

Autism Spectrum Disorder: Helping Handout for School and Home

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INTRODUCTION

Autism spectrum disorder (ASD) is the term used to describe a range of complex neurodevelopmental disorders characterized by problems with social development, communication, repetitive behaviors and/or restricted interests, and, in some cases, language and cognitive delays (American Psychiatric Association; APA, 2013). Each student with autism will show a unique pattern of behaviors across these areas. That is, students with ASD will not be the same in how they exhibit symptoms. One student with ASD may have very mild symptoms (e.g., limited eye contact, indifferent to feelings of others, irrelevant remarks), while another may have very serious symptoms (e.g., limited speech, tantrums when routines are disrupted, self-injurious behaviors).

In recent decades, the prevalence of ASD has increased considerably. The Centers for Disease Control and Prevention (CDC) currently estimates that 1 in 59 children meet criteria for ASD (CDC, 2018). State departments of education also have reported significant increases in the number of students with ASD. Specifically, the number of students receiving special education services under the autism category of the Individuals with Disabilities Education Improvement Act (IDEIA, 2004) increased from approximately 378,000 students in 2010 to 576,000 students in 2015, an increase of 52% (National Center for Education Statistics, 2016). It is possible that the actual number of students with ASD who need supportive education is greater because some children with ASD may receive special education and related services under a different category.

Supportive services for students with ASD in school should take place within inclusive settings to the extent possible. That is, students with ASD

should be taught in the same classroom with typical, nondisabled peers. Students with ASD who are educated in inclusive settings show improved academic and functional skills, fewer concerns for disruptive behavior, and greater social interaction and engagement (National Autism Center; NAC, 2015). Moreover, having students with ASD in general education classrooms leads to new learning opportunities for typical students.

WHAT TO CONSIDER WHEN PLANNING SUPPORTS

No single intervention strategy or approach is appropriate and effective across all domains (i.e., school, home, community) for all individuals with ASD. Rather, various tools within a toolbox of evidence-based approaches are necessary to develop effective programming (e.g., Sansosti & Mizenko, 2016). Given the growing number of students with ASD who are served within inclusive classrooms, educators and families should work collaboratively to combine evidence-based practices when designing and implementing supports for students with ASD. Those supports should include the following elements:

- *Individualized supports that incorporate choice-making.* The design and implementation of individualized supports should allow the student to select an activity among several available alternatives. For example, a student with ASD may be given the choice of whether to complete math or reading work first during independent seatwork time.
- *Functional programming.* It is essential to use an approach that increases prosocial skills while reducing problem behaviors. The

prevent–teach–reinforce model (see Dunlap et al., 2010) is effective for students with ASD because it prevents problem behaviors from occurring, teaches replacement behaviors, and provides contingent positive reinforcement.

- *Evidence-based instruction within a structured environment.* Interventions should be carefully planned and allow for frequent checks on success (i.e., data-driven progress monitoring). Visual supports and media should be used as needed to prompt the student with ASD to engage in particular behaviors or tasks.
- *Home–school collaboration.* Educators and families should work as partners in educational planning and delivery of supports and services. Such collaboration increases the frequency of learning opportunities for the student and can help to maintain and generalize across settings the skill sets the student has learned in the classroom (e.g., home, school, community), rather than the student using such skills only while in school (Barton & Harn, 2014).
- *Person-centered planning.* Person-centered planning is a process designed to consider the long-term goals of the student. Working together, teachers, family, professionals, friends, and the student (as appropriate) can identify a future vision and provide supports to meet the identified long-term goals. This process is particularly important for students with ASD who are reaching transition milestones (e.g., college or career readiness, independent living). For guidance on person-centered planning, interested readers should go to the Learning Community for Person Centered Practices (<http://tlcpcp.com>).

RECOMMENDATIONS FOR SCHOOL AND HOME

Because the individual needs and abilities of students with ASD can vary, some of the following approaches may be more applicable to some individuals than others. While not exhaustive, these recommendations align with the broader evidence-based tools that are effective for promoting skill development in students with ASD.

