Behavior Support for Students With ASD
Practical Help for 10 Common Challenges

by

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CHAPTER 2

Multi-Tiered Systems of Support for Students With ASD

This chapter provides an overview of MTSS with explanations for how the MTSS framework can be used to address the academic and behavioral needs of students with ASD. Evidence-based practices that can be used to prevent behavioral challenges of students with ASD and remediate problems as early as possible after onset are introduced and explained. This chapter includes additional resources readers can gain access to for more information on the various practices that are also included in the sample intervention plans in later chapters, indicated in bold, italicized font. Thus, as you read subsequent chapters in this book, you can use typographical cues for easy reference back to this chapter any time you want to review specific information and gain access to the recommended resources.

INTRODUCTION TO MTSS

The MTSS framework combines the positive behavior interventions and supports (PBIS) framework that was developed to support students with challenging behaviors and the response to intervention (RTI) framework that focuses on the academic needs of struggling learners. The PBIS and RTI frameworks use tiered intervention models, which means that different levels of research-based intervention and support are given to students, with the intensity of supports and frequency of data collection for progress monitoring purposes increasing at different tiers (Vaughn & Linan-Thompson, 2003). Tier 1 instruction and supports are research-based approaches used with all learners in the classroom to prevent challenging behavior and optimize learning. Students who need more than Tier 1 supports to address their behavioral and academic needs, receive additional specialized interventions to address areas of weakness (Tier 2). Intensive, individualized Tier 3 interventions and supports are provided if a student continues to struggle behaviorally or academically. Because behavioral needs and academic needs occur in conjunction with one another, it does not make sense to have two separate frameworks (RTI and PBIS). This means the problems of many students with behavioral challenges are related to their academic deficits. Likewise, students' academic needs may be a result of their challenging behaviors. Thus, separating behavior and academic interventions and supports into two systems is not the most efficient and effective way to address challenges.

The MTSS model combines academic and behavioral supports into one comprehensive framework. Differentiated instruction using research-based practices is provided through tiered intervention and supports for purposes of preventing academic and behavioral challenges or remediating problems as early as possible after onset, as opposed to using reactive

procedures after the severity of students' behavior or academic challenges become extremely problematic. Second, the intention of MTSS is to deliver supports within the context of the general education classroom to the maximum extent appropriate, using layered supports and collaboration among general and special education teachers, related services providers, families, and the student whenever possible. This collaboration and team approach is essential to the intervention process because there is no other way to fully understand the various strengths, interests, and needs of the student without considering various perspectives. The collaboration should be ongoing and occur both formally through individualized education program (IEP) meetings as well as teacher planning meetings, parent conferences, e-mails, telephone calls, communication logs, and informal assessments in the classroom. The team must be knowledgeable about the student's passions, areas in which the student excels, present levels of academic and functional performance, and ways in which specific ASD characteristics discussed in Chapter 1 affect the student.

MTSS FOR STUDENTS WITH ASD

Students with ASD may have various academic and behavioral challenges due to their unique characteristics (see Chapter 1). It is important that teachers recognize that many of their challenges can be addressed at the Tier 1 and Tier 2 levels without needing the most intensive behavioral and academic interventions and supports at the Tier 3 level. The following sections explain a multitude of evidence-based and research-supported practices that can be used in classroom settings to be preventative at the Tier 1 level and offer immediate remediation and support at the Tier 2 level. Chapter 3 focuses on providing Tier 3 supports through FBA, leading to the development and implementation of comprehensive behavioral intervention plans.

As you read the specific strategies discussed next, keep in mind that it often is most effective to use two or more strategies in conjunction with one another when planning and implementing a comprehensive intervention, rather than relying on one strategy alone. Using a combination of strategies is often more effective in getting a student to learn a specific replacement behavior or reach a desired outcome.

Tier 1 Supports and Interventions for Students With ASD

Many practices can be used by teachers for all students that will prevent challenging behaviors for students with ASD. These are the approaches that are part of Tier 1 interventions and supports. If teachers utilize the interventions and supports explained next, then the frequency and intensity of challenging behaviors for students with ASD and other students in the class will certainly decrease. Although these approaches do require planning and time allotted for the delivery of the supports and interventions, the intent is that these are part of the everyday planning and instructional practices in the classroom. Progress should be monitored by collecting data once a week on general classroom expectations to document the behavioral outcomes for students with ASD. These can be simple measures, such as rating scales that document the level at which the students are meeting classroom behavioral expectations. Figure 2.1 shows an example of a Tier 1 progress monitoring tool.

