, the use of the story can be faded. Social Stories™ can be re-written to address variations in a situation and individualized to the specific needs of the child (e.g., how to greet new people, share with peers, and participate in circle time). In the inclusive classroom, this can be a wonderful tool to support social behavior. Vanderbilt Kennedy Center listed an online resource for how to write a Social Story™. Visit: http://vkc.mc.vanderbilt.edu/assets/files/tipsheets/socialstoriestips.pdf



6. Assign special jobs: Providing children with jobs makes interactions meaningful and provides a reason to interact with other children for a child that is not naturally motivated to do so. For example, a child can collect the name cards placed around the table during snack time by gaining another child's attention and requesting their name card. A child with ASD can pick who he want to join him at his center (routine presented during circle time), or can lead an activity, such as art (given adult support if needed).

7. Sharing time" with the classroom: Encouraging children to bring an item from home to share at school can be a great way to help a child with ASD connect with their peers. Some children may have a challenge sharing their favorite things but practice will help make this easier over time. During this routine, you can encourage the child with ASD to pick peers to ask a question of the child, take the object around to share with each child, or extend the object toward the peer to show.

Schedules can be very effective on the playground when there is a tendency toward less structure. Unstructured opportunities present as a challenge for young children with ASD and may lead to them playing alone or engaging in inappropriate behaviors, such as pacing, engaging in rituals, initiating inappropriately with peers, or engaging in vocal stereotypies.

LET'S PRACTICE: PEER-TO-PEER ENGAGEMENT!

Develop or pick a social goal for the student with ASD or child in your classroom (e.g., turn taking, giving an item, requesting an object from another child)

Create an activity within your lesson plan with focuses on the specific goal

See Sample Activity Plan & Activity Plan worksheet

Questions to Consider: Does my activity facilitate engagement with other children?

Resource Page: Peer Engagement

Challenging Behaviors: *How to address disruptive behaviors in the classroom*

UNDERSTANDING THE PURPOSE OF BEHAVIOR

Every behavior serves a purpose. Identifying that purpose (or function) is the first step to changing the behavior. Teachers and parents should practice identifying the function of problem behaviors to develop meaningful behavior management practices. Is the behavior occurring to avoid having to do something? Or is it more related to getting attention from peers or adults? Does the behavior simply feel good or does it get them access to something they want? These are important questions to ask when determining the function of the behavior.

BASIC PRINCIPLES OF FUNCTIONAL ASSESSMENT OF BEHAVIOR

A functional assessment of behavior is a problem solving process to determine the underlying causes for a behavior to occur. Children demonstrate a variety of behaviors for many purposes, such as to gain attention, to get out of something (escape), for sensory reasons, or to gain access to materials. It is the job of parents and teachers to determine what a child is trying to tell us when they are 'acting out' and determine the best way to teach the child to communicate their needs in a more effective and appropriate way. A functional assessment of behavior involves tracking what happens immediately before and after the behavior occurs. This can be done using the ABC form provided. ABC stands for **A**ntecedent (before), **B**ehavior (during), and **C**onsequence (after). It is a simple way of getting to the bottom of why a behavior is happening.

- **Antecedent** (A) helps teachers understand the triggers,
- **Behavior** (B) is what the child does and can help a teacher identify changes in intensity (e.g., a tantrum may last 10 minutes after some triggers and only 5 minutes in another circumstance) and form (e.g., sometimes a tantrum include crying and hitting, other times only crying), and
- **Consequence** (C) refers to what happens as a result of the behavior.

Example: Functional Assessment of Behavior
Sammy is a 3-year-old little girl who often gets excited when in a large group of children who are running and laughing. Sammy will grab peers and squeeze their face or arms or hug them. A functional assessment of behavior was completed over 5 days and it was determined that Sammy demonstrated this behavior between 2-5 times a day. The setting often involved groups of several peers engaged in a social game (chase, Duck-Duck goose, London Bridges). As a result, the peers would scream and pull away. The teacher would like Sammy to be able to interact or initiate with her friends more appropriately, such as by asking to play or tapping them on the hand to gain their attention. The teacher provides opportunities to practice by setting up games where she can help Sammy play within the game appropriately. When Sammy gets excited, the teacher tells Sammy, "You can ask her to play." At first the teacher provides physical help to show Sammy how to tap the peer on the shoulder to ask to play and over time, she is able to point to the peer's shoulder rather than physically touch him/her. In addition, his teacher provides his peers with a skill to use their language with Sammy. So when Sammy grabs a peer, the teacher instructs the peers to tell Sammy, "No thank you" and offer a hug.

STRATEGIES TO PREVENT DISRUPTIVE BEHAVIOR

Teaching functional communication

Many behaviors are attempts to communicate; therefore, it is important to model age appropriate language for a child when needed. By understanding the variety of functions of language, a teacher can provide the language appropriate for the child's level and function. Completing the ABC form may help you identify the function of a child's behavior to order to determine where to intervene. For example, a child may swat at another peer who takes their toy. The teacher nearby instructs the student to request the toy back by stating, " You can say, 'I want the toy Tommy'". Another example includes a child that wants access to something in the cabinet. The teacher can pick up the child in their arms so that the child might touch the item desired. Once the child identifies the item, the teacher can model, "I want the play dough".

Transition signals

Moving between activities is difficult for young children with ASD, especially if the activity the child is engaged with is highly preferred. Transition signals allow the child to finish what they are doing and/or accept that the activity is coming to an end rather than being removed unexpectedly. To help make this easier, a teacher should use cues or signals to help the child with ASD know the transition is coming. There are many different ways a teacher can provide this cue to avoid behavioral problems during transitions.

- Sing a song

- Use an audio or visual timer (for very young children a visual is often more effective)
- Verbal warning (e.g., "One more minute until we are all done"). A verbal warning can also be individual to ensure understanding of the expectation.
- Countdown (e.g., 5,4,3,2,1)
- Transition object (allow the child to carry one item with them between all activities, take one item from the current activity when moving on to the next, or to signal what is coming next). For example, asking a child to carry a ball to the playground.

