Life Journey Through Autism: An Educator's Guide to ASD (Level 1 Supports)







ORGANIZATION FOR AUTISM RESEARCH

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Organization for Autism Research

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Dear Educators,

As the father of four now adult children, two of whom have autism, I know firsthand the impact that a teacher can have on the lives of a student. The work you do is often not fully appreciated. So, let me begin by thanking you for what you do as an educator and what it means to our youth and the future of our country. Thank you.

The guide you are holding, *An Educator's Guide to ASD* (*Level 1 Supports*), replaces one of our most successful resources, *An Educator's Guide to Asperger Syndrome* (2005). We've revised and published it under a new name to make the language and terminology consistent with



Autism Spectrum Disorder (ASD) as defined by the latest Diagnostic and Statistics Manual, DSM-5, and at the same time incorporate new methods and strategies for teaching children with ASD that have become current practice since 2005. Such revisions to this guide include changes in legislative updates; evidence-based academic and environmental strategies; guidelines for transitions; and more. I hope you find it useful.

ASD presents a range of challenges in the classroom setting. It affects the way a child thinks, feels, and behaves. As you will read in this guide, the new DSM criteria uses a single classification, Autism Spectrum Disorder (ASD), to replace the sub-types used in the previous DSM, and makes distinctions based on three levels of severity, Level 1, Level 2, and Level 3, with Level 1 requiring the more common supports. The bottom line for you, the teacher, is that the severity level of a child's diagnosis will be an indicator of what to expect. This guide primarily discusses students with ASD needing Level 1 supports. What that means in actual practice, only the student, the parents, and you will soon find out.

This guide is designed to give teachers and other professionals an introduction to Level 1 ASD, some of its characteristics, and several classroom teaching strategies. It is meant to serve as a starting point for further learning; it does not have all the answers. Each child with ASD regardless of severity level is different; this book will help you recognize the specific challenges faced by the child(ren) with ASD in your class, and help you prepare your classroom appropriately.

I'd be remiss if I did not take this opportunity to thank all those who worked to put this book together, most notably the principal authors, Mellissa Savage, Ph.D., from the Frank Porter Graham Institute at the University of North Carolina, and Diane Adreon, Ed.D., University of Miami, Center for Autism and Related Disabilities. Special thanks to the OAR Research and Programs staff, Kimberly Ha and Saman Kamgar-Parsi, and the parents, teachers, and others who reviewed earlier drafts of the guide and provided feedback that made it better. The collective work of this team has produced a resource that is more personal, practical, and targeted.

Finally, as you read and refer to this guide, it is our hope that it will help you as you strive to make your classroom the best possible learning environment for all your students, including those with ASD.

Sincerely,

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INTRODUCTION

As a teacher, you are responsible for helping shape the lives of young people and preparing them to be successful adults. Your students may come from different family backgrounds and leave your classroom for different futures, but they spend a significant portion of their young lives with you right now. Next to their parents and immediate family, you have the greatest opportunity and power to positively influence their lives. To do this successfully, you need to understand and be able to meet their needs. As you already know, in addition to intelligence, passion, and enthusiasm, teaching requires patience, sensitivity, and creativity.

Having students with autism spectrum disorder (ASD) in your classroom presents unique challenges for you as a teacher, but it also gives you the opportunity to learn new ways to teach them academic and social skills that will last them a lifetime. Autism spectrum disorder (ASD) is the name for a neuro-developmental disorder that is marked by deficits in social communication and social interaction as well as restricted or repetitive patterns of behavior, interests, or activities. The severity level of these deficits ranges widely and, therefore, impacts the kind of supports a student may need.

School eligibility for special education services is different than a clinical diagnosis of ASD. When individuals are clinically diagnosed as having ASD, the diagnostician usually specifies a severity level. A Level 1 severity level indicates the individual requires support, but not as much support as those with a Level 2 or a Level 3 severity.

In order to qualify for academic supports and services in the classroom, a student must receive either a medical diagnosis or an educational determination of ASD. A medical diagnosis is not the same as an educational determination. This distinction is important to know, for example, when attempting to access medical services and determining eligibility for scholarships later down the road.

Medical diagnoses are guided by the DSM-5 and performed by qualified, licensed professionals (often a clinical psychologist, psychiatrist, medical doctor, or developmental pediatrician). Educational determinations, on the other hand, are guided by the IDEA. A school psychologist or psychiatrist typically conducts an educational evaluation to determine whether the student is eligible to receive academic services and supports.

Within the school setting, a student with a Level 1 severity of ASD may have support needs similar to those of students previously identified as having Asperger Syndrome (AS). AS was recognized as a pervasive developmental disorder in the 4th edition of the American Psychiatric Association's *Diagnostic Manual of Mental Disorders* (DSM-IV; DSM-IV-TR); however, the term was removed from the most recent, 2013 DSM-5, edition and subsumed under the umbrella term *autism spectrum disorder*. But although

the clinical terminology has changed, many students who initially received diagnoses under the previous edition of the DSM still self-identify as having AS, and the term *AS* is still commonly used and accepted within the autism community.

Severity Levels for Autism Spectrum Disorder

Level 1—Requiring support Level 2—Requiring substantial support Level 3—Requiring very substantial support

As a result of the passage of the Individuals With Disabilities Education Act (IDEA) in 1975 and subsequent legislation, all qualified students with disabilities are entitled to a free and appropriate public education. Today, inclusive classrooms, where students with all types of disabilities are included in the general education classroom for part or all of the school day, are the norm in public schools. Given the increasing number of students diagnosed with ASD (about 1 in 68 students; Centers for Disease Control and Prevention, 2014), therefore, there is a very good chance that you will have a student with this disorder in your classroom at some point.

Having a student with ASD in your class will have an impact on the educational and social environment of the classroom. These students have academic strengths and weaknesses like all students, but the effects of their disorder often require different teaching strategies to maximize students' strengths and facilitate successful

learning. These students also face many obstacles to successful social interactions and relationship building, which are essential elements of their school experience.

As a teacher, you can help ensure that students with ASD are meaningfully integrated into the classroom and are able to participate socially with their peers in the day-to-day activities of school life.



Since 2013, Asperger Syndrome is no longer a separate subtype of pervasive developmental disorders and was excluded from the American Psychiatric Association's Diagnostic Manual of Mental Disorders, 5th Edition (DSM-5). As a result, there is currently only one diagnosis of ASD. When an individual is given a clinical diagnosis of ASD, the severity of deficits should be identified (i.e., Levels 1-3) for both the social communication and interaction domain and repetitive/ restrictive patterns of behavior, interests, or activities.

The first challenge in teaching a student with ASD is to recognize it as a mutual challenge for the student and you. ASD can be invisible to the untrained eye. That is, students with ASD look and act like their typical peers and can often perform as well or better academically, thus masking the effects of ASD.

Note: This guide specifically focuses on teaching students with Level 1 ASD. It uses the DSM-5 terminology (i.e., Level 1 ASD) to refer to students on the "higher" end of the spectrum. Whether the student with whom you are working could have been, or was previously, diagnosed with Asperger Syndrome, high-functioning autism, or even nonverbal learning disability, it is important that you evaluate the recommendations and strategies contained in this guide based on your student's need, and not solely on his or her diagnostic label.

This guide does not address strategies for teaching students on the autism spectrum who have more intense support needs (i.e., Levels 2–3 ASD). Please consult additional resources for information on teaching students with ASD who have more intense support needs.

The Purpose of This Guide

This guide is designed to help you understand and respond effectively to the needs of students with ASD in your classroom. Of course — like all students — each student with ASD is different and has different needs, so given the information presented here, you will need to find your own style for supporting each student's classroom experience.

This guide is meant to orient you to the challenges and skills of students with ASD and outline strategies that you can easily implement to meet their needs. More specifically, the goals of this guide are to:

- Educate you and help you prepare for having a student with ASD in your classroom. The guide begins with background information on the characteristics of ASD, a description of the range of behaviors a student with the disorder might display, and a brief overview of helpful educational approaches.
- Describe the use of appropriate academic strategies and environmental supports to promote classroom success for a student with ASD. The guide includes a variety of approaches to help teachers and other school personnel meet the academic and environmental needs of a student with ASD in the classroom.
- Promote the development and use of strategies that foster successful peer relations and social interactions for a student with ASD. The guide describes several approaches that can be used to address the social challenges ASD presents. It also discusses the importance of peer education and provides resources for improving social interactions between a student with ASD and his or her typically developing peers.
- Encourage communication and collaboration with the parents of a student with ASD. Parents are your best source of information on the student's educational and behavioral needs. As such, they may share strategies and treatments that are effective at home. Like any student you teach, the student with ASD

benefits most when teachers and parents work together, and efforts in the home and at school are mutually supporting.

The heart of this guide is a seven-step plan (see pages 15–30) you and your team can use to prepare for having a student with ASD into your classroom. The seven steps are simple and highly flexible — think of them as continuing and often concurrent actions.

The Appendices in the back of the guide offer detailed strategies for developing and providing academic, environmental, and social supports, including the role technology can play in supporting students with ASD in the classroom. The Appendices also include information to help teachers work with parents and other educational professionals to develop Individualized Education Programs (IEPs) and plan for transitions related to school and adulthood.

Throughout the text, you will find images with text boxes that highlight important facts, point you toward additional information in the appendices, or provide links to online resources. Look for the following icons:

- The light bulb icon denotes an autism fact related to education.
- The computer icon denotes a reference to an online resource.
- The speech bubble icon denotes a safety tip or quote from a student, educator, or other community member.
- The sun icon denotes a reference to an appendix in the back of this guide.

BACKGROUND

What Is ASD?

ASD is a complex developmental disability that is marked by impairments in social communication and social interaction as well as restricted/repetitive behavior, interests, or activities. Although the characteristics of ASD differ from person to person, common effects of the disorder include the following:

- Trouble understanding social cues and conversational language styles
- An inflexible adherence to a nonfunctional routine or ritual
- Repetition of movements or words and phrases
- Hyper- or hyporeactivity to sensory input (e.g., adverse response to specific sounds)
- A persistent preoccupation with objects or narrowly focused topics of interest

While most of us possess some of these characteristics, it is the excessive presence of these characteristics that makes life challenging for individuals with ASD and, therefore, dictates the need for special supports. ASD is a neurological disorder, which means that individuals with the disorder often have difficulty controlling certain behaviors. Further, certain underlying psychological and medical bases of the disorder affect how students process information and behave in the classroom. Finally, it is important to note that these behaviors are neurologically based and do not represent willful disobedience or noncompliance. While AS is no longer included in the DSM-5, a person with a prior diagnosis of AS does not need a new evaluation and retains the diagnosis of ASD.

What Are the Three Severity Levels of ASD?

The severity level that accompanies a diagnosis of ASD symptoms is the first indicator of a student's support needs. A student with a Level 1 severity level typically requires fewer and less intensive supports than students with a Level 2 or 3 severity. For example, students with Level 1 ASD may be able to speak fluently in full sentences, but be less successful in reciprocal conversations with others due to their failure to understand context or nuance. Thus, their attempts to make friends can be odd and are frequently unsuccessful.

When an individual is diagnosed with ASD, the clinical summary should indicate:

- The level of severity of the social communication and interaction impairment
- The level of severity of the restricted/repetitive patterns of behavior, interests, or activities
- Symptoms were present in early development

- Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning
- Consideration that the disturbances are not better explained by intellectual disability or global developmental delay
- If ASD is with or without accompanying intellectual disability
- If ASD is *with* or *without* accompanying language impairment
- Any association with a known medical or genetic condition or environmental factor
- Any association with a mental disorder

Knowing details like these will help you as you learn about your student and work to design appropriate teaching strategies.

What Does Level 1 ASD Look Like?

As mentioned above, the main characteristics of ASD involve impairments in social communication and interactions as well as restricted/repetitive behaviors, interests, or activities. These characteristics exist on a continuum, ranging from minor to severe impairment.

Each student with ASD is different and, as such, presents his or her unique strengths and challenges. The chart below lists characteristics a student with ASD may exhibit that can impact the classroom experience. As emphasized previously, however, each student with ASD is unique and may display some, many, or none of these behaviors. Each of these areas is described in more detail in the following pages.

Common Characteristics of Persons With ASD

Social Communication and Social Interaction

- Lack of understanding of social cues and social nuances
- Literal interpretation of others' words
- Difficulty engaging in reciprocal conversation
- Tendency to speak bluntly without regard for the impact of words on others
- Universal application of social rules to all situations
- Focus on a single topic of interest that may not be of interest to others
- Poor judge of personal space-may stand too close to other students
- Abnormal voice inflection and eye contact
- Inappropriate facial expressions or gestures
- Difficulty interpreting others' nonverbal communication cues

Restricted/Repetitive Patterns of Behavior, Interests, or Activities

- Inflexibility of behavior—same morning routines, rigid thinking patterns
- Difficulty coping with schedule changes
- Difficulty switching focus from one subject to the next
- Problems with organization and planning
- Excessive smelling or touching of objects

Identifying ASD Among Undiagnosed Students

Just like their parents, you play a significant role in identifying possible developmental issues in your students. If a student exhibits signs of ASD, there are several screening tools you can use to aid identifying ASD. One such tool is the Think*Asperger's* mobile app: <u>https://www.autismcenter.org/thinkaspergers</u>. Although positive screening results from tools like this do not necessarily confirm the presence of ASD, they can help you determine whether to refer the student for a formal evaluation.

What Are the Classroom Challenges?

The characteristics of ASD just described translate into challenges in learning, behavior, and socialization for students with ASD. And as a result, they can pose significant difficulties for you in terms of teaching, controlling behaviors, and maintaining a classroom environment that is conducive to learning for all students.

The chart below provides a quick reference guide to some of the common challenges students with ASD have in the classroom.

Interests limited to specific topics	Low frustration tolerance
Insistence on sameness/difficulty with changes in routine	Poor coping/emotion regulation strategies
Inability to make friends	Restricted range of interests
Difficulty with initiating and/or sustaining reciprocal conversations	Poor writing skills (fine-motor problems)
Pedantic speech	Poor concentration
Socially naïve and literal thinkers	Academic difficulties
Tend to be reclusive	Emotional vulnerability
Difficulty with learning in large groups	Poor organizational skills
Difficulties with abstract concepts	Appear "normal" to other people
Problem-solving abilities tend to be poor	Motor clumsiness
Vocabulary usually great; comprehension poor	Sensory issues

Common Classroom Challenges of Students With ASD

It is important to recognize how ASD impacts a student, and how those effects can translate to behaviors that pose challenges in the academic environment. Some of these difficulties may contribute to behavioral problems in the classroom, and may be misinterpreted as "spoiled" or "manipulative" behavior, resulting in the mistaken impression that students with ASD are defiant "troublemakers." Inappropriate behaviors are usually not willful, even if the student's strengths and abilities may obscure this at first glance. More often, they are a function of poor coping skills, low frustration tolerance, anxiety, and difficulty reading social cues.

A Functional Behavioral Assessment (FBA), which is a process of identifying the purpose and causes of undesirable behaviors, can lead to the development of an intervention plan that helps replace disruptive behaviors with socially appropriate behaviors.

Note: From *Inclusive Programming for Elementary Students With Autism*, by Sheila Wagner, M.Ed.

How Does ASD Affect a Child?

Social Communication and Interaction

Social impairments, a hallmark trait of ASD, are among the greatest challenges for students with ASD. Although many students with ASD want to have friends, their social skills deficits often isolate them from their peers. For example, building and maintaining social relationships and friendships can be difficult because of students' failure to understand social cues, poor nonverbal and verbal skills, literal interpretation of others' words, and language comprehension problems.



"Kids with ASD want to interact socially but haven't learned from watching and doing like other students. Often times, social interactions with smaller groups and with adult supervision are more successful for these children. Explaining a sequence of events and even giving a sample script

helps them succeed."

—Mother of a 12-year-old diagnosed with Asperger Syndrome

Further, their impaired social skills often make students with ASD the object of teasing, victimization, and bullying by their peers, especially in middle and high school where social differences become more evident and take on greater importance within peer groups.

Here are some of the common social communication and interaction difficulties experienced by students with ASD:

• **Conversational style:** Students with ASD often exhibit a one-sided, social interaction style marked by abnormal inflection of words and phrases that do not match

those of their conversational partner. When conversing with a student with ASD, you often get the impression that you are being *talked at* instead of participating in a reciprocal conversation. Many students with ASD find it easier to converse with adults than peers because adults often bridge students' social deficits to sustain a conversation.