Set Clear Expectations

Be sure to clearly define academic, behavioral, and social expectations for various school contexts. Although having three to five positively stated classroom rules is part of this, many expectations beyond what is stated in classroom rules will need to be explained to students with ASD. For example, the expectations for one-to-one instruction, small-group instruction, whole-group instruction, independent work, and group work are often quite different. Students may be expected to raise their hands and wait to be called on during whole-group

Directions: Highlight or circle the appropriate rating for each expectation. Create a line graph by connecting the ratings each week to determine if the student is progressing, making no progress, or regressing.

Expectations	Week of ____	Week of ____	Week of ____	Week of ____	Week of ____	Week of ____
Follow teacher directions	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1
Participate during group instruction	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1
Complete independent classwork	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1
Respect others	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1
Make transition appropriately in and out of the classroom	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1

Use the following key to indicate a rating for each behavioral expectation:
1: Maximum teacher support and prompting
2: Moderate levels of teacher support and prompting
3: Minimal levels of teacher support and prompting
4: Little or no teacher support needed

Figure 2.1.   Sample Tier 1 progress monitoring tool.

instruction and during independent work, but it may be acceptable to give answers and ask questions without raising hands during one-to-one instruction and small-group instruction. Without direct teaching of these differences in expectations across situations, students with ASD often do not naturally pick up on them.

Explicitly Teach Expectations

Although some students with ASD can learn the expectations through verbal instruction, most need other instructional formats to fully understand expectations and be able to demonstrate what is expected. Using the "I Do It," "We Do It," "You Do It" instructional format is one way to provide the *explicit instruction* necessary and involves the following: 1) telling the students the expectation and modeling the expected behavior during the "I Do It" phase of instruction; 2) providing opportunities for supported guided practice using appropriate levels of scaffolding with immediate positive and corrective feedback during the "We Do It" phase; and 3) providing independent practice opportunities during the "You Do It" phase for students to demonstrate the expectations during naturally occurring situations and receive immediate feedback.

Students with ASD may need additional instructional supports if verbal instruction and physical modeling and guided practice is not enough. The "I Do It" phase may need to include *visual supports*. Visual supports help students who have language comprehension difficulties, problems with focus and attention, and executive functioning challenges and

include pictures or symbols, cue cards, lists, and video clips. To teach the expectation of only speaking when called on by the teacher during group instruction, you can provide a picture of a child raising his or her hand and waiting to be called on, a cue card that says, "Raise your hand," or a video clip that shows another student or the student with ASD raising his or her hand and waiting to be called on during group instruction. *Video modeling* is when you use video clips of another student demonstrating the desired expectation. *Video self-modeling* is when the video is of the student him- or herself (Bellini & Akullian, 2007). Of course, behind the scenes prompting and video editing is often needed to create video self-modeling clips because the student may not independently perform the expectation prior to *explicit instruction*. Information about using this technique and other recommended techniques in this chapter is available through training modules provided by the Autism Internet Modules web site (see the Resources section at the end of this chapter for links to this and other resources).

Using *social narratives* is another way to enhance the "I Do It" phase of instruction. Social narratives are visually presented stories that describe expectations for specific situations using language at the student's level of understanding. Examples of social narratives include Social Stories (Gray, 2010), comic strip conversations (Gray, 1994), or Power Cards (Gagnon, 2001). See the training module provided by the Autism Internet Modules web site listed in the Resources section at the end of this chapter for more information about social narratives. Although video modeling and social narratives are typically used at the Tier 2 and 3 levels, they can also be used at Tier 1 to help all students in the class more efficiently and effectively learn the academic, behavioral, and social expectations. Using these supports at Tier 1 may prevent problems that could arise and need to be addressed at Tier 2 or Tier 3.

Reinforce Students Who Meet Expectations

It is important to deliver *positive reinforcement* when students meet the expectations that have been clearly stated and explicitly taught. Most students with ASD respond very well to social positive reinforcement (e.g., smiles, specific praise, high-fives, fist bumps). Keep in mind, however, that positive reinforcement is only positive reinforcement when it is delivered immediately following a behavior and increases the likelihood that the behavior will continue or increase in the future (Alberto & Troutman, 2012; Cooper, Heron, & Heward, 2007). Thus, if the student does not maintain or increase the desired behavior when social reinforcement is used, then you may need to use token reinforcement, activity reinforcement, or tangible reinforcement. See the training module provided by the Autism Internet Modules web site listed in the Resources section at the end of this chapter for more information on the different types of positive reinforcement and reinforcement schedules.