Improving Academic Skills

1. ***Simplify instructions by reducing the number of steps or words.*** Repeat multistep directions and check for understanding whenever directions are

given orally. If possible, put directions in writing (e.g., task list or job card that includes step-by-step directions).

2. ***Allow time for the student to process information.*** Only ask a question again after 10 seconds have passed (to avoid disrupting the student's thinking process).
3. ***Present materials (e.g., worksheets, tests) in sections.*** Or use fewer items per page, and give the student one section or page at a time. In this way, the student is better able to stay on task and receive more feedback.
4. ***Use color-coding to improve organization.*** Keep all signs, folders, and containers of particular subjects a uniform color (e.g., blue for reading, red for math)
5. ***For reading instruction, use visual supports.*** Apply supports such as the following before, during, and after reading:
 - Before a reading activity, help students use what they already know about a topic to understand new information. One easy method is to have the student look at pictures or specific text (i.e., bold print words) and predict what the text is about. Graphic organizers (e.g., topic wheel) also can be used to engage the student. One particularly useful strategy for students with ASD is a picture walk. During a picture walk, the student looks at illustrations in the book and makes predictions about what might happen.
 - During reading, engage students in processing of information. This can be accomplished using semantic maps. Maps are a type of visual aid that helps students understand and recall the meaning of words they read. Maps also can be used to help the student understand the timing of events and how the characters in a story influence one another. When applicable, use anaphoric cuing (a process of self-correction) to help the student understand pronouns (e.g., when the student reads the word “he,” check for understanding by asking “Who is he?”).
 - After reading, help students summarize what they read. This promotes more thoughtful understanding. A basic method is to ask students what they learned from the story. Because students with ASD may have difficulty understanding emotions and feelings of characters, teachers can use emotional thermometers (e.g., a shaded bar) and

descriptive words to represent varying levels of emotional intensity (e.g., a little happy, very happy) for understanding and describing the emotions of characters within the story to the student.

6. **For writing instruction, use visual organizers or semantic maps to assist in formulating content for activities.** Teach self-management strategies for editing, such as mnemonic strategies and checklists to ensure correct spelling, grammar, and punctuation. If necessary, allow students to use a style that is easier for them (e.g., print vs. cursive), or use a computer or other assistive technology.
7. **For math instruction, use manipulatives as a visual and tactile means of learning basic facts.** For students with organizational difficulties, use graph paper or turn lined paper on its side to keep numbers in the correct place. Teach key words used in word problems that indicate the appropriate action (e.g., *increased by...*, *more than...*, *sum...* for addition).

Providing Behavioral Supports

8. **Eliminate distractions so the student can concentrate.** Keep the classroom simply decorated (objects hanging overhead can be distracting). Eliminate distractions on the student's desk.
9. **Create and post daily schedules.** The schedule should include activities for the entire school day or during a specific class, period, or event. When possible, incorporate periods of physical activity into the daily routine. Increased physical activity helps reduce stereotypical or self-stimulatory behaviors, and relieves stress.
10. **Use visuals supports.** Class rules, schedules, passes, checklists, activity plans, job cards, and first-then boards provide clear expectations regarding rules, rewards, consequences and increase motivation.
11. **Teach and reward behaviors that you want the child to display.** Demonstrate to the student what preferred behaviors look like. Make sure the student understands exactly how to earn rewards for good behavior. Reward expected behaviors when observed to increase the likelihood of them happening again. Choose rewards (e.g., an item, activity, praise) that are motivating to the child with ASD.
12. **Use a token economy.** Increase ongoing positive reinforcement to the student by providing tokens (e.g., poker chip, coupon, play money) for

completing tasks or behaving in a desired way (e.g., remaining on task, talking to a peer). The basic principle is that the child earns a certain number of tokens by engaging in an expected behavior and can then exchange the tokens to gain access to a desirable reward (e.g., computer time).