Reinforcement Systems

Token Economy. A token economy is basically a reward chart. Parents often use this strategy to encourage their children to do chores, eat healthy food and comply with self-help skills like toileting. In the classroom, token economies can be used to reward social behavior (e.g., being a good friend, following directions, etc.) and engaging in appropriate behaviors. Token economies can be class-wide or individualized. Be sure to pair any reinforcement with praise (e.g., verbal praise, high five, hug, etc.). Over time, tokens should be faded to natural reinforcement. Fading means that the level of help provided to the child should be gradually lessened after a skill is being used consistently. Within reason, it is important to note that even adults function on incentives, we all show up to work everyday for a paycheck, right?

- *Class-wide vs. individual Token Systems*: Usually young children do best working toward their own (individual) reward (or reinforcement) and receiving very specific praise for things they are doing well. At around age 4, children can begin to understand working together toward a common goal (class-wide). At this age, individual systems can be linked to class-wide-based rewards. For example, children may earn a small number of 'tokens' to receive a small individual prize. These tokens may then be added to a 'class wide' board or jar to earn a larger group prize overtime (e.g., pizza party, movie day, extra time on playground, etc.). Or, teachers can provide specific praise to individual children for appropriate behaviors (e.g., following the "class rules") and the child can place the token in the class wide token economy. The rules of the classroom could even include social-based goals.

Example of indvidual token economy: A child is having difficulty staying at the table completing an activity and the activities are 5 minutes in duration. The teacher individualizes a token chart made of individual train tokens that can be applied to a chart with train tracks. Every minute that the child stays on task, he receives a token and places it on the chart. After five tokens, the child receives a reward (e.g., playing with a train for two minutes).

EFFECTIVE CONSEQUENCES IN THE CLASSROOM

Breaks and Time away: *What is appropriate and when?*

A "break" is an opportunity to rest or deescalate. "Breaks" are best offered immediately prior to the child engaging in the undesirable behavior, which provides the child an appropriate self-regulation tool rather than engaging in the inappropriate behavior. It is common to use a break card so the child has a tangible item to request a break by passing the card to the adult. The following is an example of a break. A 4-year-old child gets overly silly and the teacher knows from previous episodes, the child gets increasing disruptive by swiping other's belongings and not listening to instructions. The teacher knows the precursors to the child's "silly" behaviors and helps "or prompts" the child by stating, "I think it's time for a break?" The child does not listen to the teacher so she gains his attention and asks him to go to the quiet area (which includes books and soft seating). She takes his hand and walks him to the area, sets the timer for 3 minutes and gives the child his favorite book. The teacher walks away and returns to her previous task.

"Time away" is defined as is the removal of a child from a situation that is reinforcing. It is very important to use time away strategically and understand why and how a child is being reinforced for different behaviors in the classroom setting. Understanding the function of the behavior is an important step in determining if time away is an appropriate consequence. For time away to work, time in has to be reinforcing. If a child wants to leave the classroom environment then time away will actually reward the challenging behavior. If such cases the break card is more appropriate, or following through with having the child complete the tasks, considering ways to make the task more motivating. It is important to note that that when having a child to take a time away, remember that it is 1 minute per year. For example, if the child were 3 years old, then he would take a time away for 3 minutes. Four-year-old, four minutes.

There are three types of time away:

1. **Non-exclusionary:** The child can remain in the activity but cannot participate. There are a few examples of non-exclusionary timeouts that can be used in the classroom.
    a. Remove materials: Once the undesired behavior occurs, the child continues to sit at table or be near activity but the items/materials needed to participate are removed. This is a useful strategy to help a child learn what is acceptable without providing social attention (e.g., no corrective language). They receive the materials back as soon as they show appropriate behavior and may be asked to try again.
    b. Remove attention/social opportunities: This is useful for children that are reinforced by adult or peer attention. It can be challenging to coach peers to stop attending to a child who is not behaving appropriately so this is easier to implement in large adult facilitated activities. For example during circle time, a child who is not sitting will not be called on for a turn. Instead, the

adult attention will be directed to peers until the child sits back down. At this time, adult attention is provided again. A timeout for social attention is a naturalistic way to use positive behavior supports in the classroom.

2. **Exclusionary:** The child stays in the room but is moved away from the activity/area. The child can be instructed to go to the area assigned for time away in the classroom, which could be a specific location. This strategy is more feasible for most teachers given they do not have to leave the room.
3. **Isolation:** The child is removed from the setting/room completely. For example, the child may be moved to the hallway with the supervision of a teacher. Sometimes, purely watching the classroom and activities can be rewarding for a child. Also, some children are easily influenced by peers and need a quiet space to calm down before re-entering the classroom to try again. This should be used very sparingly.

Example: Proactive and reactive strategies

Stevie is a 2-year-old little boy. He frequently screams out during day. The teacher completed a functional assessment of behavior and determined that Stevie often screamed when not engaged i activities, such as not playing with toys or participating in a task. The teacher also noticed that Ste received a lot of attention from others since the children would yell with him. The teachers would "Shh" or "all done", or look at him. The teacher decided that she would put proactive strategies ir place that included helping Stevie more frequently to play with materials in hopes of decreasing opportunities to the likelihood of screaming. She also put into place a reactive strategy of removin attention (or ignoring). So when Stevie screamed, the teacher would say nothing, turn her head a count to three. She would then redirect his attention to the materials by helping him paint. While the behavior got a little worse as his screaming increased (extinction burst), after two weeks of consistently using the strategies, Stevie stopped screaming and also starting playing more.

What do I do if I try these strategies and the child with ASD is still having challenges?