Use a Hierarchy of Supportive Consequences When Students Do Not Meet Expectations

If students with ASD do not meet certain behavioral, social, or academic expectations, then teachers should use consequences that help redirect the student to the desired behavior. This can be done using a hierarchy of supportive consequences such as the following:

1. *Proximity control:* Stand near the student to promote positive behavior.

2. *Planned ignoring:* Provide specific praise to the peer closest to the student performing the desirable behavior, provide an opportunity for the student to adjust behavior accordingly, and positively reinforce the student if positive behavior is demonstrated.

3. *Provide a visual reminder:* Use a gesture, cue card, picture, or symbol to remind the student of the expectation.

4. *Provide a verbal reminder:* State the behavioral expectation positively and with encouragement.

5. *Provide assistance:* Help the student meet the behavioral expectation by modeling the behavioral expectation and having the student imitate or helping the student get started with an academic task.

6. *Provide a safe place for deescalation:* If the student is unable to meet the expectations and gets emotionally distressed, then allow the student to calm down in a specially designed area of the classroom. The student will return to the ongoing classroom activities once regulated and calm.

Explicit Instruction of Academic Skills

Students with ASD often require explicit, systematic instruction when learning new academic skills. This is also true for students with other disabilities and many typically developing students. The basic structure for *explicit instruction* is the "I Do It," "We Do It," "You Do It" format described earlier in the chapter. Many elements of instruction may be altered, however, when using *explicit instruction*. *Explicit Instruction: Effective and Efficient Teaching* (Archer & Hughes, 2011), is an excellent resource for teachers who want to learn how to improve the quality of their instruction for all students. The book provides a comprehensive framework for delivering quality instruction and includes many evidence-based practices. Some of the practices discussed that will improve instruction for students with ASD at the Tier 1 level (and are referenced in sample intervention plans in later chapters of this book) include *increased opportunities to respond; think-pair-share; promote high levels of success; use clear, consistent, and concise language; prompting/fading procedures; graphic organizers, choral responding;* and *response cards*. Visit the Explicit Instruction web site listed in the Resources section at the end of this chapter for more information about *explicit instruction*.

Use Concrete Examples

When teaching new skills to students with ASD, it is important to use concrete examples the students can understand before moving directly into teaching abstract concepts. The *concrete-representational-abstract (CRA)* strategy is commonly used to teach mathematical skills by first teaching a new skill using manipulatives, then moving on to pictorial representations, and finally teaching the abstract concept (Miller & Mercer, 1993). Although this approach should certainly be used for mathematics instruction, it can also be applied to other content areas. Students with ASD often struggle with social studies content because too often it is primarily taught at the abstract level with a heavy focus on reading to learn utilizing texts that may be quite challenging to comprehend (Gersten, Baker, Smith-Johnson, Dimino, & Peterson, 2006). This may also be true for science and language arts content. It is important to first teach concepts using concrete approaches because students with ASD often think literally and have trouble understanding abstract concepts. This may include using manipulatives and models, but it can also include connecting to things that are familiar to the student to teach abstract concepts. For example, a teacher who is talking about conduction may bring in a pan and talk about what would happen if you touch the pan when it is hot (as opposed to relying on sharing a definition and giving one or two verbal examples).

Tier 2 Supports and Interventions for Students With ASD

Although some students with ASD may only need high-quality Tier 1 instruction and supports, most of these children will need additional interventions due to their various characteristics and needs. The following sections provide an overview of a multitude of evidence-based practices that can be used to address their behavioral, academic, and social needs. More information and guidance for many of the strategies and approaches described is available through the National Professional Development Center on Autism Spectrum Disorders web site and the Autism Internet Modules web site, both listed in Resources section at the end

Targeted objective: The student will complete independent work with little or no support from the teacher.

Criterion for mastery: The student completes at least 75% of independent classwork assignments each week with little or no support from the teacher.

Interventions and supports provided: *Task analysis, self-monitoring, least-to-most prompting and fading procedures, positive reinforcement*

Directions: Divide the number of classwork assignments completed with little or no support from the teacher for the week by the total number of assignments given that week to get a percentage. Highlight the percentage to determine if the student is progressing, making no improvement, or regressing.