- **Special interests:** Some students with ASD have unique special interests that consume much of their energy and time and often dominate their conversations. Examples of such intense interests include light rail transport, the solar system, or how plumbing systems work. The students share information about the topic regardless of others' input or interest, and may not pick up the cue that others are unengaged or ready to switch topics. It may help to limit the student's urge to discuss special interests and to teach ways to recognize social cues of disengagement.
- **Bluntness:** Many individuals with ASD tend to "blurt out" exactly what comes to mind, which can make them seem rude and insensitive. Utterances such as "Those pants make you look fat" or "Your breath smells really bad" are examples of ways a student with ASD might state an otherwise "true" observation in an extremely honest yet indiscrete manner. It is important to understand that the student is not intentionally being mean when saying things like this.
- Social rules: Students with ASD are poor incidental learners they don't learn from watching others around them. Instead, in an attempt to understand the social world, they tend to apply inflexible and universal social rules to all situations. This is an unsuccessful strategy that often causes problems. Social nuances, often referred to as the "hidden curriculum," are aspects of socialization that typical students learn through daily experience and do not have to be taught. Most students with ASD need to be explicitly taught those same skills and allowed to practice them in a variety of settings. Every classroom, school, workplace, and society has its own hidden curriculum. It is incumbent upon the teacher, in collaboration with the parents of the student with ASD, to identify the key elements of this curriculum and develop a plan to teach it to students who do not pick it up naturally.

Recurring burping is acceptable behavior for young children when they are with their peers. However, most students do not have to be taught that repetitive burping in public is neither polite nor appropriate. Max, who has ASD, observes students laughing and belching loudly in the hallways and during lunch. Much to his surprise, he was punished for belching loudly in quick repetition during the middle of class. He had mistakenly perceived burping to be socially acceptable, failing to understand that the change in setting required a different set of rules.

• **Social aspects of language:** Students with ASD often find it difficult to maintain a conversation unless it pertains to a narrowly defined area of personal interest.

As a result, they may discuss at length a single topic that is of little or no interest to others and speak with exaggerated inflections or in a monotone fashion. This adult-like and pedantic speech can make them seem "weird" to their peers, further exacerbating their social isolation.

• Abstract concepts: The effects of ASD can make it difficult to understand the many abstract concepts that present themselves in conversation, including different meanings of the same word. As a result, students with ASD often struggle with language that involves metaphors, idioms, parables, allegories, irony, sarcasm, and rhetorical questions.



The phrase "There's no sense in crying over spilled milk" would cause most students with ASD to think that someone had literally spilled milk, when in fact we use that phrase to mean, "What's done is done."

• Nonverbal communication: Students with ASD may have difficulty using nonverbal communication effectively and appropriately. Examples include limited or inappropriate facial expressions and gestures, awkward body language, difficulty with social proximity (standing too close or too far away during a conversation), and peculiar or stiff eye gaze. Conversely, students with ASD also have difficulty reading, interpreting, and understanding the facial expressions and body language of others.

Cognition

Although students with Level 1 ASD may have average to above-average intelligence, they may have cognitive deficits that can lead to social and academic difficulties. Common examples of these deficits and their effects include the following.

- Academic challenges: Students with ASD may have cognitive difficulties that impact their academic performance. These difficulties can result from:
 - ° Poor problem-solving and organizational skills
 - Need for perfectionism that interferes with project completion
 - ° Concrete, literal thinking—difficulty understanding abstract concepts
 - Focus on details while missing the key concepts or the "big picture"
 - Difficulty differentiating between relevant and irrelevant information
 - Difficulty inferring emotions of others from text (perspective-taking)
 - Interests that are obsessive and narrowly defined
 - ° Low social standing among peers
- Emotions and stress: ASD affects how individuals think, feel, and react. When under stress, people with ASD may have increased difficulty coping, and tend to react emotionally, rather than logically. To some, it is as if the "thinking center" of their brain becomes inactive, while the "feeling center" becomes highly active. All too often, students with ASD react without thinking, which may lead

to problem behaviors. Even when they learn how to respond more appropriately, they may not be able to retrieve and use the newly learned behavior when under stress. Instead, they may default to a more established, but inappropriate, pattern of behavior.

- Generalization: Students with ASD often face difficulty generalizing and applying the knowledge and skills they learn across situations, settings, and people. Despite sometimes having above-average rote memorization skills, people with ASD typically store information as disconnected sets of facts, giving the inaccurate impression that they have mastered the information or skill because they are able to recite a rule or set of procedures. In reality, however, students with ASD typically experience difficulty applying new information to new contexts. In addition, since it sometimes requires more effort for them to know when and how to perform the skills, they may also have difficulty maintaining them over time, even after being explicitly taught.
- "Theory of mind": This concept refers to the fact that individuals with ASD generally do not understand that other people have their own thoughts and feelings and that they may be different from theirs. As a result, students with often have difficulty interpreting or predicting the emotions and behaviors of others. Because they are unable to "put themselves in another's shoes," they may appear uncaring or self-centered, but there is no evidence to support claims that they tend to feel superior to others.
- Executive functioning: Executive functions refer to neurological processes that help us make decisions, initiate actions, and plan for future events. They also play a part in impulse control, strategic thinking, "big-picture" thinking, and cognitive flexibility (the ability to transition or shift focus between two or more activities, or to adapt to new or unexpected changes). These functions may be impaired in students with ASD, which can have a serious impact on classroom behavior and performance. For example, these students may have difficulty recognizing the most important topics within lectures and reading materials, and may fail to understand the "big picture" of a given assignment or project.

Sensory Issues

Students with ASD may have problems processing information from one or more of the seven sensory systems: tactile (touch), vestibular (balance), proprioception (movement), visual (sight), auditory (hearing), gustatory (taste), and olfactory (smell). Each sensory system has specific receptors that collect information and relay it to the brain. These processes, which often work together at an unconscious level, play a role in attention and learning. Students with ASD may be more sensitive ("hypersensitive") or less sensitive ("hyposensitive") to sensory stimuli. These challenges can lead to many disruptive behaviors and unpleasant emotions.

Sensory System Impact on Students With ASD

Tactile System—Touch

The tactile system provides information about objects in the environment. Tactile hypersensitivity may involve physical discomfort when coming into contact with someone or something that others might not register. Standing in line, taking a bath, unexpected touch, touch that is either too light or too heavy, and using a glue stick present potentially stressful situations for tactilely defensive individuals. In contrast, individuals who are hyposensitive fail to respond to the touch of others, yet often use touch to explore the environment for the tactile input they prefer.

Vestibular System—Balance

The vestibular system is stimulated by movement and changes in head position. Individuals with vestibular hypersensitivity have low tolerance for movement and exhibit difficulties with changing speed and direction. For example, they may experience nausea from spinning and have difficulty sitting still; others may display gravitational insecurity. Some may seek out sensory stimulation by spinning, flapping, crashing into things, or rocking. They might be considered clumsy, or have difficulty "switching gears."

Proprioception System—Movement

The proprioceptive system makes carrying multiple objects (e.g., backpack, books, musical instrument) down a packed hallway possible by providing information about the location and movement of a body part. For some, these movements do not come naturally. Problems in the proprioception system can result in poor posture, a lack of coordination, and chronic fatigue accompanying physical activity. Some students do not receive accurate information from their bodies about how hard or soft they are hitting or pushing something. This can result in their using too little or too much force when tagging a peer or kicking a ball.

Visual System—Sight

Compared to other sensory areas, the visual system appears to be a relative strength for many students with ASD. The problems that do arise in this area are often related to hypersensitivities to light, poor hand-eye coordination/depth perception, and hyposensitivities that make finding an object "in plain sight" difficult. Some students may have perfect 20/20 vision, yet have difficulty with visual tracking and convergence. Other students seek sensory stimuli, such as tracking moving or spinning objects, or a speaker's animated hands. These types of problems may be detected through an exam by a behavioral ophthalmologist or optometrist.

Auditory System—Hearing

Despite intact hearing abilities, students with ASD may not efficiently or accurately interpret auditory information. They may be hyper- and/or hyposensitive to noise, responding negatively to loud or small noises and failing to respond when their name is called. In either case, they may show no discomfort when emitting loud vocalizations themselves.

Gustatory and Olfactory Systems—Taste and Smell

Issues related to the taste system manifest themselves in avoidance of certain foods, eating a very circumscribed diet, and/or being very picky about foods. Closely related to the sense of taste, the olfactory system is most often characterized by a hypersensitivity to many of the smells that others enjoy or fail to notice.

To compensate for hyper- or hyposensitivity to sensory stimuli, students with ASD may use socially inappropriate stimulatory behaviors. Consider replacing these by developing a plan, such as giving the student access to items or activities that provide the desired stimulation but in a nonstigmatizing manner. Sensory preferences can be worked naturally into the environment, for example, by having the student hold the edges of a book tightly or squeeze a water bottle.

To further complicate matters, sensory thresholds occur along a continuum and may fluctuate. When sensory systems are overloaded, a person with ASD often experiences a "fight or flight" reaction. For other ways to address the complex sensory needs of students with ASD, refer to <u>Appendix A</u> (page 33).

Motor Concerns

Many students with ASD have challenges with fine-motor skills, including coloring, cutting, and handwriting. Some students may fixate on the neatness rather than the content of their writing. Others may have illegible handwriting due to heavy or light pressure, poor spacing, or letter size that is either too big or too small.

For these reasons, many students with ASD dislike or refuse to complete tasks that require motor skills, or require extensive time to complete such tasks. For anyone who is unfamiliar with the characteristics of ASD, or unaware that a student has the disorder, the refusal to write may be perceived as



inappropriate, noncompliant behavior. However, this is rarely the case. Handwriting may be physically uncomfortable and even painful, as well as emotionally and physically draining for students with ASD. In such instances, it is often necessary to separate the creative and the mechanical acts of writing so that the student's creativity is not hampered by the motor effort required of handwriting. Alternatively, writing may be avoided if it is associated with assignments that are overwhelmingly complex and abstract in nature (in this instance, clear instructions, scaffolding, and chunking are helpful strategies). Finally, accommodations may be provided through a student's IEP, as described in <u>Appendix F</u> (see page 75).

Co-Occurring Conditions

Adding to the complexity of the disorder, students with ASD may have co-morbid conditions, including seizures, anxiety, attention deficit hyperactivity disorder (ADHD), depression, obsessive-compulsive disorder (OCD), and Tourette Syndrome (TS). Of these, the most common co-morbid conditions in adolescents with ASD are ADD/ ADHD, anxiety, and depression. It is important, therefore, that teachers in middle and high school settings are particularly aware of the early warning signs of anxiety and depression in this age group, and raise their concerns with the school guidance counselor or school psychologist if they observe any signs.

ASD and Culture

Some self-advocates as well as well-regarded professionals in the field describe autism as a culture. Members of a given culture typically share similarities in the ways they think, eat, dress, communicate, spend time, and interpret phenomena, and may find the norms of another culture difficult to understand or unusual.

Teachers and other school personnel can be sensitive to students with ASD by acknowledging the way ASD impacts each of them and serving as a bridge between their culture and mainstream/neurotypical culture. Specifically, goals include helping society become more accommodating and accepting of neurological diversity, rather than attempting to "cure" individuals with ASD of their "differences."

The disability rights perspective may be viewed as part of the broader neurodiversity movement, which focuses on helping people understand, accept, and value the contributions of all members of society. While some with ASD may embrace a different culture, there may be times when it is helpful for them to learn how to conform to society in particular ways, such as in the workplace, to expand their options and opportunities as society learns to be more accepting.

Being Sensitive to Families' Preferences for Terminology

No single term will be acceptable to all students with ASD and their families. Some individuals who have received previous diagnoses of Asperger's Disorder or Asperger Syndrome like to refer to themselves as "Aspies," and resist being referred to as having ASD, despite the change in terminology in the DSM-5. Others are perfectly comfortable with the terms *autism* or *autistic*.

Generally, it is recommended that teachers use person-first language, *student with autism*, rather than disability-first language, *autistic students*. For brevity, however, the term *autistic person* may be used instead of *person with autism* by medical staff, researchers, and self-advocates. Similarly, it is recommended that teachers avoid using terms like *high-functioning* and *low-functioning* autism. While some researchers and professionals use the terminology for technical purposes to broadly indicate a person's ability to function independently, the terms are less widely used since the release of DSM-5, which lists specific severity levels.

SEVEN-STEP PLAN

Following the seven-step plan, detailed below, will help prepare you for the entrance of a student with ASD in your classroom, as well as foster inclusion throughout the school. The steps are as follows: (a) educate yourself; (b) reach out to the parents; (c) prepare the classroom; (d) educate typical peers and promote social goals; (e) manage behavioral challenges; (f) collaborate on implementing an educational program; and (g) plan for transition.

Step 1: Educate Yourself

As the person responsible for the education and behavior management of all your students, including a student with ASD, you must have a working understanding of ASD and its associated behaviors. Different behaviors are very much a part of having ASD. When students with ASD do not respond to directions or act out in class, it is typ-

ically not because they are trying to ignore you, clown around, or waste class time. Instead, these behaviors may be related to students' skill deficits or their ASD, and they may have difficulty interpreting language and expressing their needs in socially acceptable ways.

It is important to recognize that these problem behaviors may be inadvertently reinforced and maintained by reactions in the child's

"I remember my first student with ASD who didn't meet my standard expectations of speaking in a monotone and being strikingly awkward. I found that I had to learn a lot more about how ASD manifests itself in students with milder symptoms. As I learned more about it, I found myself making fewer misattributions about the student's behavior, and it became easier for me to see the importance of creating a classroom environment that was predictable, yet flexible. My increased ability to understand has resulted in more successful days for me as well as my students."

—General education teacher

environment, including teacher behaviors. For example, when the student receives attention, gains preferred items/activities, or successfully avoids an unpleasant activity after exhibiting problematic behaviors, he or she is likely to repeat these behaviors. Some problem behaviors can impact the student's ability to perform well academically and learn new skills; in addition, they can disturb the entire classroom. It is important to find ways to create a comfortable environment for your students with ASD so that they can participate meaningfully in the classroom without interfering behaviors.

Learning about ASD in general and about the specific characteristics of your student will help you effectively manage behavior and teach your class. Below are some helpful hints that can guide everyday school life for young people with ASD. They can

be applied to students with ASD across the school years and are applicable to almost all environments.

- **Operate on "ASD time."** "ASD time" means "Twice as much time, half as much done." That is, students with ASD often need additional time to complete assignments, to gather materials, and to orient themselves during transitions. Provide this time or modify requirements as necessary to fit within the time allotted and match the student's pace. Avoid rushing students, as this typically results in them moving even more slowly or shutting down altogether. When time constraints are added to an already stressful day, students often become overwhelmed and paralyzed, unable to function.
- Manage the environment. Any changes—unexpected changes, in particular can cause of increase anxiety in a student with ASD; even changes considered by others to be minor can bring about significant stress. Whenever

possible, provide consistency in the schedule and avoid sudden changes. Prepare the student for changes by discussing them in advance, providing a social narrative on the change, or showing a picture of the change. See Appendix D (page 57) for examples.

Another way to manage the environment involves incorporating student prefer"Sometimes, teachers think that if they shout it will help me do a better job of following directions. But just the opposite happens. When people shout, I get so overwhelmed I can't understand what they are saying. The teachers who have really helped me understood that I wasn't trying to be difficult or get into trouble when I didn't do right away what they wanted me to do. They explained exactly what they wanted me to do and gave me time to do it. It also helps me when teachers do not yell. My favorite teacher in sixth grade even made sure that I wasn't sitting next to Jayden, who kept saying mean things to me."

-Student with ASD

ences into activities or assignments that may serve to decrease his or her stress. For example, when going on a field trip, assign the student to sit with a group of preferred peers. If the field trip is going to include lunch, provide the student with access to the menu the day before, so he or she can plan what to eat. See Appendix B (page 37) for additional information.

• Create a balanced schedule. Visual activity schedules that display the daily activities can help students with ASD predict transitions and maintain routines. It is essential that the demands of the daily schedule or certain classes or activities be monitored and restructured, as needed. For example, "free time," which is considered fun by typically developing youth, may be challenging for students with ASD because of noise levels, unpredictability of events, and social skills problems. For these students, therefore, free time may have to be structured with prescribed activities to reduce stress and anxiety. A good scheduling strategy is

to alternate between preferred and nonpreferred activities with periods in the schedule for downtime.

It is important to distinguish free time from downtime. *Free time* refers to periods during the school day when students are engaged in unstructured activities that have marked social demands and limited teacher supervision. Lunch time, recess, passing time between classes, and time at school before classes begin are all examples of free time. These activities are stressful for many students with ASD, as some may need to be explicitly taught play or leisure skills socializing with other students. Downtime, on the other hand, provides an opportunity for the student to relax or de-stress. Students' downtime may include using sensory items, drawing, or listening to music to relieve stress. During downtime, do not make excessive demands on the students.