You have tried all the strategies outlined in this toolkit, but the child continues to have challenges within the classroom. When a child's behavior impacts their ability to access the classroom curriculum, it is important that they receive interventions to assist with the child's participation in the classroom activities. It might be a good time to talk with the parent about your concerns, recommend the family to seek early intervention services, or consult with the professionals involved in the child's treatment (e.g., behavior specialist, speech pathologist,

occupational therapist, etc.), if available. See the section titled, "Whom do I contact if there are concerns?"

LET'S PRACTICE: BEHAVIOR MANAGEMENT!

Conduct a functional assessment for a targeted problem behavior

Checklist: Effective identification and management of problem behavior in the classroom

Resource Page: Behavior

Knowledge Survey

Instructions: You are going to want to complete this survey prior to starting to and following a review of the toolkit. This survey will help with assessing your understanding of the content described within the toolkit.

I understand how to:

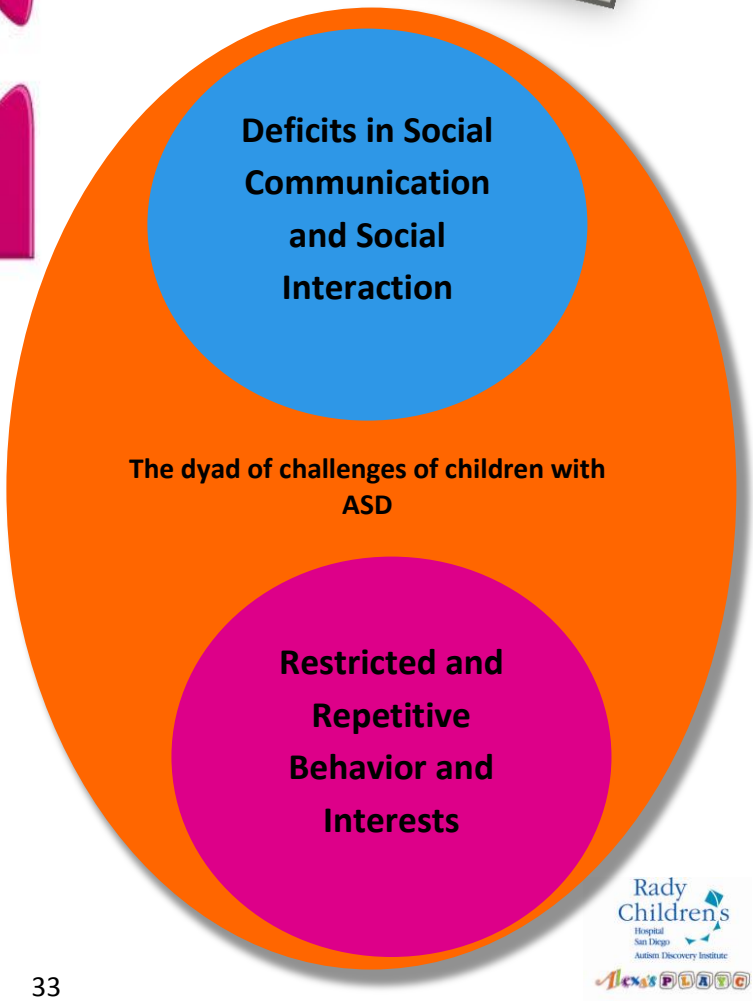
	Yes	No
1. Use positive reinforcement (reward by giving preferred items or privileges) to reduce inappropriate behaviors.		
2. Use visual support strategies to facilitate functioning within the classroom		
3. Ensure student attention before providing an instruction.		
4. Use voice output communication aids to increase communication		
5. Use class wide peer tutoring to facilitate learning.		
6. Break down complex skills into sets of sub-skills to facilitate learning.		
7. Provide clear, developmentally appropriate instruction to improve progress on child goals.		
8. Use video modeling to facilitate the development of positive behaviors.		
9. Replace inappropriate behaviors with functional communication.		
10. Use students as peer buddies to increase classroom participation.		
11. Improve communication through the use of scripts.		
12. Shape behaviors by reinforcing gradual progress.		
13. Determine communicative functions that underlie student behavior.		
14. Use varying levels of task difficulty to improve motivation.		
15. Use cooperative learning groups to facilitate learning.		
16. Identify and use natural consequences to change behavior.		
17. Implement a positive reinforcement system to improve behavior.		
18. Use modeling to improve interaction and learning.		
19. Use priming activities to prepare students for difficult tasks.		
20. Embed choices within routines to increase communication.		
21. Use prompts to teach new skills.		
22. Use social stories to facilitate positive behaviors.		
23. Conduct a functional behavior assessment to determine the functions of behaviors.		
24. Teach non-disabled students strategies for tutoring peers with autism.		
25. Use reinforcement of goal-directed attempts to improve motivation.		
26. Use preferred materials within academic tasks to increase motivation.		
27. Use negative reinforcement (reward by removing less preferred items or activities) to improve behavior.		

Adapted from Classroom Pivotal Response Training and Teaching Social Communication to Children with Autism curriculum.

Finished! You have completed the survey.

Resource Page: ASD

What to focus on....



AUTISM SPEAKS
It's time to listen.
www.AutismSpeaks.org

Rady Children's Hospital San Diego Autism Discovery Institute
Alexis PLATC

Checklist: **Am I motivating my student?**

Child's Name: _____ Date: _____ Location: _____

What are the child's strengths?

What are some of the child's favorite toys or games?

What do you want to work on (e.g., imitation, language, play, etc.) or what is your "goal"?

Instructions: While using the child's preferred materials, you should play with the child for 10 minutes. When you are done playing, rate yourself on the strategies below and see how you did!