	Week of 10/1	Week of 10/8	Week of 10/15	Week of 10/22	Week of 10/29
91%—100%					
81%—90%					▓
71%—80%					
61%—70%					
51%—60%				▓	
41%—50%					
31%—40%					
21%—30%			▓		
11%—20%		▓			
1%—10%	▓				
0%					

Figure 2.2.   Sample Tier 2 progress monitoring tool.

of this chapter. The interventions discussed are intended to be embedded within everyday instructional and noninstructional routines and activities to add an additional layer of support to what is already being implemented at Tier 1. Progress should be monitored by collecting data once a week on targeted objectives to document the outcomes of Tier 2 interventions and supports for the student with ASD. These can be simple measures, such as rating scales that document the level to which the student is meeting behavioral expectations in the classroom, or more objective measures, such as percentage data, interval data, and frequency data. Criterion for mastery should be set for each targeted objective to determine when the desired outcome has been reached. Figure 2.2 shows an example of a completed Tier 2 progress monitoring tool.

Provide Visual Supports

It is common for teachers to deliver the majority of their instruction using verbal directions, lectures, and discussions, which can be a barrier to students with ASD considering their potential language and social impairments. Students with ASD benefit from the use of *visual supports* to promote learning and positive behavior. Examples of visual supports include *visual schedules, activity schedules, graphic organizers, pictures, symbols, charts, graphs, maps, cue cards, scripts,* and *visual boundaries*. More information about creating and using these supports is available through the Autism Internet Modules web site listed in the Resources section at the end of this chapter.

Increase Active Engagement

Students with ASD typically cannot just sit and get information. They need to be actively engaged in instructional activities to optimize learning and prevent challenging behaviors from occurring. Examples of ways to increase active engagement include, but are not limited to, the following:

- Provide opportunities for students to draw to represent information they are learning.

- Provide *guided notes* for students to complete during lessons (e.g., notes or outlines with blanks to fill in, graphic organizers to complete during instruction).

- Plan for opportunities for movement during the lesson.

- Use increased questioning.

- Embed their passions and fascinations into the lesson.

- Use hands-on learning activities.

- Show video clips to demonstrate concepts.

- Conduct experiments.

- Use cooperative learning activities.

Following the student's lead is another way to increase active engagement. This is a good strategy to use with students who have significant deficits in joint attention. The teacher initiates engagement with something the student is focused on to establish joint attention and reciprocal exchanges. You can also follow the student's lead by positively responding to comments the student makes and questions he or she asks during group instruction even if they seem off of the topic. Try to find a way to respond that acknowledges the ideas shared by the student but also connects to the lesson. (The web site of Dr. Paula Kluth, an educator who has worked extensively with students with ASD, provides strategies for doing this; see the Resources section at the end of this chapter for more information.)

Arrange the Environment to Address Student Needs

Classroom environments can be quite overwhelming for students with ASD. There are ways to make *environmental arrangements,* however, to adjust to student needs. Stimuli in the classroom needs to be considered for those students who have sensory processing problems. They may need modifications to lighting if fluorescent lighting causes discomfort or overstimulation, removal of excess clutter, noise reduction, modified materials to adapt to sensory needs, and so forth. Students who have difficulties with focus and attention may need preferential seating, an individually constructed study area when intense focus is needed, and clearly defined work spaces. If a student has emotional regulation difficulties, then it would be helpful to create a safe space or cool down area that the student can use if emotionally distressed.

In addition to the special area for emotional regulation, the student may also need *emotional regulation strategies*. For example, using an emotional thermometer or rating scale helps students identify their emotional states and choose coping strategies or calming activities to implement before returning to their task. The Incredible 5-Point Scale (Buron & Curtis, 2003) is one example, and a training module about this approach can be found on the Autism Internet Modules web site in the Resources section at the end of this chapter. In addition, *Exploring Feelings: Cognitive Behaviour Therapy to Manage Anxiety* (Attwood, 2004) discusses various strategies to help students with ASD regulate their emotions, such as physical, social, cognitive, special interest, or relaxation activities that may be calming for the student.

Prompting and Fading Procedures

Using prompting and fading procedures can help ensure student success. Prompts can be physical, gestural, visual, or auditory (Wolery, Ault, & Doyle, 1992). *Modeling/request imitation* is another form of a prompt that involves showing the student what to do and immediately giving the student an opportunity to imitate your model and receive feedback (Buffington, Krantz, McClannahan, & Poulson, 1998). Two main ways to use prompting and

fading procedures are *least-to-most prompting* and *most-to-least prompting* (or graduated guidance) (Alberto & Troutman, 2012; Cooper et al., 2007). When using least-to-most or most-to-least prompting, you develop a hierarchy of prompts that would be necessary to support a student in successful responding. If you are using least-to-most prompting, then you begin with the least intrusive prompt you think the student needs to be successful and increase the prompting supports if necessary. If you are using most-to-least prompting (graduated guidance), then you begin with intensive prompting and fade it out with successive opportunities. In either case, the goal is to eventually fade all prompts until the student responds independently. More information about these prompting systems is available through the Autism Internet Modules web site listed in the Resources section at the end of this chapter.