- Share the agenda. Students with ASD have difficulty distinguishing between essential and nonessential information. In addition, they often do not remember information that many of us have learned from past experiences or that come naturally to us. Thus, it is important to state the obvious. One way to do this is to "live out loud." Naming what you are doing helps the student with ASD put together what you are doing with the "why" and the "how." In addition, "living out loud" helps students stay on task and anticipate what will happen next.
- **Simplify language.** Keep your language concise and simple, and speak at a slow, deliberate pace. Do not expect a student with ASD to "read between the lines," understand abstract concepts or sarcasm, or know what you mean by using facial expressions only. Be specific when providing instructions. Ensure that the student knows what to do, how to do it, and when to do it. Be clear, and clarify as needed. Use visual cues as reminders and/or ask the student to repeat directions back to you if possible.
- **Manage change of plans.** When planning activities, make sure the student with ASD is aware that the activities are *planned*, not *guaranteed*. Students with ASD need to understand that activities can be changed, canceled, or rescheduled. In addition, create backup plans and share them with the student with ASD. When

an unavoidable change in plans occurs, be flexible and recognize that change is stressful for people with ASD; adapt expectations and your language accordingly. For example, you could state, "Our class is scheduled to go to the park tomorrow. If it rains, you can read your favorite book on dinosaurs instead." Prepare students for change whenever possible by *priming* them. That is, tell them ahead of time about assemblies, fire drills, guest speakers, and testing schedules, while

"Be specific! Providing students with ASD specific positive feedback will help them understand your expectations. I have found it most effective to reinforce exactly what they have done that made me so proud of them at a given moment."

—General education teacher

also showing the changes visually, if possible. In addition to changes within the school day, recurring transitions, such as vacations and the beginning and end of the school year, may cause a student with ASD to be anxious about the change. Students with ASD may require additional time to adjust to the new schedule and/or environment.

- **Provide reassurance.** Because students with ASD cannot predict upcoming events, they are often unsure about what to do. Provide information and reassurance frequently so that the student knows he or she is moving in the right direction or completing the correct task. Use frequent check-ins to monitor progress and stress levels. Develop an individual motivational system to help establish and reinforce appropriate behavior by calling attention to behavior you want to continue to see.
- **Be generous with praise.** Find opportunities throughout the day to tell students with ASD what they did right. Reward attempts as well as successes by giving compliments or access to preferred activities or items. Be specific to ensure that the student with ASD knows why you are offering praise, and use a 4:1 ratio of positive to corrective feedback.

Note: A special thanks to Brenda Smith Myles, Diane Adreon, and Dena Gitlitz for allowing us to adapt the above material for this guide from *Simple Strategies That Work!: Helpful Hints for All Educators of Students with Asperger Syndrome, High-Functioning Autism, and Related Disabilities.*

Teachers who employ the above techniques are more likely to have a successful inclusive classroom, and their student(s) with ASD will be better able to learn class material. In addition to these methods, it is essential to recognize the importance of matching the teaching style with the student. Students with ASD generally respond well to teachers who have patience and compassion, and speak in a calm, quiet manner. They also tend to respond well to teachers who use clear and consistent instructions, yet are flexible in their teaching styles. Whenever possible, place students with ASD in this type of classroom environment.

Understanding Autism is a free professional development curriculum that prepares secondary school teachers to serve the ASD population. Through PowerPoint presen-

tations, videos, and worksheets, the program walks teachers through the characteristics of autism and challenging behaviors, and the effective practices that can be used to address them. Additionally, it offers evidence-based practices and strategies for classroom success.



Step 2: Reach out to the Parents

It is vitally important to develop a working partnership with the parents of your student with ASD. They are your first and best source of information about their student and ASD as it manifests itself in that child's behavior and daily activities. Ideally, this partnership will begin with meetings before the school year. If possible, start implementing strategies on the first day of school to help the student with ASD become comfortable and learn the routines and rules in your classroom. Informing parents of your desire to help their student become comfortable in your class will help set the tone for positive communication between the school and home. After your initial contact, it is critical to establish mutually agreed-upon modes and patterns of communication with the family throughout the school year.

Your first conversations with the family should focus on the individual characteristics of the student, identifying strengths and areas of challenge. In these conversations, you must establish a tone of mutual respect while maintaining realistic expectations for the course of the year. The family may have suggestions for practical accommodations that can be made in the classroom to help the student function at his or her highest potential. It is a



"I cannot adequately express how much I appreciate it when teachers tell me about little positive things that happen at school. I know my son's rigidity is challenging for his teachers. I don't need for them to remind me of that. I find it more helpful when teachers come up with positive strategies to address specific behaviors that need to be addressed."

—Mother of a student with ASD

good idea to bring their home strategies into the classroom to maintain routine and teach generalization for the student. However, it is just as important to use effective, evidence-based practices whenever possible. While parents may be the best source to find out what works for their child, they may not be aware of the most effective interventions and strategies. Have an early conversation with parents to exchange ideas and explore options that work best for the student.

Building trust with the parents is very important. Communication with families about the student's progress should be ongoing. If possible, schedule a monthly meeting to discuss the student's progress and any problems he or she may be having. If regular telephone calls or meetings are hard to schedule, you can exchange journals, e-mails, or audiotapes. When interacting with parents, try to include positive feedback on accomplishments as well as milestones that the student reached. It's good practice to start and end your exchange with a focus on something positive. Doing so increases the likelihood that parents are more receptive to listening to your concerns about classroom challenges if they arise. Share the classroom strategies you are trying with parents and solicit their ideas for alternative solutions. Families can also provide consistent support at home for social and behavioral goals identified for your student with ASD.

Open, ongoing communication with families of students with ASD creates a powerful alliance. Be aware that some families may have had negative experiences with other schools or teachers in the past. Help them work through that. If you make the effort to communicate with the family about the progress of their student and listen to their advice and suggestions, they will accept you as their child's advocate and thus be more likely to give you their complete support.

<u>Appendix C</u> (page 53) contains a worksheet with suggested questions to ask during your initial meetings with the parents. It also includes an example of a journal that may be used for teachers and parents to communicate with each other daily or weekly regarding the student's performance and progress.



Step 3: Prepare the Classroom

Having learned about the individual sensitivities and characteristics of your student with ASD, you now have the information you need to organize your classroom appropriately. This includes manipulating the physical aspects of your classroom and placing students with ASD within the classroom to make them more comfortable without having to sacrifice your plans for the class in general.

Start with the accommodations listed in the student's IEP. Utilizing visual strategies in the organization of your classroom, when providing instruction and clarifying expectations will be helpful for your students with ASD as well as all the other students in your class. Other features of a safe and more inclusive classroom include a calm area, tools for organizing desk space (such as an overflow bin), and carefully designated lockers and seats based on sensory and attention needs. Appendix B (page 37) contains information and examples about specific approaches for structuring the academic and physical environment to address the particular behaviors, sensitivities, and characteristics of your individual student with ASD.

"Set yourself up for success! Before the start of the school year, I tried to anticipate my students' specific needs and design the classroom accordingly. I created a visually rich environment and planned so that transitions can go as smoothly as possible. I also designated an area of the room where students can go whenever they feel overwhelmed or anxious. By preparing the classroom for my students' specific needs, I was able to facilitate academic and social success." —*Special education teacher*

Step 4: Educate Typical Peers and Promote Social Goals

Perhaps the most common myth about students with ASD is that they do not have the ability, motivation, or desire to establish and maintain meaningful relationships with others, including friendships with peers. This, for the most part, is not true. There is no doubt that students with ASD have social deficits that make it more difficult for them to establish friendships than typically developing students, and sometimes negative social interactions lead students with ASD to avoid certain types of social engagement. However, with appropriate assistance, students with ASD can engage with peers and establish mutually enjoyable and lasting relationships. For this to happen, it is critical that teachers believe this to be true and expect students with ASD to make and maintain meaningful relationships with the adults and other students in the classroom. Clearly stated social skills, behaviors, and objectives should be part of the IEP and assessed regularly for progress.

While many consider teasing a common occurrence in the everyday school experience for young people, it is important to keep in mind that students with ASD are frequently targets of social exclusion and rejection. When there is an imbalance of power (e.g., between socially competent students and students with social skills deficits who other students know are sensitive and reactive), a wide array of actions may constitute bullying. This includes actions

"My most painful school memories are instances of bullying. The bullies would be very sneaky, and often my teachers didn't see what was happening. When I had teachers who intervened and came up with solutions to keep bullies away from me, it made me feel safe. One teacher changed where I was sitting in class. Another got me out of Spanish class, where one student was saying mean things to me all the time. One teacher started sitting at my lunch table, so she could make sure other students weren't taking my food.

—Young adult with ASD

that otherwise might have been considered somewhat unkind, but benign, such as a student repetitively saying a word that a student with ASD does not like, or students saying that they plan to kill ants after school because they know the student with ASD becomes upset at the mere thought of any living creature being harmed.

Sometimes, classmates encourage or pressure their peers to do inappropriate or even illegal things. In some cases, students with ASD have been known to perform them, either because of their desire to be accepted or by their naiveté. It is important for teachers and other school personnel to be vigilant for signs of bullying and to have a plan of action to protect the child's safety and self-esteem. Be especially vigilant during times of low adult supervision (e.g., cafeteria, playground, hallways, lockers).

In some instances, students with ASD may be considered "provocative victims" (students who exhibit behaviors that irritate and incite others to take action against them) and eventually become the perpetrators of unkind acts in response to the treatment they received from others. In these cases, intervening to prevent maltreatment often helps reduce the likelihood of the student with ASD trying to "get back" at the student who has wronged him or her. Students with ASD can benefit from instruction and practice that expands their repertoire of prosocial behaviors.

Educators are important role models for teaching tolerance. By promoting social-emotional learning, reinforcing "acts of kindness," and capitalizing on teachable moments to address topics such as social exclusion, name calling, and bullying, you can create an atmosphere that discourages bullying behavior.

One strategy could be to assign a "buddy" or safe student in the classroom. In this way, students with ASD would have a friend who would to listen to them and to report any potential conflicts with other students. Sometimes students with ASD do not recognize when they are being bullied. In other instances, they are hesitant to report it. Therefore, it is important to routinely check in with the student with ASD and/or the parents to ensure the comfort of the student in the classroom.

In addition to the "buddy" strategy described above, it is also important to educate typically developing students about the common traits and behaviors of students with ASD. The characteristics of ASD can cause peers to perceive a student with the disorder as odd or different, which can lead to situations that involve teasing or bullying. Research shows that typically developing peers have more positive attitudes, increased understanding, and greater acceptance of students with ASD when provided with clear, accurate, and straightforward information about the disorder. When students are educated about ASD and specific strategies for how to effectively interact with students with ASD, more frequent and positive social interactions are likely to result.

Many social interactions occur outside the classroom in the cafeteria and on the playground. Without prior planning and extra help, due to their socials skills deficits, students with ASD may end up sitting by themselves during these unstructured



The Organization for Autism Research provides a free peer education program called *Kit for Kids* to help students in elementary and middle classrooms learn about autism and how to support their peers with ASD: <u>www.researchautism.org/resources/</u> <u>kit-for-kids/</u>. times. To ensure this does not happen, you may consider a rotating assignment of playground peer buddies for the student with ASD. The student will then have a chance to observe and model appropriate social behavior of different classmates throughout the year. This "circle of friends" can also be encouraged outside of school.

The academic and social success of young people with ASD can be greatly enhanced when the classroom environment supports their unique challenges. Peer education interventions, such as those listed in the Resources section of this guide, may be used with little training and have been shown to improve outcomes for both typically developing peers and young people with developmental disorders, such as ASD. Specific strategies that can be used to support social interactions for students with ASD are described in <u>Appendix D</u> (page 57).

Step 5: Manage Behavioral Challenges

Many students with ASD view school as a stressful environment. Commonplace academic and social situations can present stressors to these students that are ongoing and of great magnitude. Examples of these stressors include:

- Difficulty predicting events because of changing schedules
- Tuning into and understanding teachers' directions
- Interacting with peers
- Anticipating differences across settings, such as classroom lighting, sounds/ noises, odors, etc.

Some students with ASD do not indicate in any overt way that they are under stress or are experiencing difficulty coping. In fact, they may not always have the self-awareness that they are near a stage of crisis. However, there are warning signs before meltdowns. By learning the warning signs for triggers, you can help the student adopt better adaptive, coping behaviors.

A certain pattern of behavior, sometimes subtle, can indicate a forthcoming behavioral outburst for a student with ASD. For example, a student who is not blinking may be so neurologically overloaded that he is "tuned out." He may appear to be listening to a lesson but, in fact, is not taking anything in. Other signs of distress can manifest in the form of self-injury, noncompliance, elopement, aggression, and stereotypy (e.g., repetitive flapping or rocking).

Tantrums, rage, and meltdowns (terms that are used interchangeably) typically occur in three stages that can be of variable length. These stages and associated interventions are described below. The best intervention is to prevent behavioral outbursts through the use of appropriate academic, environmental, social, and sensory supports and modification to environment and expectations. A Functional Behavioral Assessment (FBA) should be conducted when problem behaviors persist, interfere with the student's learning progress, or become harmful to the student or others. If an FBA reveals, for example, that the student with ASD tantrums to escape from nonpreferred tasks, you can modify the task in advance or teach a healthier, less disruptive replacement behavior, such as how to request help or ask for a break. In addition, it is important to respond in an effective manner when problem behaviors do arise to avoid inadvertently reinforcing them.

Seven-Step Plan

The Cycle of Tantrums, Rage, and Meltdowns and Related Interventions

Rumbling

During the initial stage, young people with ASD exhibit specific behavioral changes that may appear to be minor, such as nail biting, tensing muscles, or otherwise indicate discomfort. During this stage, it is imperative that an adult intervene without becoming part of a struggle.

Intervention

Effective interventions during this stage include antiseptic bouncing (i.e., temporary removal from the scene), proximity control, support from routine, and home base. In addition stopping the cycle of tantrums, rage, and meltdowns, these strategies can help the student regain control with minimal adult support.

Rage

If behavior is not diffused during the rumbling stage, the student may move to the rage stage. At this point, the student is uninhibited and acts impulsively, emotionally, and sometimes explosively. These behaviors may be externalized (i.e., screaming, biting, hitting, kicking, destroying property, or self-injury) or internalized (i.e., withdrawal). Meltdowns are not purposeful, and once the rage stage begins, it most often must run its course without being reinforced. Additionally, the student may have an "extinction burst" whereby the behavior worsens before it improves.

Intervention

During this stage, emphasis should be placed on child, peer, and adult safety, as well as protection of school, home, or personal property. Of importance here is helping the student regain control and preserve dignity. Adults should have developed plans for (a) obtaining assistance from educators, such as a crisis teacher or principal; (b) removing the student from the area (removing the upset student from the peer group is far less memorable for the peers than is moving the entire peer group away from the upset student); or (c) providing therapeutic restraint, if necessary. Especially in elementary and middle school, every effort should be made to prevent a student from having a meltdown in view of peers, as such behavior tends to "define" the student in the peers' minds in the years ahead.

Recovery

Following a meltdown, the student often cannot fully remember what occurred during the rage stage. Some become sullen, withdraw, or deny that inappropriate behavior occurred. Others are so physically exhausted that they need to sleep.

Intervention

During the recovery stage, students are often not ready to learn, as they may be perseverating on the event or lamenting their behavior. Thus, it is important to work with them to help them to once again become a part of the routine. This is often best accomplished by directing the student to a neutral or motivating task that can be easily accomplished, such as an activity related to a special interest. If appropriate, when the student has calmed sufficiently, "process" the incident with the student. Staff should analyze the incident to identify whether or not the environment, expectations, or staff behavior played a role in precipitating the incident.

Note: Video presentations about this cycle are available in the *Understanding Autism Professional Development Curriculum*: <u>http://www.researchautism.org/education/resource-edu/</u>.</u>

Step 6: Collaborate on Implementing the Education Program

A key step in your preparations to work with a student with ASD will be to participate in the development and implementation of an educational program for the student. It is critical to develop this plan based on the assessment of the student's current academic skills and his or her educational goals, as defined in the IEP.

A Brief Legislative History

Congress passed the Education of All Handicapped Students Act in 1975 and reauthorized it in 1990 as the Individuals with Disabilities Education Act (IDEA). This legislation guarantees that all qualified students with disabilities will be provided a free and appropriate public education (FAPE). It also states that students with disabilities should be placed in the least restrictive environment (LRE), where they can "The IEP is developed by the child's teachers, who have little time to implement it, parents who wish for the best outcome but usually do not know they have any voice at the table, and specialists who probably have little knowledge about the child, as well as administrators who look at costs. After the best plan is made for the child, oftentimes it is not implemented. The parent has to become an advocate for the student and make sure the plan is implemented or changed if the original ideas are not working for the child."