13. **Teach the student self-management strategies.** Explicitly teach goal setting, self-instruction, and self-monitoring. For increased effectiveness, pair direct skills lessons with visuals supports or token economies.
14. **Avoid punishing the child.** The use of punishment usually only results in immediate, short-term control of a situation. It does not provide long-term behavior change.

Enhancing Social–Emotional Functioning

15. **Help the student identify stress levels.** Use visual methods such as an emotional thermometer. The emotional thermometer can be used to discuss with the child how he or she is feeling (e.g., rage, anger, calm), and it can be used to offer simple strategies of how the child can deal with certain emotions (e.g., take deep breaths, ask for a break). Make sure both parents and teachers use the same strategies.
16. **When possible, allow time during the day for the student to relax.** Having a plan in place will help make relaxing part of the student's day, such as follows:
 - Provide a quiet area or place that will allow the student to work quietly, or provide a place to calm down when stressed.
 - When the student is becoming stressed or anxious, prompt the use of imagery or deep breathing exercises to refocus negative thoughts.
 - Teach the student to use positive self-talk (e.g., "I can do this; I don't need to yell; I will just try my best.").
17. **Use peers to promote and prompt the student in appropriate conversation in natural settings such as lunch or recess.** This helps to decrease the likelihood of social isolation and provides the student with opportunities to engage in kid-friendly conversation.
18. **Directly teach or guide social skill development through small groups.** To be optimally effective, use the following approaches:
 - Identify and target specific social skills (what you want to student to do).

- Distinguish between skill or performance deficit. A skill deficit exists if the student cannot perform the expected behavior. A performance deficit exists when the student has the skill but does not engage in the behavior when needed.
 - Provide direct instruction from curricula designed for teaching social skills. Identify lesson plans and activities for teaching specific skills (e.g., turn-taking), as well as when, where, and for how long instruction will occur.
 - Enhance instruction by using visual strategies (e.g., Social Stories™, Power Cards, video modeling). Develop a series of video models to teach specific skills (e.g., social initiations, basic interactions, turn-taking, compliment giving). Use modeling, role-playing, scripting, and multiple opportunities for practice.
 - Monitor student progress. Ideally, observe the student during unstructured activities (e.g., recess, lunch).
19. **Use computers or mobile devices to supplement social skills instruction.** Teachers and families should share effective software and apps that teach and/or prompt responses in social situations. Provide explicit examples of appropriate behavior.
20. **Develop a Circle of Friends network.** This is a small group of students who meet on a regular basis to help build friendships. This strategy can reduce social isolation.

Promoting Ongoing Family–School Collaboration

21. **Recognize families as experts in working with their child.** Collaborate and engage them in joint planning, action, reflection, and feedback about their child's education and progress.
22. **Develop a system of open, ongoing communication between educators and the family.** Share information about the child's progress and any upcoming changes by doing the following:
- Use a school-to-home notebook between the teacher and family to share information about progress, upcoming activities, and concerns. The notebook can be included in the student's bookbag or backpack and reviewed by parents daily.
 - Create a “change in routine” notification system, such as a card that goes home with the student or to school the day before a new activity or major change in the schedule is to take place.
- Adjust the frequency of communication depending on the student's needs.
 - Use newsletters, e-mails, phone calls, and meetings to communicate. Make sure that parents and teachers know the best ways to reach each other.
23. **Provide a monthly support group.** Families may benefit from opportunities to share their experiences, successes, challenges, and family impact. Support groups also can include community experts who provide information on specific topics (e.g., respite care).
24. **Create an ASD resource library for families.** This library can be organized within the school or hosted on the school website. Provide families access to the most contemporary resources, including books, videos, community pamphlets, and more.
25. **Provide opportunities for training or workshops for both teachers and families.** Training should correspond with those interventions that are coordinated within the school and help students learn.