Time-delay is another strategy used in conjunction with prompting and involves systematically waiting for a student to respond before delivering a prompt for purposes of decreasing prompt dependency. Zero-second time-delay (or simultaneous prompting) is used when you are asking the student to do something he or she has not done before to ensure immediate success. Constant and progressive time-delay are used to encourage student responses without necessitating prompts (Browder & Snell, 2000). Constant time-delay uses a set waiting period (e.g., 5 seconds) before delivering a prompt. Progressive time-delay gradually increases the waiting period from 2 seconds up to 6 seconds with successive trials (Wolery, Bailey, & Sugai, 1988). Teachers should use expectant, positive affect and body language while waiting for a response to encourage a response from the student.

Use Motivational Strategies

Using a *strengths- and interests-based approach* is one way to increase the motivation of students with ASD. Students with ASD often have a restricted range of interests and may have skill deficits in communication, social, and academic skills (see Chapter 1). Much of what is presented to them at school is uninteresting (or boring) and difficult. No wonder many of these children have problems with motivation. Teachers can create a real game changer when they shift from a deficits-based model to a strengths- and interest-based model, which means the majority of instruction taps into the strengths and interests of the student, addressing skill deficits within activities that are also enjoyable and have easy tasks included. *Just Give Him the Whale: 20 Ways to Use Fascinations, Areas of Expertise, and Strengths to Support Students with Autism* (Kluth & Schwarz, 2008) is an excellent resource for considering creative ways to motivate students with ASD by tapping into their strengths and interests.

Teachers can use the *behavioral momentum* strategy (also referred to as *high-probability instructional sequences*) (Mace et al., 1988) to increase the motivations of students with ASD to attempt difficult tasks. This means using a repeated pattern of easy-easy-difficult-easy-easy-difficult to support student motivation. Students with ASD often get anxious and fearful when presented with challenging tasks and have difficulty regulating their emotions, which may result in challenging behaviors. Presenting two or three easy tasks prior to each difficult task, however, can reduce anxiety a great deal. Academic success is one of the most natural reinforcers available to students. Thus, students with ASD are naturally reinforced by quick success when they are given two or three easy problems to solve or tasks to complete. This builds the momentum they need to attempt a more challenging problem or task that comes next. This approach can also be applied by using a repeated pattern of preferred-preferred-nonpreferred-preferred-preferred-nonpreferred tasks to address the motivational needs of students with a restricted range of interests.

Teachers can also use *increased choice making* to increase the motivations of students with ASD. Many people describe the purpose of challenging behavior of students with ASD as a need for control. Considering that many students with ASD have no control over their own bodies due to sensory processing problems, have limited opportunities to make choices

due to communication deficits, and are often unable to effectively negotiate to have more input into decisions made on their behalf, it makes sense that they would engage in challenging behavior to try to have some control over their own lives. This is not a behavior problem, but a basic human need. Therefore, provide as many opportunities as possible for students with ASD to make choices throughout the school day to fulfill this need and improve motivation in the classroom. This can entail choosing study topics, materials, or ways to learn new material (e.g., read, listen to an audio clip, watch a video, have a small-group discussion); choosing who to work with during partner and group activities; choosing how to demonstrate learning (e.g., write an essay, answer multiple-choice questions, draw a picture, give an oral response, deliver a presentation, create a model); choosing scheduling of tasks, and so forth.

Prepare Students in Advance

Many students with ASD get extremely anxious and fearful when a change in the normal routine occurs because their need for sameness, sensory processing problems, social impairments, and other skill deficits. They are able to handle changes much better, however, when they are prepared in advanced using a strategy called *priming* (Koegel, Koegel, Frea, & Green-Hopkins, 2003). Teachers can explain an upcoming change verbally, in writing, or using *social narratives*.