-Mother of a 12-year-old diagnosed with ASD

make progress toward achieving their IEP goals, meaning that as much as possible, students with disabilities should be educated with students who are not disabled. Finally, it states that qualified students with disabilities must have an IEP, which describes the student's current level of functioning, his or her goals (for the year or a shorter period of time), and how these goals will be supported through special services.

IEPs are an important focus of the seven-step plan, and they are discussed in greater detail below. Not all students with disabilities qualify for IEP services. Those who do not qualify may have 504 plans instead. For a more in-depth explanation of the IEP process, see the OAR publication *Life Journey Through Autism: Navigating the Special Education System* (2012).

Individualized Education Program

IEPs are created by a team of education professionals, along with the student's parents, and are tailored to the needs of the individual student. The IEP is a blueprint for everything that will happen to a student in school for the next year. Special and general education teachers, administrators, speech-language therapists, occupational therapists, school psychologists, and families form the IEP team and meet on a regular basis to discuss student progress on IEP goals.



"Parents are the key players in developing an effective IEP. Edu-

cators should encourage parents to play an active role in developing goals and strategies for their child's IEP. Most parents feel intimidated and overwhelmed during IEP meetings. I always ask families specific questions and encourage them throughout the meeting to share experiences that have assisted their student in being successful each school year. After all, parents know their student best!"

-Educator

Before the IEP team meets for the first time, an assessment team gathers information about the student to make an evaluation and recommendation. The school psychologist, social worker, classroom teacher, and/ or speech-language pathologist are examples of educational professionals who conduct educational assessments. A qualified, licensed professional may conduct a medical evaluation. The classroom teacher also gives input about the student's academic progress and classroom behavior. Parents give input to each specialist

throughout the process. Then, one person on the evaluation team coordinates all the information, and the team meets to make recommendations to the IEP team. The IEP team, which consists of the school personnel who work with the student and families, then meets to write the IEP based on the evaluation and team member suggestions.

IEPs include present levels of performance, a summary of assessment results, annual goals, objectives, needed accommodations, and special education services, and related services needed by the student. One special service that IEP teams *must* consider is a student's need for assistive technology (AT) and services so that the student can receive a free,



appropriate public education in the LRE. <u>Appendix E</u> (page 65) describes some AT tools, considerations, and resources for teachers. AT can support students in reaching annual goals and objectives identified in the IEP.

Goals and objectives must be written in observable and measurable terms so that it is clear what progress is expected by the end of the short-term period or year. The short-term objectives should contain incremental and sequential steps toward meeting each annual goal. <u>Appendix F</u> (page 75) provides more information on IEPs for students with ASD, including how to write objectives and develop measurable IEP goals.

Once the IEP team has identified the annual goals and short-term objectives, they will use strategies to help the students reach them. Two organizations, the National Standards Project (NSP; National Autism Center, 2015) and the National Professional Development Center on ASD (NPDC; Wong et al., 2015), conducted literature reviews of the intervention research and identified sets of intervention practices that are evidence-based.

Evidence-based practices (EBPs) are those that are shown to have meaningful effects on student outcomes, as evidenced by a sufficient number of high-quality research studies that use appropriate research designs (Cook & Odom, 2013).

The table below lists the EBPs identified for students with ASD. Board-certified behavior analysts (BCBAs) can provide meaningful support when implementing some of them. Online resources are also available (e.g., <u>http://afirm.fpg.unc.edu</u>). In addition, Appendix F (page 75) includes implementation checklists for some of the EBPs listed in the table below to help guide teachers in following the steps of an intervention.

Evidence-Based Practices identified by the NPDC and NSP

Antecedent-based intervention Differential reinforcement Discrete trial training Extinction Modeling Prompting Reinforcement Response interruption/redirection Scripting Task analysis Video modeling Time delay Cognitive behavioral intervention Naturalistic intervention Parent implemented intervention Peer-mediated instruction and intervention Pivotal response training Self-management Social narratives Social skills training Visual supports Exercise (NPDC; emerging according to NSP) Functional communication training (NPDC; emerging according to NSP) Picture exchange communication system (NPDC; emerging according to NSP) Technology-aided instruction and intervention (NPDC; emerging according to NSP) Structured play groups (NPDC only) Functional behavioral assessment (NPDC only) Language training (NSP only) Comprehensive behavioral treatment for young students (NSP; not part of NPDC review)

Note: Taken from the Comparison of NPDC and NSP EBPs (<u>http://autismpdc.fpg.unc.edu/evidence-based-practices</u>).

As a general education teacher, you may be responsible for implementing EBPs and reporting back to the IEP team on the student's progress toward meeting specific academic, social, and behavioral goals and objectives as outlined in the IEP. You also will be asked for input about developing new goals for the student in subsequent and review IEP meetings. An overview of how to write objectives and develop measurable IEP goals for students with ASD is provided in <u>Appendix F</u> (pages 75–82), along with an IEP calendar that can be used to track the student's progress.

Step 7: Plan for Transition

Students' lives are full of transitions, from elementary school and cubbies to middle school and lockers. While these and so many more transitions occur throughout their lives, perhaps one of the most significant transitions is the transition from secondary school to adult life. Planning for the transition of students with ASD out of secondary school into adulthood is an ongoing process outlined by the IDEA, and is the focus of the last step in the seven-step plan. While this step will give an introduction to transition planning and some resources, more detailed information may be found in the OAR publication *Life Journey Through Autism* series: *A Guide for Transition to Adulthood* (2006).

In addition to outlining academic and behavioral goals, the IEP includes interventions, modifications, supports, and hands-on learning opportunities designed to aid the student with ASD in transitioning to a successful adulthood. According to the 2004 revision of IDEA, transitional planning must begin by the time the student is 16, or younger if determined by state law or the IEP team.

When transition services, assessments, and goals are discussed, the student must be invited to participate in the IEP meeting. Self-determination and self-advocacy are critical parts of the transition process and, if the student cannot attend, other steps must be taken to ensure student preferences and interests are accounted for (Wehmeyer & Shoegren, 2016).

Many researchers identify self-advocacy as a skill within the concept of self-determination. *Selfadvocacy* can be defined as an individual's ability to effectively communicate, convey, negotiate, or assert his or her own interests, desires, needs, "My mother was and continues to be my number-one ally. Once she accepted that I had a disability, she vowed to fight for what I needed and not take 'no' for an answer. As a result, I realized I was worth fighting for and started advocating for myself." —Autism Self-Advocate,

Presenter, & Consultant

and rights (VanReusen et al., 1994). <u>Appendix G</u> (page 83) highlights resources for teaching self-advocacy skills to students with ASD, and includes a self-determination checklist. <u>Appendix H</u> (page 87) also includes a transition timeline and checklist to better prepare students with ASD with transitions from pre-K through high school.

The Revised Comprehensive Transition Model (CTM; Sitlington, Neubert, & Clark, 2010) encourages IEP teams to make the following knowledge and skill domains the focus of transition planning, education, and services:

- Communication
- Academic performance
- Self-determination
- Interpersonal relationships
- Integrated community participation
- Health and fitness

- Technology and assistive technology
- Leisure and recreation
- Mobility (transportation)
- Independent/interdependent living
- Work readiness
- College readiness

A brief description of each domain is provided in <u>Appendix H</u> (page 87). Given the multitude of domains, and skills within them, involved in adulthood, team members must be forward thinking. During elementary, middle, and high school years, it is often easy for the school team, including parents, to focus primarily on academic skills. But this is a mistake. The other domains, which contribute to a rich and rewarding quality of life, include many areas of challenge for individuals with ASD, such as the soft skills needed in employment (e.g., flexibility, time management, stamina, independent work completion, teamwork). Therefore, these skills should be an integral part of the instructional program for students with ASD.

In addition to traditional formal (e.g., intelligence, achievement, and aptitude tests) and informal (e.g., observations, interviews) assessments, teams should use transition-specific tools, such as the *Transition Planning Inventory* (TPI; Clark & Patton, 2006), to pinpoint and plan for a student's transition needs and monitor the student's and team's progression with the resulting plan. The TPI includes forms for the student, school team, and parents to complete, and it emphasizes transition planning that revolves around the unique strengths, challenges/needs, interests, goals, and preferences of each student and his or her team.

Person-centered planning is also an integral part of transition planning. While there are various methods of person-centered planning, overall, they share the following characteristics:

- Discussing who the student is, including his or her strengths, challenges, interests, goals, and preferences
- Bringing together the student with different stakeholders in his or her life
- Developing an action plan for achieving the student's vision for his or her future

Focusing on all domains within the CTM, using a transition-specific assessment tool (such as the TPI), and incorporating student-centered planning into the transition process will help students with ASD transition more successfully to the next steps in their lives—whether postsecondary education, job training, employment, or other life events. However, there are three critical factors in the transition process that should

Seven-Step Plan

always remain at the center of the team's efforts: (a) planning for this transition as soon as the student enters school (i.e., as early as possible); (b) individualizing all transition planning to the student; and (c) and involving the student in as much of his or her transition planning as possible. With that in mind, it is important to update the plan to ensure that it is responsive to the student's current needs and interests.

Pulling It All Together

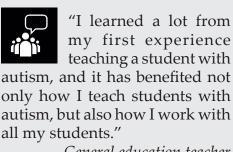
The seven-step plan discussed on the preceding pages presents a constructive framework for how to approach the inclusion of a student with ASD in your classroom. Further, specific strategies and tools for developing and providing academic, environmental, and social supports are presented in the Appendices.

Your classroom is already a diverse place, including many students with varying backgrounds, talents, difficulties, and interests. With the increasing inclusion of students with ASD, the challenges associated with managing a diverse classroom in today's educational environment will grow. Just as every student with ASD is different, so is every school environment.

It is quite likely that there will be constraints — environmental, interpersonal, financial, and administrative — on the ways that you can implement the approaches suggested in this guide. Despite the challenges, however, your hard work and commitment makes a difference in the lives of *all* the students in the classroom. It is clear, though, that students with ASD may need more help and support than some of your typically developing students. The investment of time and energy in the strategies listed above can pay off tenfold — not only for the student with ASD, but for all the learners in your school community.

You will benefit as well. As you learn more about students with differences and how to support their inclusion in the classroom, you will become a mentor to other educators who may be facing this challenge for the first time. Many of the skills that make you

a powerful educator will help you succeed in the new challenges ahead. Your curiosity will fuel your education about ASD and other developmental disorders; your communication skills will help you create a meaningful alliance with the parents of the student with ASD in your class. Most of all, your collaboration skills will help you be an integral part of the team that will support the student with ASD throughout the course of the school year. The reward for your patience, kindness, and professionalism will



-General education teacher

be the unique sense of satisfaction that comes with knowing that you have helped a student with a special need and have made a difference in that young person's life!

APPENDICES

Appendix A Addressing Sensory Needs

Given the variance and complexity of issues associated with the sensory systems for individuals with ASD, the design and implementation of support strategies in this area usually involves a board-certified behavior analyst (BCBA) and an occupational therapist (OT) with expertise in sensory processing. The OT can conduct an evaluation to determine the sensory needs of the individual using a variety of assessment methods. In turn, the behavior analyst, who understands sensory stimuli and motivators, can ensure that sensory preferences are addressed without creating dependency, so students can live up to their full potential.

The results of a sensory assessment, sometimes called a sensory profile, yield important information about a student's sensory processing that enables the OT to develop the strategies for sensory-based support. Such support strategies must be available to the student at all times and in all environments. To that end, the OT can identify sensory objects (often called *fidgets*), such as paperclips or fidget spinners, that serve the student's needs. The OT can also train all who come in contact with the student, at home and at school, to help the student use them. However, in choosing fidgets, it is important to ensure that they don't become distracting to the student or make him or her stand out from peers, thereby lessening their chances of benefiting from inclusion.

It is also important to determine the function of any challenging behaviors the student with ASD may demonstrate and when such behaviors are likely to occur. A behavior analyst might help to put a plan into place that reduces the occurrence through preventive measures or teaches replacement skills. When a function is automatic, or provides sensory feedback (e.g., jumping, fidgeting), educators may be able to work with the student to alter the ways and times when the student engages in the behavior. For example, provide opportunities to engage in those behaviors only at certain times and help the student understand that there are also times when such behaviors are not appropriate.

Presented below are examples of sensory support strategies and fidgets that may be used to address common problem areas for students with ASD. For a more comprehensive guide to the interpretations of and interventions for sensory-related behaviors, see *Asperger Syndrome and Sensory Issues: Practical Solutions for Making Sense of the World* (Myles, 2001).

Sensory Su	pport Process
Sensory Problem	Signs or Behavior
Overly sensitive to touch, movements, sights, or sounds	Distractible, withdraws when touched, and avoids certain textures, clothes, and foods; reacts negatively to ordinary movement activities, such as playground play or P.E.; sensitive to loud noises.
Under-reactive to sensory stimulation	Craves intense sensory experiences, such as spinning, falling, or crashing into objects. Fluctuates between under- and over-responsiveness.
Coordination problems	Poor balance, great difficulty in learning a new task that requires motor coordination; appears awkward, stiff, or clumsy.
Poor organization of behavior	Impulsive or distractible; shows lack of planning in approach to tasks; does not anticipate results of actions; difficulty adjusting to new situations or following directions; gets frustrated, aggressive, or withdrawn when encountering failure.
Unusually high/low activity level	Constantly on the move or slow to get going and fatigues easily.
Poor self-concept	Lazy, bored, or unmotivated; avoids tasks; appears stubborn or troublesome.

Note: From Answers to Questions Teachers Ask About Sensory Integration, by Carol Stock Kranowitz, M.A.

When any part of the sensory process is out of order, problems in learning, motor development, or behavior may be observed. The following chart lists common sensory needs of students with ASD and suggested supports.

Examples of Sensory	Needs and Supports
Sample Sensory Problem Area	Sample Support Strategy and Fidget
Caesar has difficulty pouring a glass of water without spilling it. He may have trouble with motor planning related to successfully completing a task.	Increase the weight of the container and decrease the amount of liquid in it, or fill cups or bowls only partially.
Greta cannot keep her hands and feet to herself during circle time in her preschool classroom. Greta may crave tactile input , in which case she may learn by handling objects; and/or she may fail to understand about personal boundaries.	Provide a visual or physical boundary for sitting, such as a bean bag, pillow, or tape boundaries; or provide a fidget, such as a Koosh Ball [™] , stress ball, or something academically related, such as a pencil grip or paperclip.
Mikhail will only wear color variations of his favorite cotton sweatsuit, despite his mother's urging for him to try jeans. He may like his current outfit because of the soft cotton texture and dislike jeans because of their coarser, stiffer texture or because certain characteristics are irritating or uncomfortable, like the waistband or the width/length of the leg.	Respect the student's preferences when appropriate. Other interventions include rubbing lotion on the student, removing irritating clothing tags, or using a fragrance-free detergent.
Chen constantly chews on her pens and pencils at school and on her clothing at home. She may find this calming or may be seeking oral, tactile, or proprioceptive input .	Provide her with something socially and age-appropriate to chew on, such as candy, straws, gum, or a sports-type water bottle.

Appendix B Academic and Environmental Supports

Students with ASD may require a variety of interventions to succeed in school. A standard set of interventions should not be prescribed, as each student has individual needs. However, generally, interventions that provide predictability, support, and empowerment, while also reducing anxiety and building on strengths, are effective. Some interventions that merit consideration for students with ASD include the following:

- Priming
- Assignment accommodations and modifications
- Visual supports
- Home base
- Choice-making
- Handwriting modifications
- Incorporation of special interests
- Homework considerations
- These intervention activities are described in more detail in the following pages.

Priming

Priming is a method of preparing students with ASD for an activity that they will be expected to complete by allowing them to preview the activity before it is presented for completion. Priming helps to:

- Accommodate the student's preference for predictability
- Promote the student's success with the activity
- Reduce the likelihood that the student will experience anxiety and stress about what lies ahead—with anxiety and stress at a minimum, the student can focus on successfully completing activities

During priming, the student previews the materials that will be used in an upcoming activity, such as a worksheet, outline for a project, or schedule of events that will occur. Priming is not a time for teaching or reviewing the content of an activity, or having the student actually complete the activity. Anyone can help the student with priming, teachers, parents, or peers.

Priming may occur the day before an activity, the morning of, the class period before, or even at the beginning of the class period when the activity will be completed. Priming should occur in short, concise time periods in an environment that is relaxing for the student with ASD, and be led by a person who is patient and supportive. One application of priming includes preview of material to be presented in a general education class (e.g., the art activity planned for later in the day). Learning directions and looking at materials in advance can help the student successfully complete the task with peers at the time of the activity; for example, if large-group directions and too many distractions impede learning.