+	+/-	-
Did this well!	Used this sometimes. There were some ways it could have been used better.	Did not use this.
		Rating
I let the child lead the activity.		
I stayed face to face or eye level.		
I imitated the child's actions.		
I was enthusiastic.		
I took turns with the child.		
I prepared the child for turn taking.		
I used developmentally appropriate language.		
I expanded on the child's language.		
I modeled appropriate play.		
I modeled a play action higher than the child's current play level.		
I controlled access to the toys.		
I encouraged the child to play close to peers.		
I facilitated turn taking between children.		
I used the child's interests to encourage peer interactions.		
I helped the child perform a more complex skill.		
I praised the child for demonstrating the new skill.		

What did I do well? GREAT JOB! What do I want to focus on next time?

Resource Page: Motivation & Engagement

Say

Sho

Do

Create opportunities for back and forth

Help the child communicate

Let them practice

Adults can help!

Peers can help!

Practice always helps!

Steps to Peer Interaction

Checklist: Is my environment creating multiple opportunities for learning?

What is the child's favorite toys or games?

Who would be a good peer model?

What are some of the child's challenges?

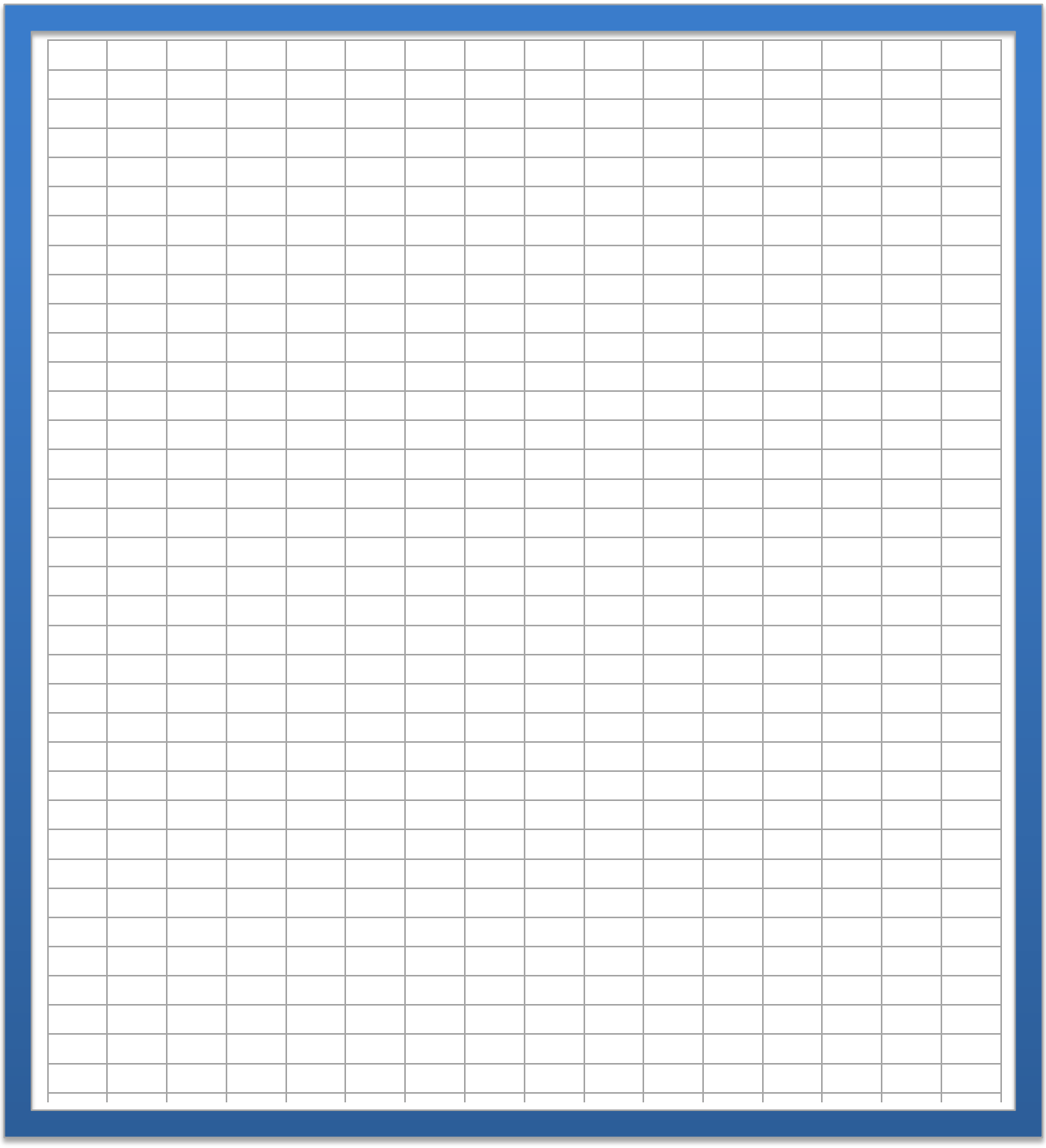
Draw a sketch of your classroom while considering some of the concepts described within the section, Classroom Arrangements.

+	+/-	-
Doing this well!	Use this sometimes. There are ways it could be used better.	Did not use this.
		Rating
Physical Space		
Created a designated space in the classroom for small group instruction		
Created a designated space in the classroom for large group instruction		
Materials are limited that create distraction for the child		
There are opportunities for tabletop tasks.		
There are opportunities for floor play		
Some materials are in sight, out of reach ☐ Shelving ☐ Clear bins ☐ Curtains on shelving		
There are opportunities for free access to selected toys		
There is a designated calm or "break" space ☐ Allows child to be away from the group ☐ Soft cushion/pillow ☐ Safe ☐ Adequate supervision ☐ Calming materials/visuals		
Daily picture schedule is displayed in *at least* one area		
Classroom rules are displayed in age appropriate format		
Areas are designed by function or location (center signs in different colors)		
Opportunities for child to be face-to-face		
Opportunities for interactive play		
Visual schedules are readily available for use		

What are you doing well?