Priming can also be used to prepare students in advance for upcoming lessons and activities in the classroom. Teachers can preteach skills and concepts in small-group or one-to-one contexts to prepare the student for an upcoming whole-group lesson. This will provide the student with essential content and understanding of the lesson format, ultimately reducing the likelihood of challenging behaviors when the actual lesson takes place. Parents can also be involved in priming by preparing the student at home for an upcoming lesson or schedule change.

Make Sure Academic and Behavioral Expectations Are Developmentally Appropriate

Students with ASD may require extensive differentiation of instruction to address their needs, depending on their present levels of academic and behavioral performance. Teachers cannot simply set the same objectives for all students in the class without considering whether the objectives are appropriate and feasible for each student. Using the *shaping* strategy is one way to differentiate. *Shaping* means you reinforce success approximations of a desired behavior (Alberto & Troutman, 2012; Cooper et al., 2007) by first determining the student's baseline performance for a particular behavior or skill (e.g., works independently for 1 minute). Then you set an achievable target (e.g., works independently for 2 minutes) and positively reinforce the student when that target is reached. You continue this pattern until the student reaches the desired outcome (e.g., works independently for 15 minutes).

Partial participation is another way to involve the student in developmentally appropriate instructional activities (Ferguson & Baumgart, 1991). This is primarily used for students with more severe cognitive impairments who can benefit from participating in instructional activities but require adaptations or individualized objectives that will be focused on during the activity. For example, during a science experiment, the students may be required to write a hypothesis statement, conduct the experiment, record the results, and analyze findings. If a student with ASD is unable to meet all of those expectations, then the student can still participate by verbally predicting what will happen, gathering materials for the experiment, conducting specified steps of the experiment, and drawing a picture to show what happened.

Break Down Multistep Assignments Into Sequential Steps

Students with ASD often need support learning how to complete multistep directions and assignments because of problems with executive functioning and attention and focus. Teachers can use *task analysis, chaining*, and *self-monitoring* to address this need. Task analysis

involves breaking complex assignments or directions down into simple, sequential steps and then teaching the steps using forward chaining, backward chaining, or total task presentation (Alberto & Troutman, 2012; Cooper et al., 2007). A teacher using forward chaining teaches the first step, then the second step, and so forth until the student can put it all together and complete the entire task independently. A teacher using backward chaining teaches the last step, then the second-to-last step, and so forth until the student can complete the entire task without support. A teacher using total task presentation involves the student in the entire task, increasing independence with whatever steps the student is ready to perform. *Self-monitoring* tools can be used by students with ASD to provide a visual representation of the individual steps of the task (either in words or pictures) because they often require visual supports to learn due to language impairments, executive functioning challenges, and problems with focus and attention, and students can check off each step as it is completed (Coyle & Cole, 2004). More guidance on implementing task analysis and self-monitoring tools is available at the Autism Internet Modules web site listed in the Resources section at the end of this chapter.

   Point-of-view video modeling is another way to help students learn how to complete multistep tasks and involves showing a video clip of the task being performed from the student's perspective (Hine & Wolery, 2006). A video clip that removes all extraneous information and purely focuses on the steps of the task can be quite effective in teaching students with ASD how to perform complex tasks because they often have focus and attention problems. The video can be shown in its entirety, or *video prompting* can be used to show each step in isolation, and the student can perform the step before the next step is shown (Cannella-Malone et al., 2006).

Refrain From Positively Reinforcing Challenging Behavior

It is quite natural for teachers to respond negatively when students engage in challenging behavior. They may deliver reprimands, show negative facial expressions, remove the child from the activity or classroom, and so forth. Although most would call these things punishment, *punishment* means that consequences are delivered immediately following a behavior that decrease the likelihood that the behavior will occur again in the future. If teachers are honest, then they will admit that these punitive consequences are not decreasing the challenging behavior and actually increase the challenging behavior in many cases. This occurs because the consequences intended as punitive actually serve as positive reinforcement for students who are seeking attention and for those who enjoy the predictable reactions they observe due to their need for sameness. You may think students would not enjoy negative attention, but the truth is that negative attention is more consistently delivered than positive attention in classroom settings without the implementation of teacher training to turn that around (Cook et al., 2017). Thus, students quickly learn that engaging in challenging behavior is the most effective and efficient way to get teacher attention. Teachers should use *differential reinforcement* to address this issue (Alberto & Troutman, 2012; Cooper et al., 2007). You completely refrain from attending to challenging behaviors while increasing your positive reinforcement for desirable behaviors. More information about the multiple ways to utilize differential reinforcement is available through the Autism Internet Modules web site in the Resources section at the end of this chapter.