Assignment Accommodations and Modifications

Many students with ASD require assignment accommodations and modifications in order to be successful at school. For example, assignments may need to be reformatted into a stepwise progression to accommodate the student's inability to inherently detect problem-solving sequences and distinguish relevant from irrelevant details. Students with ASD also have a difficult time neurologically shifting from one thought process to another. For this reason, grouping like questions together on quizzes and tests is helpful. Common examples of these accommodations include:

- Allowing additional time for the student to complete tasks
- Allowing the student to use alternative methods to demonstrate understanding (oral vs. written report, creating a pamphlet or PowerPoint presentation, etc.)
- Shortening tasks or reducing the number of tasks the student is expected to complete
- Outlining precisely what information the student is expected to learn from reading
- Providing graphic organizers and concrete strategies for assignments
- Giving the student a model to follow of what is expected on assignments

Modifying assignments can be accomplished easily without drawing undue attention to the student. For example, when reducing the number of math problems assigned to the whole class, the teacher can simply circle the problems on the student's assignment sheet that the student must complete.

Students with ASD may read slowly and have trouble discerning important facts from irrelevant information. Highlighted text and study guides help these students maximize their reading time. Teachers can also help by identifying the information the student will be responsible for in upcoming tests.

A model of what is expected on assignments or a list of grading criteria may also be helpful for students with ASD. For example, if an essay will be graded on neatness and spelling, as well as content, this must be explained. A model of an "A" paper and a "C" paper highlighting the differences between the two can also help the student be more successful.

Visual Supports

Visual supports help individuals with ASD focus on the task at hand by:

- Clarifying the task that is to be completed
- Reminding the student of the task to be completed
- Directing the student's energies toward completing the task at hand

Most students do not want to appear different from their peers. Therefore, when designing visual supports for students with ASD, it is important to ensure that they are either used by everyone in the class or are not obvious to anybody in the class except the teacher and student with ASD. There are ways to make cues discrete, yet still allow the student to access the tool.

The use of visual supports may benefit all students, but they are essential for students with ASD. Keep in mind that a student may need different types of visual supports for different activities, and these needs may change over time. Visual supports that can be used to support students with ASD at the middle and high school levels are shown in the table below. Examples of what these supports actually look like are provided at the end of the table.

Visual Supports fo	r Secondary School Stude	nts With ASD
Type and Purpose of Support	Description	Location
 Map of school outlining classes: Assists the student in navigating school halls and locating classes Helps orient and structure the student 	The map shows the student where his or her classes are, the order in which they take place, and when he or she should visit his or her locker.	 Taped inside locker Taped inside back cover of textbook or folder/notebook
 List of classes, room numbers, books, and other supplies needed: Aids the student in getting to class with needed materials Works well with students who have difficulty with maps 	The list outlines the class, room number, supplies needed, and when the class starts and ends.	 Taped inside locker Taped inside back cover of textbook or folder/notebook

continued

Visual Supports fo	r Secondary School Stude	nts With ASD
Type and Purpose of Support	Description	Location
 List of teacher's expectations and routines for each class: Helps the student understand the environment Reduces anxiety associated with routines and lack thereof 	This support details the routine that is to be followed in the classroom and outlines particular characteristics that can help the student get along in class. For example, the list could describe that a particular teacher does not permit talking with neighbors, or that another teacher allows students to bring a bottle of water to class.	 Stuck inside back cover of textbook or folder/notebook Placed on a key ring that is kept in a pocket or on a backpack
 Schedule of activities within the class (or "mini-schedule"): Prepares the student for upcoming activities Assists in transitions 	This list simply details what activities will occur during a given class. As each activity is completed, it can be erased, crossed out, or checked off.	 Listed on chalkboard or whiteboard Listed on an electronic device, if technology is permitted
 Outlines and notes from lectures: Facilitates the student's understanding of content material Addresses fine-motor difficulties that can make it difficult for a student to take handwritten notes Reduces any anxiety the student may have about listening and taking notes at the same time 	Providing the student with outlines and notes from lectures, rather than expecting the student to take his own notes, allows the student to focus on understanding the content. Providing partial notes with fill-in- the-blanks can work well to maintain attention and engagement and reduce the writing load.	 Prepared in advance by the teacher and given to the student Notes taken by a peer during class using carbon paper or photocopier, and handed out at the end of class Tape recording of lecture by the teacher, with the tape discreetly given to the student at the end of class Second set of books to take home

Visual Supports fo	r Secondary School Stude	nts With ASD
Type and Purpose of Support	Description	Location
 Sample models of assignments: Helps the student understand exactly what is required Provides a concrete, visual model 	A model of assignments helps the student be visually aware of format requirements and allows the student to concentrate on content. The model can be an actual copy of an assignment that received an "A" grade.	• Prepared in advance by the teacher and given to the student discreetly
 List of test reminders: Ensures that the student knows when a test will occur and what material will be covered 	A study guide that lists content and textbook pages covered in the test. The study guide should include a timeline for studying outlining content to be studied each night and the approximate time necessary to do so. The teacher assumes responsibility for developing the guide initially, but then works with the student to complete the task independently.	 Prepared in advance by the teacher and given to the student with sufficient time to study Final reminder given the day before the test
 List of schedule changes: Ensures that the student is prepared for changes in routine Reduces stress and anxiety that can accompany unexpected or even minor changes 	This prompt helps students prepare for a change in routine. Including the responsibilities of the student in the activity helps the student complete the activity with minimal stress/ anxiety. If the activity is one that the student is not familiar with, it should also include his or her behavioral responsibilities.	 Listed on chalkboard or whiteboard Noted in agenda (or assignment book) and checked by staff Prepared at least 1 day in advance by the teacher and given to the student

continued

Visual Supports fo	or Secondary School Stude	nts With ASD
Type and Purpose of Support	Description	Location
 List of homework assignments: Assists the student in understanding requirements so that he or she can complete homework independently 	Teachers often write the basic elements of homework on the board and supplement them verbally as students write down the assignment. This is not sufficient for students with ASD. The homework support should include all relevant information, such as the due date, items to complete, and the format.	 Prepared in advance by the teacher and given to the student discreetly Noted in agenda (or assignment book) and checked by staff
Cue card to use home base: Prompts the student to leave class to lower her stress/anxiety level 	Students with ASD often do not know that they are entering the cycle for meltdown. When the teacher recognizes the behaviors associated with the start of the cycle, he or she can use this card to prompt the student to leave the room.	 A small card, approximately the size of a business card, is carried by the teacher. who discreetly places it on the student's desk when home base is needed. It is important to cue the student into any missed content when returning from the break so he or she does not feel "lost" or "out of sync" with the class.

Example Visuals

List of classes, room numbers, books, and other supplies needed:

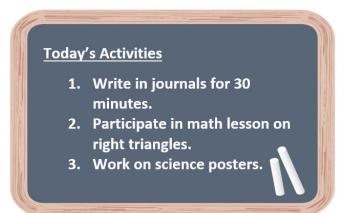
CLASSES:

- Math (8:00-9:00)
 Room 106
 Bring backpack, calculator, and folder

 Science (9:05-10:05)
- Room 110 Bring backpack and folder 3. English (10:10-11:10)
- Room 203 Bring backpack and folder
- 4. Lunch and Recess (11:15-12:40) Cafeteria Bring lunchbox
- 5. Art (12:45-1:35) Room 402 Bring backpack and art supplies
 6. Gym (1:40-2:40) Gymnasium

Bring gym clothes

Schedule of activities within the class:



List of teacher's expectations and routines for each class:

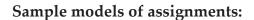
Expectations for Math:

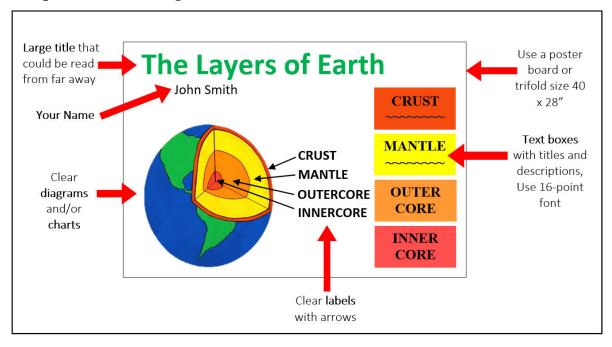
- Say hello to Mrs. Smith
- Come to class with completed homework
- Raise your hand if you have a question
- Pay attention during the lesson
- Pick up next homework assignment at the end of class

Outlines and notes from class:

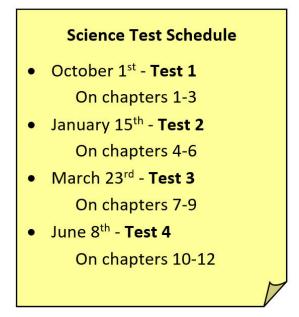


- Right Triangles have one right angle equal to 90°.
- Since all of the angles must add up to 180°, the other two angles can be found.

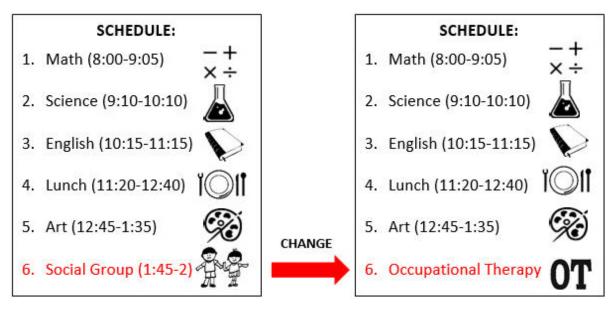




List of test reminders:



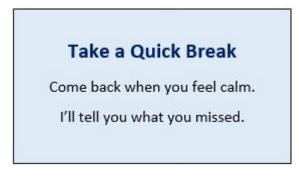
List of schedule changes, with change highlighted in red:



List of homework assignments:

Due Date	Assignment
9/10	Math Problems 1-4
9/17	Math Problems 5-10
9/24	Math Problems 11-16
10/1	Math Problems 17-21
10/8	Study for Math Test

Cue to use home base:



Home Base

The home base strategy supports the ability of a student with ASD to function within his or her environment, whether at home, school, or out in the community. A home base is a place where the student can go to:

- Plan or review daily events
- Escape the stress of the current environment
- Regain control if a tantrum, rage, or meltdown has occurred
- The location of home base is not important; it can be a bedroom at home or a resource room at school. What is important is that the student with ASD perceives home base as a positive and reassuring environment.

Home base is never to be used as a timeout or as an escape from tasks and activities. Additionally, home base is never to be used as a punishment. For example, when a student goes to home base at school, he or she brings the assignment along. The home base may contain items determined to help facilitate self-calming, such as a bean bag chair, weighted blanket or vest, or mini-trampoline.

For some students, it may be necessary to schedule the use of home base as a regular part of the day. At the beginning of the day, home base can serve to preview the day's schedule, introduce and get familiar with changes in the typical routine, ensure that materials are organized, or prime the student for specific subjects. Home base is also effective when scheduled after a particularly stressful activity or task.

The length of time spent in home base varies across students and the situation that necessitated the use of this support. The decision is based on the amount of time the student needs to self-calm.

Handwriting Accommodations

As noted previously, fine-motor skills, such as handwriting, are often difficult for people with ASD. Teachers must take this into consideration and make appropriate accommodations for students with ASD. Examples of accommodations include:

- Asking a student to only write key words in response to a question, rather than complete sentences; some students with ASD may not respond well to this, as they are rule-bound and think it is "wrong" to write incomplete sentences. In such a case, try a different approach
- Modifying assignments and tests to incorporate multiple-choice, fill-in-theblank, matching, and/or short-answer questions, rather than essay questions
- Letting the student underline or highlight answers to questions within a reading passage, rather than having to write out the answers
- Allowing the student to use a computer or smart device to type information, rather than writing it by hand
- Permitting the student to verbally express information and tape record it, rather than writing it by hand
- Allowing the student to state information to a scribe, such as a peer, aide, etc.
- Supplying the student with a teacher-made outline of main ideas and key points from readings and/or presentations

It is important to teach keyboarding to students with ASD from an early age so that they have the opportunity to become fluent in typing. While handwriting is typically emphasized throughout the early school years, people encounter fewer requirements to use handwriting, other than providing a legal signature, as they get older. Fluent typing skills will be useful to students with ASD as they enter high school, college, and the working world.

Choice-Making

Choice-making is a strategy in which small choices and decisions are embedded into daily routines and activities. This strategy allows students with ASD to feel like they have some control over events in their life. While this is important for everyone, it can be particularly beneficial for students with ASD. Choice-making provides students with opportunities to:

- Strengthen their problem-solving skills
- Build their self-confidence
- Feel a sense of control over their environment

Many opportunities are available throughout the day to give students with ASD choices. For instance, completing a math assignment is not a choice, but the choice of color of pencil to use when doing the assignment may be left up to the student.

Note: When providing choices, it is important to keep the individual student in mind. Sometimes students who usually have the ability to make choices cannot do so under stressful situations or if the choices are not appealing to them. In these cases, offering choices could inadvertently increase stress instead of benefiting the student.

Incorporation of Special Interests

As mentioned earlier, ASD is typically marked by intense and sometimes all-consuming attention to specific areas of interest. Students with ASD tend to enjoy learning more about their special interests and are motivated by them. Incorporating these special interests into the curriculum of the student with ASD is one way of making tasks seem interesting, when they may initially seem overwhelming or meaningless. However, special interests can impede learning at times. So it is important for the student to learn to disengage from the special interest if necessary to stay with a content task or reciprocal social interactions. Overall, special interests may be used in a student's motivational (e.g., reward) system, thereby limiting excessive engagement with the special interest during inappropriate times while still having access to it throughout the day.

Homework Considerations

While homework can be a valuable component of a student's learning process, it does not always serve that function for students with ASD. That is, homework may present major concerns to students with ASD, such as those described below.

- Homework often requires handwriting, which can be cognitively and physically challenging for students with ASD. As a result, these students may not be able to demonstrate best what they know.
- Many students with ASD have to work hard to remain emotionally composed throughout the school day and, therefore, arrive home exhausted. These students may need their afternoons and evenings to relax without demands to avoid reaching their emotional limit for the day, which can result in tantrums, rages, or meltdowns.
- Students with ASD may have additional activities in the afternoons or evenings, such as attending social skills groups.

For the above reasons, homework should be considered on an individual basis for each student, and any decision should incorporate the student, school team and additional service providers, and parents. The homework checklist on the following page may be used to aid in this decision-making process.

Homework Checklist
Decide whether to (check one):
Assign homework
Provide a homework time during the day
Waive homework altogether
Select a homework planner or PDA/personal computer that includes (check all that apply):
Enough space for the student to write
A specific place to write assignments for each class
Decide whether (check one):
Teacher(s) will write down homework assignment(s) for the student
Teacher(s) will prompt the student to write down homework assignment(s) in the planner
If student writes down the assignment (check all that apply):
Teacher(s) will fill in the details student has omitted
Specific aspects of homework assignments not written by the student will be identified, and the student will be taught a system for handling that portion (i.e., due dates)
Teacher(s) will reinforce the student's efforts to write down homework

continued

	Homework Checklist
Hor	nework assignments (check all that apply):
	Are presented in written form in the same manner and same place every day
	Are specific enough so that parents understand the assignment requirements
	Include models of assignments whenever possible
The	home routine for homework completion includes (check all that apply):
	A designated location free from distractions
	A specific time when homework is completed
	Special considerations for the student (please specify)
	Use of textbooks that are kept at home for easy reference
	nethod for clarifying homework is in place that includes ck all that apply):
	A school homework hotline
	A carefully screened peer buddy who may be called to clarify assignments if needed
	plan to monitor completion and turning in of homework includes <i>ck all that apply</i>):
	Assignments e-mailed to parents; if paper management is a problem, discuss the option of turning assignments in electronically
	Having a parent sign the homework planner nightly
	Parent-assisted organization of homework assignments in backpack
	Teacher prompt to turn in homework
	Notifying parents weekly of any assignments that have not been turned in
	Adjusting homework assignments as needed or when excess support from parents is required for homework completion

Appendix C Tips For Talking With Parents

This worksheet may be used as a template to communicate with families of students with ASD. It should not be viewed as an endpoint in itself. It is meant to begin the discussion of classroom issues and challenges between educators and families.