RECOMMENDATIONS FOR HOME

Although many of the strategies listed above can and should be used within the home and community environments, some supports are relevant mainly to parents. Families play a key role in the transition of effective practices from the school to the home or community. Parents can integrate recommended strategies for learning into the family's natural activities without disrupting the flow of routines.

26. **Create a quiet, private space in the home.** Provide a predictable area where your child can calm down when stressed. Include a variety of tactile and sensory items in the area, such as blankets, a disk seat, a sound dock to play music, or toys. Sensory items should be organized into bins or storage containers so as not to become too visually overstimulating. The key is to teach your child times when he or she should use this private space as a location for self-regulation. This likely will involve some sort of prompt (e.g., when you notice your child's increased stress or immediately following a challenging activity). Over time, your child will learn to use this space independently.

27. **Organize the home.** The home environment can be organized in a variety of ways to lessen the child's anxiety. These can include keeping objects in a special place to keep them from going missing or using color-coded bins for storage of common items. For extra support, label bins, cupboards, closets, and other items as a reminder of where things are kept.
28. **Create a consistent routine and use posted schedules.** Print out and laminate simple morning, afternoon, and evening routines using pictures and words.
29. **Incorporate exercise into daily activities.** Exercise can reduce stress and anxiety, as well as improve sleep, reaction time, and memory. Schedule times during weekdays and on weekends for your child to engage in independent activities (e.g., climbing, hanging on a jungle gym, jumping rope), as well as have more collaborative experiences (e.g., riding a bike, hiking, group sports) that promote social skills.
30. **Play games that focus on developing social and communication skills.** Use fun activities and games to teach your child how to read faces and interpret emotions. For example, you can play emotions charades, where you take turns acting out words and displaying how that particular emotion looks. As the child becomes better at the game, you can make it harder by having players demonstrate body language that would show a certain emotion (e.g., for sadness, the child has to draw someone sitting alone).
31. **Give yourself permission to take a break.** As a caregiver of a child with ASD, you likely are under a great deal of stress. Taking a break is important and necessary for your own mental health so that you can be at your best. Options for respite care include calling on friends and family, identifying members through your state's Developmental Disabilities and Family Services offices, or using the National Respite Network (<https://archrespite.org/respitelocator>) locator service.

RECOMMENDED RESOURCES FOR TEACHERS AND FAMILIES

Websites

www.nationalautismcenter.org

The website for the National Autism Center provides information and resources regarding evidence-based interventions for ASD.

www.dec-sped.org/dec-recommended-practices

The website for the Division for Early Childhood of the Council for Exceptional Children provides guidance to educators and families regarding the most effective ways to improve learning outcomes.

Books

Rogers, S. J., Dawson, G., & Vismara, L. A. (2012).

An early start for your child with autism: Using everyday activities to help kids, connect, communicate, and learn. New York, NY: Guilford Press.

This book provides examples and proven strategies for using everyday activities to promote play, language, and engagement.

Sansosti, F. J., Powell-Smith, K. A., & Cowan, R.

J. (2010). *High functioning autism/Asperger syndrome in schools: Assessment and intervention.* New York, NY: Guilford Press.

This book provides tools for improving the educational outcomes of students, including the tools described in this handout.

RELATED HELPING HANDOUTS

Self-Management: Helping Handout for School and Home

Social and Emotional Learning: Helping Handout for Home

Social and Emotional Learning: Helping Handout for School

Using Praise and Rewards Wisely: Helping Handout for School and Home

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Frank J. Sansosti, PhD, is assistant director of Lifespan Development and Educational Sciences and professor and coordinator of school psychology at Kent State University. His primary research and professional interests focus on the provision of best-practice instruction and intervention to students with autism spectrum disorder (ASD) and related low-incidence disabilities. His work has focused on evidence-based principles of effective school-based interventions, the use of technologically derived instruction, and effective transition planning and service delivery. Dr. Sansosti is

acknowledged for his hands-on approach for extending research to practice.

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