Provide Expressive Communication Supports

Students with ASD who have expressive communication skills deficits will require support to effectively communicate in the classrooms through the use of *augmentative and alternative communication (AAC).* AAC can be low tech or high tech. Low-tech AAC includes communicating using arrays of pictures or symbols, response cards, and simple switches with prerecorded words or messages. High-tech AAC includes communication devices such as the Dynavox or apps on the iPad or other tablets, such as Proloquo2go. Whether your student is

using low-tech or high-tech AAC, it is important that the student has opportunities to do more than make requests. Students also need to be able to meaningfully participate in academic and social activities using AAC. Contact the assistive technology (AT) specialist(s) in your school district or state for more support. An AT evaluation may be necessary to determine which AAC supports are best for your student. Students with ASD often need AT supports for written expression because of their language and fine motor skills deficits. They may need to type using computer software or specialized devices instead of writing. Although you can use a *scribe* (i.e., have someone write what the student says) you do not want to rely on a scribe alone because it reduces independence. More information on AAC tools is available through the Autism Internet Modules web site in the Resources section at the end of this chapter.

Utilize Peer Supports

Teachers cannot deliver all of the instruction and supports that students with ASD need because they often need intervention in many areas. Peers can be a great source of support for students with ASD, however, if teachers know how to effectively facilitate *peer-mediated interventions* (DiSalvo & Oswald, 2002; Odom & Strain, 1984). Peer-mediated interventions occur when teachers provide training to peers on strategies and approaches to use to engage students with ASD and encourage the use of specific skills. It is important that teachers set up situations using *balanced turn-taking* (Landa, 2007) so that peers can support students with ASD in learning social reciprocity skills. This means that the interactions are designed with clear procedures for facilitating long chains of back-and-forth interactions. Steps for peer-mediated interventions are provided at the Autism Internet Modules web site listed in the Resources section at the end of this chapter.

Embed Social-Communication Intervention Within Existing Routines and Activities

It is important to continually take advantage of naturally occurring opportunities to enhance the social-communication skills of students with ASD. *Incidental teaching* is one way to do this and involves using the student's motivation to encourage the use of targeted social-communication skills (McGee, Krantz, & McClannahan, 1986). For example, if the student wants to play with a soccer ball during recess and runs to go get it, then get there first to provide an opportunity for the student to ask for it instead of just grabbing it. Here is a more advanced example: if the student likes to research different breeds of dogs on the Internet after finishing seat work, require the student to ask for permission to do so, and have a brief conversation about what information will be explored prior to allowing access to the computer.

Teachers can also embed *discrete trials* (Lovaas, 1987) during ongoing routines and activities to teach targeted social communication skills. This involves three basic steps:

1. Provide an antecedent (e.g., ask a question, make a comment, give a direction).

2. Deliver a prompt (if necessary) to support a successful response.

3. Provide positive reinforcement after the student successfully responds.

If the student does not successfully respond, then the third step should involve error correction procedures followed by positive reinforcement after the student is able to correctly respond. For example, the teacher asks the student to name his or her favorite kind of pet during guided reading of a book about adopting a pet. The teacher prompts the student by showing a picture with several pets from which to choose. The student says, "dog." The teacher delivers positive reinforcement by smiling, giving the student a high-five, and saying, "Great! You would love to have a dog!" Several training modules relevant for social-communication intervention are provided at the Autism Internet Modules web site listed in the Resources section at the end of this chapter.

Teach Functional Communication Skills

Many students with ASD engage in challenging behavior because they are not equipped with the functional communication skills needed to express themselves in various situations. For example, children with ASD often do not naturally learn how to say phrases such as, "I don't know," "Can you help me?" "What do you mean?" "I don't feel well," or "I can't do this right now." They may resort to using challenging behaviors to communicate those messages because of this deficit. Thus, it is important to teach functional communication skills based on individualized needs. Many students temporarily lose the ability to use their expressive communication skills when they get upset due to emotional regulation difficulties. Use expressive communication supports, such as visuals and AAC options, to address this fact for students who are nonverbal as well as those who are verbal. More information about teaching functional communication skills is available at the Autism Internet Modules web site listed in the Resources section at the end of this chapter.