1. What are your student's areas of strength? _____

2.	What types	of	things	work	best	for	your	student	in	terms	of	rewards	and
	motivation?												

- 3. Does your student have any balance, coordination, or physical challenges that impede his or her ability to participate in gym class? If so, please describe:
- 4. How does your student best communicate with others?
 - □ Spoken language □ Written language
 - \Box Sign language \Box Communication device

□ Combination of the above (please describe): _____

5. Does your student use echolalia (repeating words without regard for meaning)?

 \Box Never \Box Sometimes

 \Box Frequently

6.	Do changes in routine or transitions to new activities affect your student's behavior?
	\Box Never \Box Sometimes \Box Frequently
	If yes, what types of classroom accommodations can I make to help your student adapt to change and transitions?
7.	Does your student have any sensory needs that I should be aware of? □ Yes □ No
	If yes, what type of sensitivity does the student have?
	□ Visual □ Auditory □ Smells □ Touch □ Taste □ Other (please describe):
	What kinds of adaptations have helped with these sensitivities in the past?
8.	What behaviors related to ASD am I most likely to see at school?
9.	What is your student usually seeking when engaging in these behaviors?
	\Box Sensory sensitivity \Box Preferred items/activities
	□ Social attention □ Escape from a boring task or unpleasant stimuli
	Other (please describe):
	Are there triggers for these behaviors?
	□ Change in schedule or routine □ Lack of peer or adult social attention
	□ Given a difficult or new assignment □ Denied access to preferred items/activities
	Other (please describe):

10. In your experience, what are the best ways to cope with these challenges and get your student back on task?

11.	. Is there anything else you think I should know about your student?
12.	. What is the best approach for us to use in communication with one another about your student's progress and challenges?
	□ Telephone calls—Phone numbers:
	E-mails—Addresses:
	□ Communication book exchange
	Monthly/quarterly check-in meetings
	□ Other:

The following reproducible worksheet provides a daily or weekly template that teachers and parents can use to communicate about a student with ASD and his or her performance and progress.

Date: _____

Student's Name:	
Overall rating of the day/week (please circle):	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Things that went well in class this day/week:	
1	
2	
3	
4	
Things that could have gone better:	
1	
2	
3	

Teacher's Signature

Parent's suggestions and advice about things that could have gone better:

Parent's Signature

Appendix D Social Supports

Social interactions are an inherent part of everyone's life, including individuals with ASD. Despite their desire to have friends and interact with others, students with ASD often have difficulties in the social realm. Thus, it is important that social skills be included as a part of their curriculum. In addition to video modeling and role-playing, effective instructional strategies include:

- Direct instruction
- Social narratives
- Cartooning
- Power Card strategy
- Incredible 5-Point Scale

These strategies are described in more detail in the following pages.

Direct Instruction

Young people with ASD must be directly taught the social skills they need to be successful. Fortunately, a variety of social skills curricula have been created to facilitate this very important type of instruction (see Resources for a list of social skills curricula).

Effective social skills curricula include an instructional sequence that facilitates learning and generalization of skills. Direct instruction is an interactive process — presenting a student with ASD with a worksheet and telling him or her to follow directions will not work! The sequence of direct instruction includes the steps described below.

- **Rationale:** Students need to understand why the information is useful, how to use the information, and where the information fits in with the knowledge they already possess.
- **Presentation:** The information should be presented in an active and multimodal format to encourage students to respond to questions, share observations, and provide and receive meaningful corrective feedback.
- **Modeling:** This step shows students how to perform the behavior within the proper context.
- **Verification:** The teacher closely monitors the student's understanding of what is being taught and his or her emotional state, providing opportunities for the student to practice the new behavior in a controlled setting.
- Evaluation: In addition to adults evaluating the student's acquisition of new social skills, the student with ASD should self-evaluate his or her skill performance and set goals for generalization and skill maintenance.
- **Generalization:** This final step provides the student with opportunities to use newly acquired social skills in a variety of settings and structures. Parents can assist with generalization of social skills by observing and supporting at homeand community-based events in which the student is expected to use the skill.

Social Narratives

Social narratives provide support and instruction for students with ASD. They are written at the student's instructional level and often use pictures or photographs to convey content. Social narratives may be used to:

- Describe social cues and appropriate responses to social behavior
- Teach new social skills
- Promote self-awareness, self-calming, and self-management

Sample Social Narrative

When I want my work checked during class, I can place my "assignment done card" on my desk and patiently wait for the teacher. While I wait, I can read my book. The teacher will not forget me or my needs. When she gets to me, I will close my book and put it away. I will give her my full attention and get back to my task.

MY ASSIGNMENT IS DONE AND READY TO BE CHECKED

Few guidelines exist for creating social narratives other than to ensure that the content matches the student's needs and takes the student's perspective into account. The most frequently used type of social narrative is *Social Stories*TM, followed by conversation starters and scripts. These strategies are described below.

Social Stories[™]

A *Social Story*TM, first developed by Carol Gray, is an individualized text that describes a specific social situation from the perspective of the young person with ASD. The description may include where and why the situation occurs, how others feel or react, or what prompts their feelings and reactions. Within this framework, *Social Stories*TM are individualized to specific situations, and to individuals of varying abilities and lifestyles. *Social Stories*TM may exclusively be written documents, or they may be paired with pictures, audiotapes, or videotapes. They are created by educators, mental health professionals, and parents, often with student input. It is important to monitor the student's response to this type of intervention, as at some point he or she is likely to find the approach too "childish."

Conversation Starters

Beginning and maintaining a conversation requires a high degree of social skills and flexibility, which are challenges for young people with ASD. Although they want to interact with peers, they may not know what to talk about.

A conversation starter card, the size of a business card or trading card, contains five or six different subjects that same-age peers might like to discuss. Topics are generally identified by adults listening to the conversations of peers in school hallways, at recess, or while standing in line at a movie. Topics must be gender-sensitive, as boys and girls may find different types of topics interesting.

Using a different format, teachers seat several students, including the student with ASD, around a table; tell them that they will choose one person to tell the others about his or her weekend (or other item or event), and that the listeners are expected to ask that student a question relevant to the topic being discussed. This exercise can help the student with ASD learn to attend to the content of somebody else's speech.

Scripts

Scripts are written sentences or paragraphs or videotaped scenarios that students with ASD can memorize and use in social situations. The scripts can be practiced with peers or an adult, and then used in real-life situations. Scripts are used for students with ASD who have difficulty generating novel language when under stress, but have excellent rote memory. Age-appropriate slang and jargon should be included in scripts for young people with ASD.

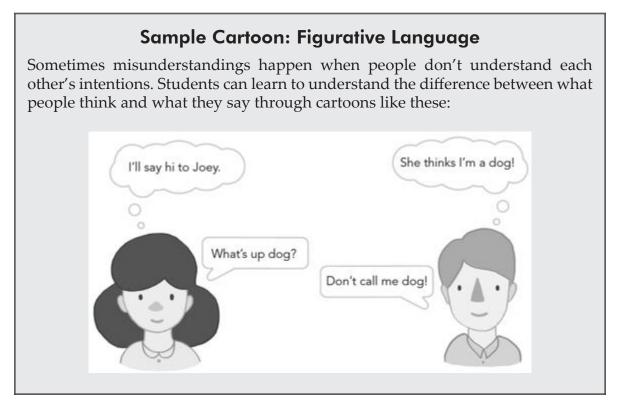
Sample Script

If I forget my lunch, I will go to the lunchroom. I can say this after the lunch helper greets me:

Hello, my name is Neil, and I'm in 3B. I forgot my lunch today and need to order a lunch. Could you please tell me my choices? (I will have to pick from only these.) Thank you, I will have the . . . (fill in the blank with one of the choices), please. Thank you.

Cartooning

Cartooning promotes social understanding by using simple figures and symbols, such as conversation and thought bubbles, in a comic strip-like format that is drawn to explain a social situation. The teacher can draw a social situation to facilitate understanding, or the student, assisted by an adult, can create his or her own illustrations of a social experience.



Cartoon reprinted with permission from the Ohio Center for Autism and Low Incidence (<u>www.ocali.org</u>).

Power Card Strategy

The Power Card strategy, developed by Elisa Gagnon, is a visual aid that uses a student's special interest to help the student understand social situations, routines, the meaning of language, and the hidden curriculum in social interactions. This intervention consists of two components: a script and the Power Card.

- Script: An adult develops a brief script written at the student's comprehension level detailing the problem situation or target behavior. The script also describes how the student's special interest has successfully addressed the same social challenge, and this solution is then generalized back to the student.
- **Power Card:** The size of a business or trading card, the Power Card contains a picture of the special interest and a summary of the solution it represents. Power Cards should be portable and accessible in a variety of situations to promote generalization. The Power Card can be carried with the student, placed on the corner of the desk, or stuck inside a book, notebook, or locker.

A sample Power Card scenario and Power Card was created for David, a 9-year-old boy with ASD, who whose current interest is high-end exotic cars, including the Aston-Martin driven by screen legend James Bond. This information was used to generate the Power Card scenario and Power Card presented below.

Sample Power Card Scenario and Power Card

James Bond Takes His Turn

James Bond loves to drive his Aston-Martin. He would drive it all the time if he could; however, he is not the only agent in his Majesty's Secret Service. Other spies also need their turn to drive it. So James takes his turn and waits patiently for his next chance. He knows his turn will come—if not today, maybe tomorrow, but he will get his chance again. Just like James Bond, you can wait patiently for your turn.

James Bond knows:

It is sometimes hard to wait, but your turn will eventually come. Just like James Bond, take a deep breath and wait for your turn.



Incredible 5-Point Scale

Managing one's emotions and behaviors requires self-awareness and self-regulation, skills that many young people with ASD are lacking. The Incredible 5-Point Scale, developed by Kari Dunn Buron, provides a clear, concrete visual aid that uses numbers to represent abstract ideas, such as feelings, emotions, and behaviors. It allows students with ASD to "talk in numbers" instead of using socially and emotionally loaded language. This format matches the major learning characteristics of many students with ASD.

The scale is unique in that it can be used as an obsessional index, a stress scale, a meltdown monitor, and so on. The Incredible 5-Point Scale helps people with ASD learn to:

- Better understand their emotions and reactions to events in their lives
- Modulate their responses and behaviors in difficult situations

To use the Incredible 5-Point Scale, the student with ASD and adults identify a behavior or problem situation and determine a rating scale for the behavior choices available to the student. The adult then creates a social narrative in the form of a *Social Story*TM, memo, or letter explaining the scale to the student. Using the scale and accompanying social narrative, students with ASD are taught to recognize the stages of their specific behavioral challenges and learn methods to self-calm at each level. Below is an illustration of how the Incredible 5-Point Scale may be used.

Sample Use of the Incredible 5-Point Scale

Larry, an 11-year-old boy with ASD, is very soft-spoken. The topic of voice volume was his particular social challenge. His social skills group had worked on filling in the colors and numbers on the scale. They determined that a voice volume of 5 was yelling. The number 4 represented a loud voice that might mean the person being talked to would have to move away. A conversation was represented by the number 3. Whispering happened at 2, and 1 was not talking at all. Larry practiced his voice volume using the scale . . . and it worked.



Appendix E Role of Assistive Technology

While technology has been used to support students with ASD for multiple decades (e.g., speech output devices), there has been a surge in the use of technology to support the academic, social, functional, vocational, and behavioral needs of students with ASD in recent years (Cardon, 2013). Computers, phones, tablets, specialized adapted equipment, and many other technological tools and devices support students with ASD in both assistive and instructional ways. Regarding assistive technology (AT) specifically, learning about available AT tools for students as well as knowing what to do if you believe you have a student who could benefit from AT are key.

The following is included in this appendix:

- Checklist teachers can use to support determining student AT needs
- Questions to consider when selecting AT for a student
- AT tools, including descriptions and examples of use
- Repurposing technology to be AT
- AT resources

Assistive Technology (AT) Consideration Checklist

This checklist should be used to support Committees on Preschool Education (CPSEs) and Committees on Special Education (CSEs) in their thorough consideration of AT devices for students with disabilities. The AT devices included on this checklist are not exhaustive, so CPSEs/CSEs are encouraged to make other student-specific considerations outside of the items on this checklist if necessary. This checklist is for consideration purposes and may be used to support the assessment of an assistive technology device (or, devices) for an individual student.

Student: _____ Date: _____

Environments and Tasks (Check all applicable environments and tasks in which the student may require AT support.)	Challenge Areas Related to Tasks (Check "Independent" if the student functions adequately with standard classroom tools. Check "Consider AT" if additional support may be needed.)	Possible AT Devices (For areas in which "Consider AT" is chosen in the preceding column, indicate any possible AT devices the CPSE/CSE may wish to consider when assessing the student's AT needs.)		
Curriculum Tasks: Instruction Independent Work Group Work Vocational Tasks Assessments Transitions Homework	Seating, Positioning & Mobility Independent Consider AT	 alternative/adapted chair or desk stander stabilizing supports grab bar/hand rail walking supports wheeled devices other 		
 Physical Tasks: Building Navigation Materials Manipulation Equipment Use Social Tasks: Communicating with 	Reading Independent Consider AT 	 reading window handheld voice-output reading device for printed documents text-to-speech software/app pictures/picture symbols added to text scanner with Optical Character Recognition (OCR) other 		
Others Participating in Extracurricular Activities Peer Interaction Game Play 	Writing Independent Consider AT 	□ pencil grips* □ adapted □ hand/wrist stabilizer* pens/utensils* □ adapted paper* □ electronic □ slant board* dictionary/thesaurus □ spell check □ scanner feature/device □ typing program with □ word-prediction voice output software □ other □ voice recognition *utensil modifications word processor for art class, as well □ drawing/painting, etc.)		

Environments and Tasks	Challenge Areas Related to Tasks	Possible AT Devices		
(Check all applicable environments and tasks in which the student may require AT support.)	(Check "Independent" if the student functions adequately with standard classroom tools. Check "Consider AT" if additional support may be needed.)	(For areas in which "Consider AT" is chosen in the preceding column, indicate any possible AT devices the CPSE/CSE may wish to consider when assessing the student's AT needs.)		
Safety Tasks: Safety Drills Building Safety Bus Safety Equipment Safety	Computer Access Independent Consider AT	 Microsoft/Mac accessibility options adapted/alternative keyboard adapted/alternative mouse switch interface 	 arm stabilization touch screen eye gaze access other 	
Environments: General Education Classrooms Special Education Classrooms Hallways Outdoor Activity Areas Assembly Spaces Cafeteria/Meal Spaces	Communication Independent Consider AT 	 picture symbols other communication boards voice output device with picture icons/overlays voice output device with steps for sequencing messages voice output device with dynamic displays written/typed communication text-based device with speech production 		
 School Bus Job Sites Field Trips Home 	Mathematics Independent Consider AT 	 manipulatives abacus talking calculator adapted math paper on-screen calculator voice recognition software/app with math recognition 	 math software/app talking watch/clock graphing calculator software/app math recognition feature for text-to-speech software/app other 	
Other Tasks/ Environments not listed: Curriculum Tasks: Instruction Instruction Group Work Vocational Tasks Assessments Transitions Homework	Organization Independent Consider AT	 sensory/regulatory supports fidget items sticky notes (low-tech or digital) highlighter (low-tech or digital) handheld scanner/ scanning pen electronic organizer dividers/bins/color coding for desk/locker/cubby 	app/computer-based	
	Vision	 □ large print □ Braille devices/ supports 	☐ math manipulatives☐ abacus	

continued

Environments and Tasks	Challenge Areas Related to Tasks	Possible AT Devices		
(Check all applicable environments and tasks in which the student may require AT support.)	(Check "Independent" if the student functions adequately with standard classroom tools. Check "Consider AT" if additional support may be needed.)	(For areas in which "Consider AT" is chosen in the preceding column, indicate any possible AT devices the CPSE/CSE may wish to consider when assessing the student's AT needs.)		
Physical Tasks: Building Navigation Materials Manipulation Equipment Use Social Tasks: Communicating with Others	 Independent Consider AT 	□ color filters for reading□ text-to-speech software/app□ magnifier/ magnifying devices (low-tech or electronic)□ voice recognition software□ closed captioning □ high contrast pen □ large key calculator□ typing program with voice output □ audio recorder □ tactile supports □ GPS □ other		
 Participating in Extracurricular Activities Peer Interaction Game-Play Safety Tasks: Safety Drills Building Safety Bus Safety 	Hearing Independent Consider AT 	 classroom amplification FM system infrared system induction loop system voice recognition software (to read another person's spoken message) one-to-one communicator personal amplification visual/vibrating alerting device other 		
 Equipment Safety Environments: General Education Classrooms Special Education Classrooms Hallways Outdoor Activity Areas Assembly Spaces Cafeteria/Meal Spaces School Bus Job Sites 	Recreation and Leisure Activities Independent Consider AT	 low-tech adaptations to toys/games (e.g. Velcro®, magnets, handles, etc.) switch access for toys/games/music arm stabilizers for drawing/painting specialized adapted toys/utensils/ manipulatives position aides electronic aids – remote controls, timers, CD/digital music players, speech generating devices online and virtual recreational experiences (e.g. art apps, digital dice, gardening, etc.) adapted sports/outdoor recreation equipment other 		
☐ Field Trips ☐ Home	Feeding Independent Consider AT 	 adapted feeding utensils adapted bowls/plates adapted cups tray attachment for specialized seating other 		

Environments and Tasks	Challenge Areas Related to Tasks	Possible AT Devices	
(Check all applicable environments and tasks in which the student may require AT support.)	(Check "Independent" if the student functions adequately with standard classroom tools. Check "Consider AT" if additional support may be needed.)	(For areas in which "Consider AT" is chosen in the preceding column, indicate any possible A devices the CPSE/CSE may wish to consider when assessing the student's AT needs.)	
Other Tasks/ Environments not listed:	Other:	List other tools to consider in the space provided:	

Note: Adapted from the *Kentucky State Assistive Technology Consideration Guide* and the Wisconsin Assistive Technology Initiative (WATI) *Assistive Technology Assessment Checklist* with acknowledgment to the Wisconsin Department of Public Instruction.