What to focus on next

Sketching Instructions: Draw a sketch of your classroom. Modify the table to accommodate the shape of your room. Arrange the furniture to create a calm space, define spaces, minimize aisles that might promote running, etc.



Resource Page

Classroom Environment

Attention
- Label main areas
- Limit Distractions

Access
- In sight, out of reach
- Limit items

Motivation
- Use visuals
- Rotate toys

Sample Social Goals

The following is a list of potential goals for children with ASD within your classroom. For children 12 to 48 months, there is a highly detailed assessment tool contained within the Early Start Denver Model (ESDM) manual (Rogers & Dawson, 2010). By using that assessment tool, you can identify a vast number of specific goals targeting core challenges of children with ASD.

Imitation/Turn taking

1. During free play, Jennifer will play alongside another child and imitate their action with an object.
2. When playing with a board game, Jennifer will take turns with another peer by asking for the object.
3. During circle time, Jennifer will imitate novel actions related to songs and books.
4. During a peer-facilitated routine, Jennifer will take an item from a child by taking the toy from the peer's hand and saying, "thank you".

Functional Play

1. Jennifer will play with toddler toys while playing alongside at least two peers.
2. Jennifer will follow a peer's lead during a pretend play activity such as a dollhouse, Princess play, and Strawberry Shortcake.
3. During a small group activity involving 2-3 peers, Jennifer will build a scene together with the other children using train tracks, placing furniture in a dollhouse, or dressing up for a pizza party.

Socialization

1. When playing with 2-3 peers, Jennifer will initiate either by asking to play or following along with the game.
2. Jennifer will play Ring Around the Rosey, London Bridges, or Row-Row-Row your Boat with another peer.
3. When engaged in an adult directed activity, Jennifer will respond appropriately to simple requests from peers.

Checklist: Functional Assessment of Behavior

Instructions: Complete each column. The behavior you are trying to figure out why is it occurring will be listed under "during". The record what happened right "before" the behavior occurred, then what happened "after". *See Example*

ABC Behavior Tracking in the Classroom						
Date/Time:	**Setting**	**Before**	**During**	**After**	**Function**	**Notes**
Example: 12/12/15	*Playground structure/slide*	*Child on the slide*	*Johnny came from behind and hit child with open hand*	*Child moved and Johnny went down slide*	☐ Gain Attention ☐ Escape/Avoid ☐ Feels Good ☐ Access to toy/activity	*Johnny hits instead of using his words with his peers*
					☐ Gain Attention ☐ Escape/Avoid ☐ Feels Good ☐ Access to toy/activity	
					☐ Gain Attention ☐ Escape/Avoid ☐ Feels Good ☐ Access to toy/activity	
					☐ Gain Attention ☐ Escape/Avoid ☐ Feels Good ☐ Access to toy/activity	
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					☐ Gain Attention ☐ Escape/Avoid ☐ Feels Good ☐ Access to toy/activity	
					☐ Gain Attention ☐ Escape/Avoid ☐ Feels Good ☐ Access to toy/activity	

Suspected Function? ☐ Gain Attention ☐ Escape/Avoid ☐ Feels Good ☐Access to object

Any patterns to when or where the behavior typically occurs? ______________________________

What's the replacement (new/alternative) behavior to teach *(e.g., Teach Johnny to use a gesture to request from peers on the playground)?* ______________________________

How can you change your behavior or the environment to stop the behavior from occurring? ______________________________

____

REINFORCEMENT INVENTORY

Toys/Games	Likes	Dislikes	Specific (what kind, brand, type):
Puzzles			
Games			
Musical instruments			
Action figures			
Dress-up materials			
Dolls			
Lighted toys			
Trains			
Cars/Vehicles			
Puppets			
Shiny toys			
Slinky			
Spinning toys			
Stuffed animals			
Textured balls			
Pop-up toys			
Books/Magazines			
Blocks/Building			
Animal figures			
Mirrors			
Legos			
Board games			
Other:			

Sensory/Fine Motor	Likes	Dislikes	Specific (what kind, brand, type):
Play dough			
Balloons			
Arts & crafts			
Crayons/chalk			
Stinging beads			
Painting			
Dry erase marker			
Cutting with scissors			
Bubble play			
Silly putty			
Scented items			
Flashlights			
Water play			
Tickles			
Sand box			
Other:			

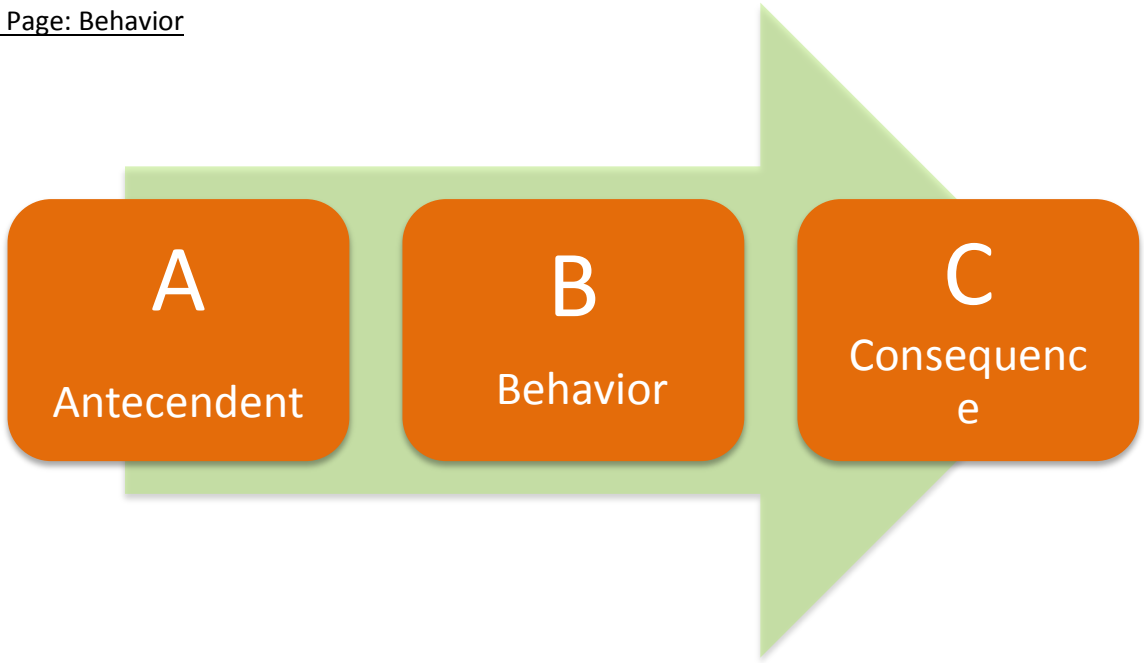
Gross Motor	Likes	Dislikes	Specific (what kind, brand, type):
Swings			
Playing chase			
Slides			
Playground			
Sit and Spin			
Dancing			
Bike riding			
Sports			
Ball play			
Bouncing			
Spinning			
Other:			