Teach Social Problem-Solving Skills

Students with ASD often do not have the social problem-solving skills needed to effectively handle a situation in which they are in conflict with a peer or group of peers. They may resort to aggression or other challenging behaviors because they cannot see a feasible alternative. *Social autopsies* (Lavoie, 2006) and the **SOCCSS** (Situation, Options, Consequences, Choices, Strategies, Simulation) strategy (Myles & Simpson, 2001) are two strategies that can be used or adapted to teach students how to engage in social problem solving. These two strategies are typically used after a problem occurred and was not handled positively to help the student think about alternative choices that could have been made that would have led to desired outcomes without the use of problematic behavior. You involve the student in a dialogue in a social autopsy to identify the following:

- What happened?

- What was the social error?

- Who was hurt by the social error?

- What should be done to correct the social error?

- What could be done next time?

The SOCCSS strategy is used to engage the student in a dialogue to identify the who, what, when, where, and why of the situation; the desired outcome; and various options for alternative ways to handle the situation with associated consequences for each option. The student then chooses the best option(s) for future situations and participates in simulations to practice the selected option(s).

Although the social autopsy and SOCCSS strategies are typically used after a social problem has occurred, these strategies can also be used when a student does utilize positive social problem-solving skills to highlight what the student did well and positively reinforce the student for making good choices. In addition, the strategies can be used during role-play scenarios as a means of explicitly teaching social problem-solving skills. Additional information and resources related to these strategies are available at the Ohio Center for Autism and Low Incidence (OCALI) web site's Autism Center Resource Gallery, a link to which is provided in the Resources section at the end of this chapter.

Provide Scripts to Support Reciprocal Social Interactions

Because many students with ASD have significant deficits in social reciprocity and conversational skills, the script-fading strategy can be quite helpful when the students are working

and socializing with peers (Krantz & McClannahan, 1993). This strategy involves creating a script of what the student and the peer should say in specific situations. Parts of the script are then systematically faded out until the student no longer requires the script to engage in reciprocal interactions during the activity. This can be used during social activities or academic activities.

SUMMARY

This chapter provided information about the MTSS framework and how it can be used to deliver support and intervention to students with ASD in classroom settings. Suggestions for Tier 1 and Tier 2 evidence-based practices that can be used within an MTSS framework to address the unique characteristics and needs of students with ASD were provided. These same strategies and supports can also be used at the Tier 3 level with increased individualization, intensity of intervention, and progress monitoring. When planning comprehensive interventions, it is often best to use many of the strategies included in this chapter in conjunction with one another to achieve desired outcomes. For example, using social narratives, video modeling, self-monitoring, and positive reinforcement to teach a specific replacement behavior would likely be more effective than just using one of those strategies alone. Chapter 3 discusses procedures for conducting FBAs to develop comprehensive behavior intervention plans at the Tier 3 level.

RESOURCES

The following print and online resources provide additional information and tools that will help you implement the recommendations discussed in this chapter.

Print Resources

See *Exploring Feelings: Cognitive Behaviour Therapy to Manage Anxiety* (Attwood, 2004) to learn more about helping students learn to regulate their emotions.

See *Just Give Him the Whale: 20 Ways to Use Fascinations, Areas of Expertise, and Strengths to Support Students with Autism* (Kluth & Schwarz, 2008) to learn more about creative ways to motivate students with ASD by tapping into their strengths and interests.

Online Resources

The Autism Internet Modules web site (http://www.autisminternetmodules.org) provides a wealth of information through training modules that address in depth many of the strategies introduced in this chapter and listed next. Access the home page using the URL provided, use the Module List link to navigate to a list of modules, then follow the link for the specific strategy. Module topics include

- Antecedent-based interventions
- Video modeling
- Social narratives
- Visual supports
- The Incredible 5-Point Scale
- Prompting
- Task analysis

- Self-management/self-monitoring

- Differential reinforcement training

- Picture Exchange Communication System (PECS) and speech-generating devices (SGDs)

- Peer-mediated instruction and intervention

- Discrete trial training, pivotal response training, and naturalistic intervention (used for social-communication intervention during classroom routines and activities)

- Functional communication training

Visit the Explicit Instruction web site at http://www.explicitinstruction.org for more information about explicit instruction.

Visit the National Professional Development Center on Autism Spectrum Disorder web site at http://autismpdc.fpg.unc.edu/evidence-based-practices for more information about evidence-based practices.

Visit educator Paula Kluth's web site at http://www.paulakluth.com to access various resources to learn how to increase the active engagement of students with ASD.

Visit the Resource Gallery of Interventions page of the Ohio Center for Autism and Low Incidence web site at http://www.ocali.org/project/resource_gallery_of_interventions to learn more about social autopsies and the SOCCSS strategy and download related free worksheet templates.