Questions to Consider When Selecting AT for a Student

- How does the AT device relate to the student's strengths and needs?
- Does the AT device promote a free, appropriate education, including access to the general education classroom?
- How does the AT device promote independence?
- How will you identify the training needs of the student as well as the training needs of others who will support the student in using the device?
- How you will determine if the student is benefiting or not from the device?

From Bryant, D. P., & Bryant, B. R. (2012). *Assistive technology for people with disabilities*. Upper Saddle River, NJ: Pearson Higher Ed.

Assistive Technology Tools, Definitions, and Examples of Use

According to IDEA 2004, an assistive technology (AT) device refers to "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of a student with a disability" (Section 602[1]). Students have a right to the AT they need to succeed.

AT Tool	Definition	Example of Use	
Checklists	A list of steps or items that will be checked off as it is completed. Checklists can be low-tech (paper/pencil) or high-tech (Wunderlist: To Do List & Tasks App downloaded to mobile device).	A student makes a list of items he needs for each class and posts the checklist in his locker with columns for each day of the week. As he puts each item in his backpack, he checks it of his list for that day.	
Clocks/timers	Tools that can be used to support students during transitions and/or to help students self-manage their time. Teachers can use a clock already in the classroom, clocks/timers on mobile devices or computers, and/or specific tools such as the Time Tracker® Visual Timer.	A teacher sets a timer to go off 2 minutes before each transition to prepare the student for the upcoming transition.	
Marker-based augmented reality	A form of augmented reality that uses a physical marker to trigger a display of digital information.	A student looks at a 4-step picture sequence to solve a math problem. When he needs additional support for a specific step, he opens the Aurasma AR app on his iPod Touch® and hovers the mobile device over the step he needs help with in order to watch a user-created video-model of that step.	
Pencil grip	A low-tech piece of adapted equipment that attaches to a pencil to improve grip.	A student with fine-motor challenges uses a pencil grip during writing assignments to increase the legibility of his handwriting.	

continued

AT Tool	Definition	Example of Use	
Smartpen	A smart pen that records and replays audio. The smartpen also records what you write in your smart notebook and instantly adds it to the corresponding app.	A student uses a Livescribe® smartpen to audio record the teacher's lesson while writing brief notes. She later replays the audio to study for a test, and uses the Livescribe® computer software to create flashcards from the audio notes.	
Speech- generating device (SGD)	A device that evokes a digitized speech message when the user presses a picture or text on the device.	A student uses her iPad with a purchased speech-generating app Proloquo2Go® to generate programmed speech messages when answering the teacher in her social studies class.	
Speech-to-text	Software that converts speech into text.	A student uses speech-to-text to dictate his essay by speaking in place of writing or typing.	
Text-to-speech	Software that reads electronic text aloud.	A student uses text-to-speech software to read his essay aloud to help him identify errors and revise the essay before submitting it for a grade.	
Virtual manipulatives	Computer-based simulations of physical manipulatives accessed from software or the internet.	A student goes to the National Library of Virtual Manipulatives website (<u>http://</u> <u>nlvm.usu.edu</u>) and uses virtual base 10 blocks to show and solve addition problems.	
Visual schedules	A visual support strategy to support students in independence and transitions. Visual schedules can be low- tech (e.g. paper/pencil) or high- tech (e.g., creating a visual schedule using an app on a mobile device).	A student follows her pictorial visual schedule on her Choiceworks app to move independently between classes.	

Repurposed Assistive Technology (AT)

Ownership of technology devices is becoming prevalent for school-aged students, including smartphones, tablets, and mp3 players. Using these socially desired technologies and repurposing them to serve as AT can provide the support students need, while being cost-effective and socially appropriate. Bouck et al. (2012) suggested using the TAPE framework to help select technology to be repurposed as AT, according to the four criteria: The technology should be Transportable, Accessible, Practical, and Engaging (TAPE) for the student. The following are examples of repurposed AT for the iPad and audio recorders.

iPad

The iPad was not originally designed and intended to be AT for students with ASD. However, researchers, families, teachers, and other service providers have been repurposing the iPad to be AT, including the following:

- Video: Use the iPad's video recording feature to record a task or behavior; then show the video to the student for instruction (i.e., video modeling)
- Communication: Use one of the numerous speech-generating apps, available for free or purchase, support students' communication needs
- Transition: Use the iPad's clock app and set alarms for transition periods
- Camera: Use the iPad's camera to take pictures of items in the classroom and to be used in making a visual picture schedule

Audio Recorder

While again not designed with the intention to be AT for students with ASD, audio recorders can serve as a support across multiple tasks, behaviors, and settings.

- Scripting: A script may be recorded on an audio recorder and the student can listen to it as needed throughout the school day
- Task analysis: A task analysis may be recorded on an audio recorder. Students can listen to the recording as they complete the task with the option to stop the recorder in between steps or keep the recording looping until the task is done
- Lecture notes: Students can use the audio recorder to record the teacher's lecture. They can then play back the recording when needed during homework, studying, or applied assignments

From Bouck, E. C., Shurr, J. C., Tom, K., Jasper, A. D., Bassette, L., Miller, B., & Flanagan, S. M. (2012). Fix it with TAPE: Repurposing technology to be assistive technology for students with high-incidence disabilities. *Preventing School Failure*, 56, 121–128.

Additional Technology Resources for Educators

Resource	Description
The Assistive and Instructional Technology Lab (UT Austin) http://www.edb.utexas.edu/atlab/ index.php	The lab is available for professors and students to use and familiarize themselves with different hardware and software applications. The AT categories section gives a comprehensive list of AT devices and tools across 9 domains (e.g., seating and positioning, sensory aids).
INDATA Project http://www.eastersealstech.com	A federally funded project for Indiana residents designed to increase access to and awareness of AT. Services include a large lending library, device demonstration, information and referral, and funding assistance. Similar projects are available in other states.
Quality Indicators for Assistive Technology <u>http://www.qiat.org</u>	AT resource for families and educators, including quality indicators, matrices, a resource bank, and connection to other online resources.
TechMatrix http://techmatrix.org	A project that allows users to search for assistive and educational technology tools and resources, featured resources, and a free professional learning platform. When searching for assistive or educational tools, users can narrow their search by content, grade level, IDEA disability category, cost, and operating system.
Technology and Media Division http://www.tamcec.org/	The official division of the Council for Exceptional Students that promotes availability and use of technology and media for individuals with exceptional needs. The website provides AT resources and information on membership.
Wisconsin Assistive Technology Initiative http://www.wati.org/	The mission of this initiative is to support Wisconsin schools in providing AT devices and services to students and youth with disabilities. Numerous free publications in English and Spanish, classroom materials, a lending center, and outside resources are available.

Appendix F IEP Planning and EBP Resources

As a general education teacher, while you may not be writing IEPs for students, it is important that you understand and comply with the IEP process and participate in the development and implementation of the educational programs for your students with ASD. The following will be described in this appendix:

- Developing IEP goals and objectives
- IEP calendar resource to keep track of student progress towards goals
- Implementation checklists for some foundational EBPs. Use these checklists as a guide to using these practices in your classroom

Developing Observable and Measurable IEP Goals and Objectives for Students With ASD

As mentioned previously in this guide, the Individualized Education Program (IEP) is a very important tool for helping your students with ASD achieve their full potential in your classroom. According to federal rules and regulations, every IEP must consist of the following six components:

- Statement of the student's current level of performance
- Statement of annual goals for students with mild disabilities and statement of annual goals and short-term objectives for students with significant disabilities
- Appropriate objective criteria and evaluation procedures and schedules for determining (at least annually) whether short-term objectives are being met
- Statement of the specific educational and related services (e.g., speech, OT/PT, transportation) to be provided to the student
- Projected dates for the start of the services, along with how long they will be provided
- Statement identifying the extent to which the student will be able to participate in general education classes, and any modifications or accommodations necessary to enable that participation

As a general education teacher, your greatest areas for input in the IEP process will be the following: (a) you will participate in the development and implementation of individual goals, specific educational goals, and objectives for your student; and (b) you will complete an ongoing assessment of your student's progress toward meeting these milestones.

Developing goals and objectives that are clearly stated, objectively determined (based on the student's need), and accurately measured is essential to success. While goals may be more broadly stated (*In math, Jim will learn addition and subtraction using carrying and borrowing*.), the objectives associated with the goal must present the clear steps by which this goal might best be attained (*When presented with 10 double-digit addition problems involving carrying, Jim will complete all problems with 90 percent accuracy within 10 minutes. Jim will be able to complete this task at this level for 2 consecutive days.*). Such clearly defined objectives are often referred to as **behavioral objectives**. In general, a good behavioral objective must:

- Identify the learner
- Identify the specific skill or behavior targeted for increase
- Identify the conditions under which the skill or behavior is to be displayed
- Identify criteria for competent performance

Each of these components will be discussed in turn in the following sections.

Identify the Learner

In most cases, it is easy to identify the learner (e.g., *"Jim will …" or "Susan will …"*). However, more than one learner may be identified in a behavioral objective (e.g., *"Jim and Susan will …"*), and this must be clearly stated.

Identify the Specific Skill or Behavior Targeted for Increase

In identifying the specific skill or behavior targeted for increase, you are, in effect, stating exactly what the learner is expected to be doing when the objective is met. This requires a precise description of skill in terms that are both observable and measurable. In the previous example, the overall goal was stated as: *In math, Jim will learn addition and subtraction using carrying and borrowing*. This is a general statement with little specificity or measurability.

On the other hand, in the second example given, the behavioral objective was stated very specifically as: *When presented with 10 double-digit addition problems involving carrying, Jim will complete all problems with 90 percent accuracy within 10 minutes. Jim will be able to complete this task at this level for 2 consecutive days.* In this case we know:

- Where the task is presented (in the classroom)
- How many problems are presented (10)
- What type of problems are presented (double-digit addition with carrying)

In writing clear and measurable behavioral/educational objectives, it is important to use verbs and related descriptors that are observable and measurable. Examples of observable and nonobservable verbs are listed below.

Observable Verbs	Nonobservable Verbs	
To write	To conclude	
To point to	To appreciate	
To name	To be aware	
To jump	To discover	
To count orally	To improve/increase	
-	To learn	
	To develop	

Identify the Conditions Under Which the Behavior Is to Be Displayed

A good behavioral/educational objective should include, when appropriate, conditions for performance, such as:

- What prompts the behavior: When presented with the verbal direction, Jim will ...
- A list of required materials: Using the math workbook, Jim will ...
- Characteristics of the environment: During school assemblies, Jim will ...

In this way, a myriad aspects of the individual instructional interaction can be presented in as consistent and productive a manner as possible.

Appendix F

Identify Criteria for Competent Performance

In the above case, the definition of success is clearly stated: *90 percent accuracy in a 10-minute time frame, for at least 2 consecutive days.* Once this objective is achieved as stated, Jim is to be considered competent at the task and ready to move on to the next objective. A solid IEP goal should always have similarly clear criteria, allowing team members to objectively determine success.

Summary

Creating an IEP for a student with ASD is both an art and a science. Using clear language to write achievable goals and objectives is the first step to success. The reference listed below provides more information on this important part of the educational process. Additionally, this appendix includes sample templates and checklists for the IEP process and EBPs.

From Alberto, P. A., & Troutman, A. C. (2013). *Applied behavior analysis for teachers* (9th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

IEP Calendar

Student's Name:	:
IEP Goal #1:	
IEP Goal #2:	
IEP Goal #3:	

Date	Progress Notes
L	

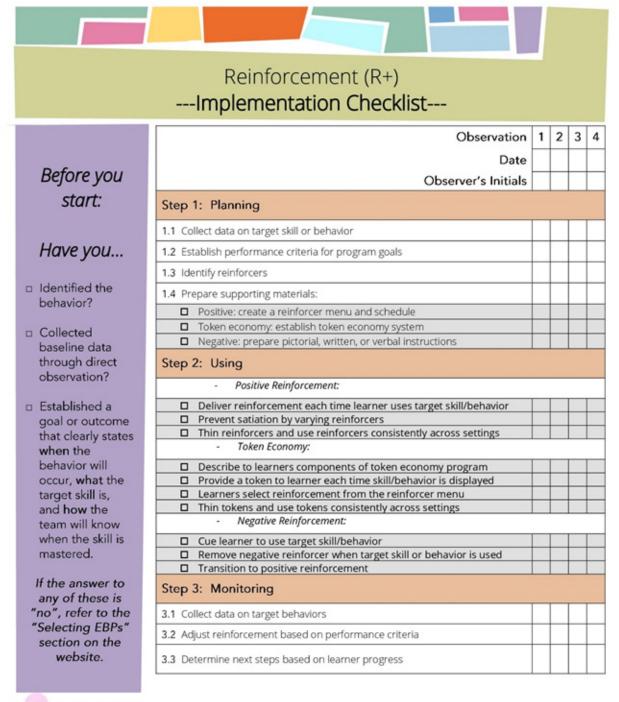
Implementation Checklist for Prompting

Prompting (PP) ---Implementation Checklist---Observation 1 2 3 4 Date Observer's Initials Before you Step 1: Planning 1.1 Identify the target skill/behavior as either a discrete or chained task 1.2 Select prompting procedure to use start: 1.3 Identify target stimulus 1.4 Select cues or task directions 1.5 Select reinforcers Have you... 1.6 Follow unique planning steps for selected prompting procedure Least-to-Most Prompting Select the number of levels in the hierarchy Identified the Select the types of prompts to be used Sequence prompts from least-to-most assistance behavior? Determine the length of the response interval Identify activities and times for using least-to-most prompting Collected Graduated Guidance baseline data Identify the controlling prompt through direct Determine the length of the response interval observation? Specify prompt fading procedures Identify activities and times for using graduated guidance Simultaneous Prompting Established a Identify the controlling prompt goal or outcome Determine the length of the response interval that clearly states Identify activities and times for using simultaneous prompting when the Step 2: Using behavior will Least-to-Most Prompting: occur, what the Establish learner attention, deliver stimulus, and provide the cue target skill is, Wait for learner to respond Respond to learner's attempts and how the Graduated Guidance: team will know Establish learner attention, deliver stimulus, and provide the cue when the skill is Wait for learner to respond mastered. Respond to learner's attempts Simultaneous Prompting: If the answer to Establish learner attention, deliver stimulus, and provide the cue any of these is Conduct instructional sessions by: Delivering the controlling prompt "no", refer to the Responding to learner's attempts "Selecting EBPs" Conduct probe sessions by: section on the Providing no prompt website. Responding to learner's attempts Step 3: Monitoring 3.1 Collect data on target behaviors 3.2 Determine next steps based on learner progress

AFIRM Autism Focused Intervention Resources and Modules

Note: From the *Autism Focused Intervention Resources & Modules (AFIRM)*, <u>http://afirm.fpg.unc.edu/</u> prompting/. Used with permission.