Tokens	Likes	Dislikes	Specific (what kind, brand, type):
Certificates			
Special Badges			
Stars/Smiley faces			
Tickets			
Being teacher's helper			
Classroom duties			
"Good note" home			
"High 5s"			
Happy face			
Choosing partner for day			
Verbal praise			
Hugs			
Other:			

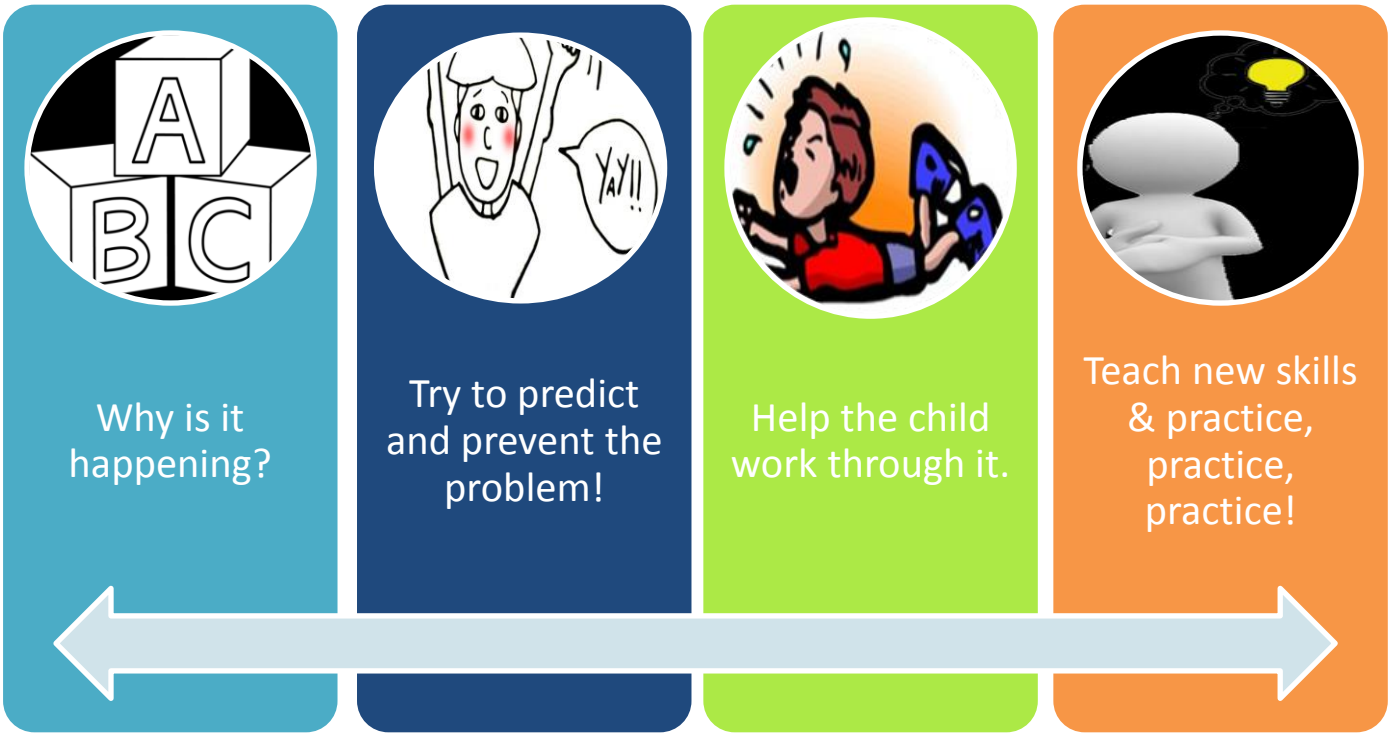
Food	Likes	Dislikes	Specific (what kind, brand, type):
Crackers			
M&Ms			
Cereal			
Pretzels			
Marshmallows			
Chocolate milk			
Cheese			
Cookies			
Other fruit			
Other vegetables			
Other drinks:			
Other:			

Adopted from materials by Beautiful Minds of Princeton & Fisher, et al. (1996)

Resource Page: Behavior



The Continuum Behavior Management



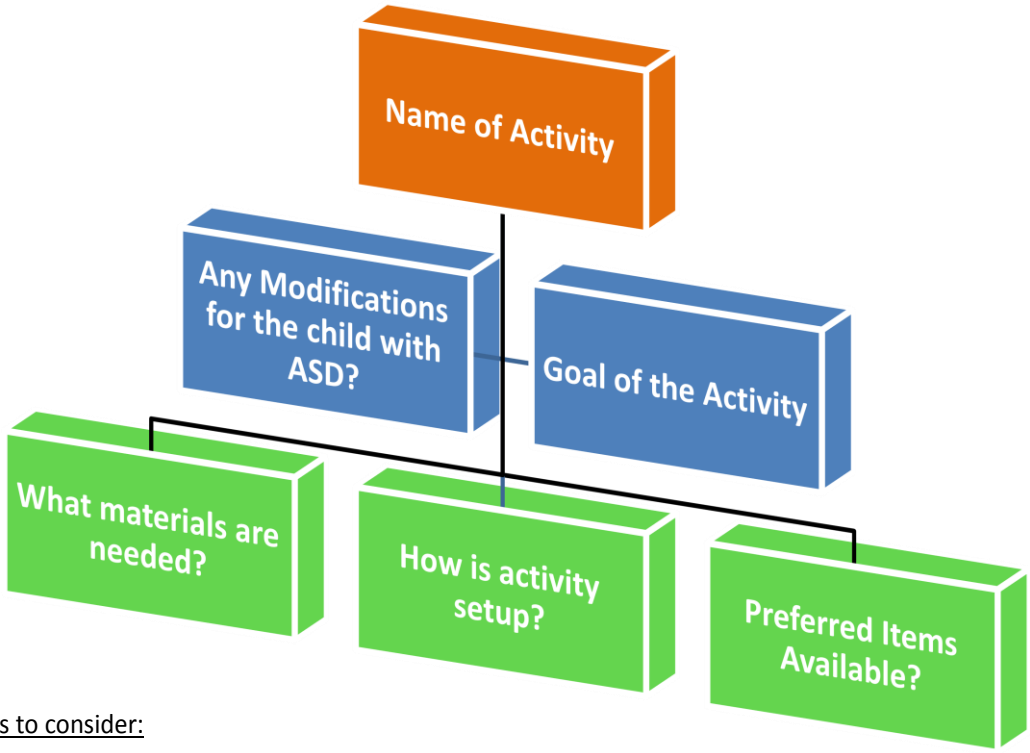
Checklist: Identifying and Managing Problem Behaviors Checklist

Instructions: While completing a functional behavior assessment, there are several points you want to consider when developing reactive or proactive strategies.

Rating: (+) Performed (-) Did not Perform	✓/ - (Notes)
Identify problem behavior	
Behavior interferes with child's ability to interact with others	
Behavior occurs in multiple settings	
Behavior occurs across multiple people	
Behavior occurs at different times of the day	
Behavior is interfering with learning	
Child and staff are safe	
ABC data collected and chart tells us that behavior occurs for: ☐ Attention ☐ Access to an item/activity ☐ To escape/avoid something ☐ It feels good How does this look in the classroom? _____	
Proactive Strategies	
Consider the impact of the sensory stimuli in the classroom	
Teach a new behavior to replace the disruptive behavior What do you want the child to do? _____	
Create opportunities for child to practice replacement skill often	
Reward other behaviors	
Independent or class-wide reinforcement schedule	
Individualize supports ☐ Schedule ☐ Reward chart ☐ Quiet Space ☐ Time away	
Provide opportunities for the child to sue communication skills	
Reactive Strategies	
Remove social attention (or ignore)	
Remove from situation Child's reaction _____	
Track ABC's to understand how behavior is changing	
Take away a token for misbehavior (response cost)	
Support behavior change	
Develop goals to continue to support child ☐ Communication ☐ Play ☐ Socialization	
Communicate plan to ALL staff	
Implement plan consistently	
Modify/fade plan based on changes in child's behavior	
Family is aware of the intervention plan	

Questions to Consider: **Does my activity facilitate engagement with other children?**

Instructions: When planning an activity, consider each of the areas below. When completed, there are some additional questions below to consider when facilitating social interaction between the child with ASD and peer.

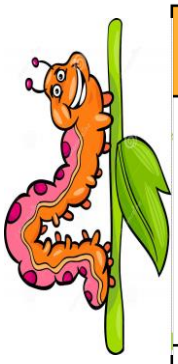


Questions to consider:

1. What is your social goal for the child with ASD? _____
2. How do I ensure the children are interacting or how do I create social opportunities (use Motivation strategies)? _____
3. Will a teacher be available to help the child with ASD? _____
4. If no teacher available, what supports are needed for the child with ASD to be successful? _____
5. What will be challenging about this activity? _____
6. What can I do to overcome this challenge? _____
7. What kind of praise will I use to reward both the child with ASD and typically developing peers? _____

Sample Activity Plan

Insect Exploration



AM Lesson prepared by Kayla	Monday April 4	Tuesday April 5	Wednesday April 6	Thursday April 7	Friday April 8
Table Top Activities	Blowing bubbles (sensory, "ask" for help) Puzzles (Problem-solving)	Hammer & Nails (Fine motor, 3-4 step actions) Stringing Beads with varying size beads (Fine motor)	Cutting Real Grass and leaves to fee the insects (grasp activity, snipping) Cause & effect toys (1-2 step actions)	Music with pom-poms (responding to inhibitory words) Coin banks and pop up toys *(multistep toys)*	Chalk board and chalk with caterpillars drawn *(vertical/horizontal lines)* Monkey birthday (app play w 1 step toy)
Circle Time (Song, book, activity) Motor actions and imitation with in songs and finger plays-goal	____ is wearing___ at school today Where Do Insects Live? Song dice	__ is here today, horary The Very Busy Spider Itsy bitsy spider	Going on a Garden Hunt The surprise Garden Pick an insect, tell the name, and trade with your neighbor	Namaste Mouse's First Spring Yoga dice with various moves	Insect Choice Bugs! Bugs! Bugs! Brining home baby bumble bee with bee puppet
Free Play Center-based Activities	Play dough with flower kit of cookie cutters and rolling pins Tea Party (Expanding 3-4 step play schemes)	Legos and bugs (Stacking blocks 3+) Shape sorter in green grass (2 step motor action) Sensory bottles with oil/water/jelly bead and grass	Pirate Ship, Castles, and figurines (Spatial concepts, 3-4 step actions) "Treasure Hunt" Obstacle course (Scavenger hunt, body awareness)	Texture board (*Matching)* Cars and blocks with foam road with tree branches to go through forest	Doctor set with stuffed animals Dinosaurs with cardboard blocks
Special Activities (teacher directed)	Sensory table with insects and grass (Turn taking)	Fly swatter with colorful paint on "fly paper" (Sensory, messy play)	Contact paper with frogs (Pincher grasp)	Boats and turtles in blue water (Messy media, Problem solving)	Bubble Wrap Bee Hives (2+ sequencing)

Activity Planner:

Name of Activity: Sensory table with insects and grass (Special Activities, Monday)
Goal(s) of the Activity: Turn Taking, trading preferred toys, communication (requesting), sensory (tolerating smell and textures), fine motor skills (squeezing)
Modifications Needed: Provide sticks for the child to have access, have foam blocks available to place on top of grass, using tongs
Materials Needed: Cars, sensory bin, grass clippings, leaves, blocks (if needed), tongs, gloves, container and tree playhouse
Activity Setup: Place tree playhouse in sensory bin, place leaves and grass in bins on bottom and within house, place cars on top and under grass

Are preferred materials available? ☑ Yes ☐ No Favorite Materials: tongs, cars

"Prompting"

Helping the child with ASD: Professionals who work with children with ASD refer to helping as "prompting." For the purpose of this toolkit, we use the word *help* because that is all a prompt really is. Helping can be offered in a variety of ways (verbal, gestural, physical) to address a variety of different skills (imitation, language, play). Sometimes, children with ASD can become reliant on this type of support so the level of assistance should be graduated or faded over time so the child can learn to do things on their own.
There are ways to help a child with ASD that differ from other children:

- Do not use too many words
- Try to show the child what you want by using actual items, pictures and modeling
- Use real labels and speak in statements (e.g., "its time to play with puzzles" instead of "are you ready to play?")
- Use repetition to teach new things
- Use consistent cues (e.g., tone of voice, facial expression, etc.)

Helping a child with ASD perform a task or communicate with a peer will not always follow the suggested guidelines, however in most situations, these tips will be useful.

For a more detailed description, we have also included information specific to prompting: http://www.bbbautism.com/prompting_and_fading.htm.

For a comprehensive overview of prompting and fading, please visit: http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=8&ved=0ahUKEwiUntXE-qLNAhVDxWMKHWCfD1QQFgg5MAc&url=http%3A%2F%2Fdddc.rutgers.edu%2Fpdf%2Fprompting.pdf&usg=AFQjCNFq9LpsX-J39sx2Rzs7yd0vRoQowQ&bvm=bv.124272578,d.cGc

Sensory Materials: Sensory materials can be calming but they can also be overstimulating; what calms one person may excite another. Like all children, children with ASD use all of their senses to explore and learn. Most children with ASD have heightened or dulled sensory experiences. This has been described as 'feeling the sounds' and 'hearing the sights'. Children with ASD may struggle to filter out relevant versus irrelevant stimuli in their environment. For example, a child may focus on a song they can hear in a neighboring classroom rather than attending to a book during story time. It is important that teachers tailor sensory activities to facilitate learning for a child with ASD. For some, this will mean increased language and social awareness during messy play, for others messy play will increase anxiety and create more social challenges. As infants and toddlers explore their world, they begin to develop and test hypotheses. It is important to observe the child and how they interact with various materials to understand how to expand their experience and broaden their social capacities. Things to pay attention to: lights, sounds, too many people in close proximity, seating arrangements, using utensils to interact with messy mediums, different textures (e.g., clothing, carpet, etc.), using different body parts to touch (e.g., lips, hands, feet, etc.) and covering ears (this may relate to feeling overwhelmed and not only by loud noise) or headphones.

Cooperative Arrangements: This term refers to the concept of "setting up for success". To encourage children to work together, activities can be set up cooperatively by embedding opportunities for meaningful interactions. Some ways to do this include using limited materials (e.g., four children with two paintbrushes to encourage turn taking), seating arrangements (e.g., face to face with a peer who can model desired skills), special jobs (e.g., child asked to pass out snack items to peers), etc. There are many creative ways to use cooperative arrangements in the classroom and on the playground with preschool aged children and this concept should be used to support inclusion practices for children with ASD throughout the day.

Reinforcement: Any response a child gets that contributes to an increase in a behavior. *Positive reinforcement* occurs when a behavior results in something being given or added. For example, a child screams, the teacher talks to the child about being quiet, the next time the child wants attention, the child screams. This is positive reinforcement because the teacher gave the child verbal attention after the child screamed resulting in more screaming in the future to get the same result. *Negative reinforcement* also contributes to an increase in behavior

but occurs when something is removed. For example, the teacher asks the child to sit down for snack, the child runs away, the teacher lets the child go read a book instead of coming to the snack table. In the future, the child will run away when demands are placed because running away resulted in the demand being removed.

Generalization: Learning to use new skills in multiple ways across people and settings. For example, a child learns to point to a picture of a cow but when asked to find the cow when playing with figurines, the child needs help. Learning a single skill requires generalization to connect the single concept to related skills. This phenomenon can also occur across people and settings, a child may learn to say hello to teachers but need help to say hello to peers; similarly, a child may learn to take deep breaths when upset at school but need help learning to do this at home or in public.

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Alexa's PLAYC (**P**layful **L**earning **A**cademy for **Y**oung **C**hildren) is a unique early education program. We provide children with a warm and loving environment that stimulates physical, social, intellectual and emotional growth. Our curriculum focuses on teaching developmentally appropriate communication, cognitive skills and social skills, while fostering independence in our young students.

Our aim is to share this resource with people across the nation to support children, families and service providers in inclusive settings and contribute to improved outcomes for patients with ASD and their families.