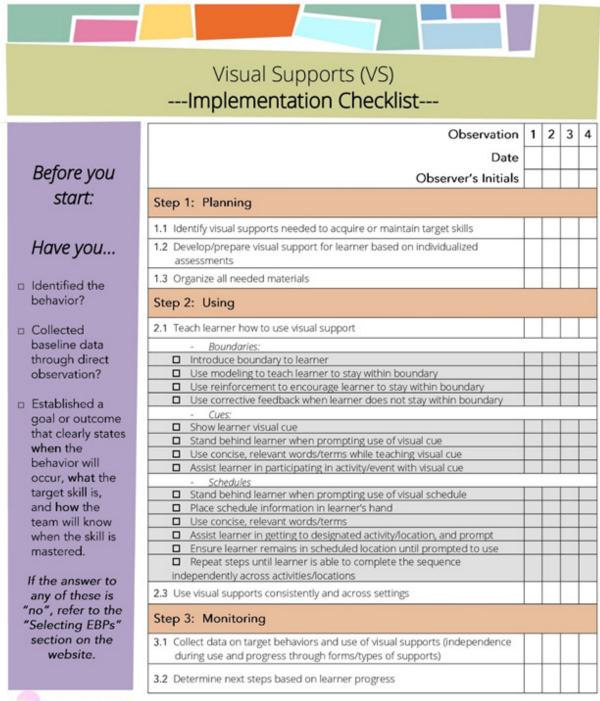
Implementation Checklist for Reinforcement



AFIRM Autism Focused Intervention Resources and Modules

Note: From the *Autism Focused Intervention Resources & Modules (AFIRM)*, <u>http://afirm.fpg.unc.edu/</u> <u>prompting/</u>. Used with permission.

Implementation Checklist for Visual Supports



AFIRM Autism Focused Intervention Resources and Modules

Note: From the *Autism Focused Intervention Resources & Modules (AFIRM)*, <u>http://afirm.fpg.unc.edu/</u> prompting/. Used with permission.

Appendix G Teaching Self-Advocacy Skills

What is self-advocacy?

Self-advocacy is the ability to effectively communicate, convey, negotiate or assert one's own interests, desires, needs, and rights. It involves making informed decisions and taking responsibility for those decisions (VanReusen et al., 1994). Self-advocacy skills are crucial in order for people with ASD to make decisions about their own lives.

When should students start learning to be self-advocates?

It's best to begin as early as possible. Self-advocacy goals can be included in students' IEPs. A list of self-advocacy skills that individuals should learn by a certain age range is available at <u>http://milestones.org/individuals-with-asd/self-advocacy/</u>.

What are some examples of self-advocacy skills?

Examples of self-advocacy skills include:

- The ability to recognize that one needs to take a break and being able to effectively communicate that to others
- Problem-solving when things don't go as planned. This involves consideration of alternative solutions and determining the best course of action
- Participating in or even leading one's own IEP meetings
- Safety skills

How do I teach self-advocacy?

How best to teach these skills depends on the individual student. We have gathered some lesson plans to help you encourage students to grow as self-advocates and participate actively in decisions about their lives.

The following sample checklist helps track progress in self-advocacy skill development. It is meant to serve only as a starting point, so it's important to customize it to reflect your individual students' areas of strengths and needs.

Note: Talk with your student and his or her guardian before teaching skills related to disclosure of ASD. It's important to receive permission and approval from the family, as not everyone is comfortable with sharing their ASD diagnosis.

For tools and tips to assist with teaching self-advocacy skills, see the Resources section.

Self-Determination Checklist: Progress Check

Student Name:	Date:
Name of person completing the checklist:	
Relationship to the student:	

Directions: Use the scale below to answer the following questions. There are no wrong answers.

5 = Always 4 = Most of the time 3 = Sometimes 2 = Rarely 1 = Never 0 = Not observed

THIS CHART SHOULD BE INDIVIDUALIZED TO REFLECT MAXIMUM PARTICIPATION

The student:	Beginning of school year:	Mid- year:	End of year:
Tells teachers, staff, and family what he/she likes to do.			
Makes choices regarding supports, accommodations, and activities.			
Can describe his/her disability.			
Can identify supports and accommodations that work best for him/her in a given situation.			
Asks for help when he/she needs to.			
Can describe the way that supports and services help him/her.			
Can tell paid and unpaid supports how he/she wants the requested help to be provided.			
Leads/takes principal role in IEP and transition planning meetings.			
Chooses whom he/she would like to attend the planning meeting.			

The student:	Beginning of school year:	Mid- year:	End of year:
Articulates his/her strengths.			
Can make meaningful decisions related to academic and leisure activities.			
Has a circle of support, including family and friends, who help him/her accomplish the things the student wants.			
Works with his/her IEP manager in developing his/her IEP.			
Has expressed interest in developing options for life after finishing school.			
Chooses integrated leisure and recreational activities.			
Can describe the range of housing options available and express a preference.			
Can describe medical needs, if any.			
Monitors/assesses educational program and outcomes.			
TOTAL SCORE:			

Note: Adapted with permission from Milestones Autism Resources, <u>www.milestones.org/</u>.

Appendix H Transition Planning

	Transition Considerations and Checklist
Pre-K	
Setting	Make sure staff has good knowledge of typical student development and is trained in ASD
	Use an integrated approach for goals and services
	Teach generalization skills—focus on the positive
	Be proactive
	Prevent bullying
Environment	Natural setting, includes similar-age peers who are both social and verbal
	Visually structured with clear, defined boundaries
	Quiet area to reduce anxiety and sensory overload
Social- Emotional	Provide curriculum that addresses core deficits based on the student's developmental stage
	Foster self-awareness of feelings and emotions
	Encourage friendships and develop play skills
	Build self-esteem
Academic	Create schedule that reflects a balanced variety of activities that address both cognitive and adaptive needs and skills
	Use student's special interests to enhance learning
Behavioral	Ensure staff and classroom expectations meet student's needs
	Reduce stress and anxiety
	Build in choice-making throughout the day, as appropriate; often, presenting too many choices confuses and agitates students with ASD
	Teach the hidden curriculum
	Teach, encourage, and support developmentally appropriate self-advocacy
Elementary S	:hool
Setting	Same as pre-K; in addition:
	Conduct and review assessments
	Check for understanding

continued

	Transition Considerations and Checklist			
Elementary School				
Environment	Same as pre-K; in addition:			
	Consider student's needs with teacher style			
	Use visual supports and graphic organizers			
	Provide structure to unstructured activities			
Social-	al- Same as pre-K; in addition:			
Emotional	Use circle of friends and social groups to build relationships			
	Teach concept of home base and safe person			
	Allow and encourage student to be a leader/helper			
Academic	Same as pre-K; in addition:			
	Be respectful of learner's strengths and challenges			
	Modify and adjust academic expectations to meet student capabilities			
	Introduce concept of leisure skills			
Behavioral	Same as pre-K; in addition:			
	Make sure positive behavioral supports are in place			
	Recognize communication of behaviors			
	Be aware of teaching independence rather than learned			
	helplessness			
	Middle School			
Setting	Same as elementary school; in addition:			
	Be sensitive to possibility of depression			
Environment	Same as elementary school; in addition:			
	Provide orientation			
	Practice routines			
	Provide maps and written directions			
Social-	Same as elementary school; in addition:			
Emotional	Analyze effects of stress and anxiety			
	Teach self-reflection, self-evaluation			
	Expand vocabulary of emotions/feelings			
	Change the format of social skills training			
Academic	Same as elementary school; in addition:			
	Build in homework strategies/accommodations			
	Provide study hall			
	Provide opportunities for leadership in special interest areas			
	Further define leisure skills			

	Transition Considerations and Checklist
Behavioral	Same as elementary school; in addition:
	Honor and value student's opinions
	Reassess motivation and reinforcements
	Introduce self-determination curriculum
	Establish understanding of role and responsibility of law enforcement
	High School
Setting	Same as middle school; in addition:
	Prevent intimidation and harassment
Environment	Same as middle school; in addition:
	Provide orientation opportunities prior to beginning of the year
	Possibly attend a summer class
Social-	Same as middle school; in addition:
Emotional	Provide work experience, supported if necessary
	Continue to facilitate friendships and build on like interests
Academic	Same as middle school; in addition:
	Provide enrichment activities in addition to academics
Behavioral	Same as middle school
	School-to-Work
Setting	Same as high school
Environment	Same as high school; in addition:
	Change from high school setting to college or work setting
Social-	Same as high school; in addition:
Emotional	Expand friendships to the next environment
Academic	Same as high school; in addition:
	Continue to focus on academics or transfers to work environment
Behavioral	Same as high school; in addition:
	Builds on self-determination and self-advocacy

Transition Timeline

Middle School Tasks

- □ Develop study skills and strategies that you know work for you.
- □ Talk to teachers to identify classroom accommodation needs.
- □ Evaluate basic skills in reading, mathematics, and oral and written language, and plan for remediation, if necessary.
- □ Identify tentative postsecondary career and personal goals.
- □ Investigate which high school classes will best prepare you for your postsecondary goals.
- □ Attend high school orientation or schedule appointment with the high school special education department chair to familiarize yourself with high school requirements.
- □ Review high school diploma options and plan a course of study to meet requirements.
- □ Explore interests through elective courses, clubs, and/or extracurricular activities.
- □ Investigate ninth-grade vocational class to see if it offers training relevant to your postsecondary goals.
- □ Investigate customized work experience opportunities in school, such as tech support or working in your school store.
- □ Begin a Transition Services Career Portfolio to collect information that may be helpful in planning for your future.
- □ Review high school diploma options and plan a course of study to meet the requirements.
- □ Take the state-required standardized tests in English and mathematics at the end of eighth grade.
- □ Participate in developing a transition plan, which will be included in your IEP starting in eighth grade (or at age 14).
- □ Attend IEP meetings.
- □ Make a list of the activities necessary to achieve your transition plan goals.

Freshman Year Tasks

- □ Learn the specific nature of your disability and how to explain it so others will understand your needs.
- □ Ask your parent or a special education teacher to help you develop a plan for meeting with your teachers to explain your disability and request accommodations.
- $\hfill\square$ Learn strategies to help you access the same coursework as your peers.
- □ Continue to remediate basic skill deficits.
- □ Review diploma options, revise choice as necessary, and plan a course of study to meet requirements.

- □ Consider whether extending your high school graduation date by 1 to 3 years will help you to reach your postsecondary goals.
- □ Discuss with a guidance counselor the appropriateness of enrolling in 10th-grade career-related courses.
- □ Visit the school career center and ask the career center specialist to tell you about the college and career planning resources available in your school.
- □ Meet with your case manager to discuss the comprehensive vocational assessment services offered locally to decide whether a referral is appropriate.
- □ Continue to explore interests through elective courses, clubs, and extracurricular activities.
- □ Update your Career Portfolio.
- □ Meet with your case manager to plan your IEP meeting and to discuss the role you will play in developing your IEP.
- □ Formulate a transition plan with your case manager and IEP team that reflects your goals and interests.
- □ Prepare for and pass the required standardized tests.

Sophomore Year Tasks

- □ Ask your parent or special education teacher to help you prepare to meet with your teachers to explain your disability and request accommodations.
- □ Add to your understanding and use of learning strategies to help you access the same coursework as your peers.
- □ Continue to remediate basic skill deficits.
- □ Review diploma options, revise choice as necessary, and plan a course of study to meet requirements.
- □ Consider whether extending your high school graduation date by 1 to 3 years will help you to reach your postsecondary goals.
- □ Discuss with a guidance counselor the appropriateness of enrolling in career-related courses.
- □ Meet with your case manager to discuss available career/vocational assessment options to decide whether a referral is appropriate.
- □ If your career plans will require a college degree, register and take the Preliminary Scholastic Aptitude Test (PSAT) in the fall; consider using testing adjustments and auxiliary aids.
- □ Continue to explore interests through extracurricular activities, hobbies, volunteer work, and work experiences.
- □ Identify interests, aptitudes, values, and opportunities related to occupations in which you are interested.
- □ Update your Career Portfolio.
- □ Participate actively in your IEP meeting.
- □ Continue to actively participate in your IEP transition planning with your case manager and IEP team.

Junior Year Tasks

- □ Identify the appropriate academic adjustments and auxiliary aids and services that you will need in postsecondary settings and learn to use them efficiently.
- □ Learn time management, study skills, assertiveness, stress management, and exam preparation strategies.
- □ Arrange to meet with your teachers to explain your disability and request accommodations.
- □ Continue to remediate basic skill deficits.
- □ Review diploma options, revise choice as necessary, and plan a course of study to meet requirements.
- □ Consider whether extending your high school graduation date by 1 to 3 years will help you to reach your postsecondary goals.
- □ Discuss with a guidance counselor the appropriateness of enrolling in careerrelated courses in 12th-grade.
- □ Meet with your case manager to discuss available career/vocational assessment options to decide whether a referral is appropriate.
- □ Continue to explore your interests through involvement in school- or community-based extracurricular activities and work experiences.
- □ Update your Career Portfolio.
- □ Focus on matching your interests and abilities to the appropriate post-secondary goals.
- □ If your career goals require postsecondary education, look for schools that offer courses in which you might be interested.
- □ Speak with representatives of colleges, technical schools, training programs, and/or the military who visit your high school or present at college and post-secondary fairs.
- □ Gather information about college programs that offer the disability services you need.
- □ Visit campuses and their disability service offices to find out what services are available and how to access them.
- □ Make sure that the documentation of your disability is current. Colleges want current evaluations, usually less than 3 years old when you begin college.
- □ Ask your guidance counselor about the differences between SAT and ACT tests to determine which one is a better match for you.
- □ Consider taking a course to prepare for the SAT (Scholastic Aptitude Test) or the ACT (American College Testing).
- □ Take the SAT or ACT in the spring. Discuss with your case manager whether to request testing accommodations.
- □ Meet with your case manager to develop a plan for leading your IEP.
- □ Continue to participate in your IEP transition planning with your case manager and IEP team.
- Contact the Department of Rehabilitative Services (DRS), the Community Services Board, or other postsecondary agencies to determine your eligibility for services.

□ Invite a representative of the appropriate adult services agency to attend your IEP meeting.

Senior Year (or 18–22) Tasks

- □ Identify ways in which the accommodations listed on your IEP will translate to postsecondary education and employment settings.
- □ Continue to develop your advocacy skills and to polish your study skills.
- □ Arrange to meet with your teachers to explain your disability and request accommodations.
- □ Continue to remediate basic skill deficits.
- □ Review diploma options, revise your choice as necessary, and plan a course of study to meet requirements.
- □ Consider whether extending your high school graduation date by 1 to 3 years will help you to reach your postsecondary goals.
- □ Discuss with a guidance counselor the appropriateness of enrolling in career-related courses during the fifth, sixth, or seventh year of high school.
- □ Meet with your case manager to discuss available career/vocational assessment options to decide whether a referral is appropriate.
- □ Continue to explore your interests through involvement in school- or community-based extracurricular activities and work experiences.
- □ Update your Career Portfolio.
- □ Focus on matching your interests and abilities to the appropriate postsecondary goals.
- □ Meet with your school guidance counselor early in the year to discuss your postsecondary plans.
- □ Plan to visit schools, colleges, or training programs in which you are interested early in the year.
- □ Evaluate the disability services, service provider, and staff of any schools in which you are interested.
- □ Obtain copies of any school records that document your disability to obtain accommodations in postsecondary environments.
- □ Take the SAT or ACT again, if appropriate.
- □ Lead your IEP meeting.
- Develop your Individual Transition Plan and present it at your IEP meeting.
- □ If not done in your junior year, contact the Department of Rehabilitative Services (DRS), the Community Services Board, or other adult service agency counselor to determine your eligibility for postsecondary services.
- □ Invite a representative of the appropriate adult services agency to attend your IEP meeting.

Note: Adapted from Virginia's *College Guide for Students With Disabilities* (2003 Edition). Available at <u>www.pen.k12.va.us</u>.

Revised Comprehensive Transition Model (CTM): Knowledge and Skill Domains

Communication	Expressive and receptive communication skillsFocus on practicing skills at home, in school, and in the community
Academic Performance	 Academic skills, such as reading, math, language arts, science, and social studies Focus on getting students to use accommodations both in class and for state assessments
Self-Determination	• Being the primary "causal agent" in one's life, which involves making one's own decisions and acting on them, as well as participating in more self-directed learning
Interpersonal Relationships	• Social skills such as those related to communicating with others (e.g., initiating, maintaining, and ending conversations) and understanding and managing emotions (e.g., conflict resolution)
Integrated Community Participation	• Participating in one's community through components such as restaurants, stores, parks, libraries, places of worship, community events, government, and volunteering
Health and Fitness	 Monitoring one's health, including scheduling and attending regular check-ups, and recognizing symptoms and determining how to respond to them Understanding and applying the principles of nutrition and exercise Understanding sexuality Being prepared to handle medical emergencies
Technology and Assistive Technology	 Low- and high-tech assistive devices and services to assist students with independence Focus on socially appropriate technology for older students, including texting and social media Focus on the use of technology across home, school, and community settings
Leisure and Recreation	 Activities that are relaxing and enjoyable in one's downtime, such as those related to sports, arts and crafts, and music Development and expansion of student awareness and knowledge of leisure options
Mobility (Transportation)	 Practice skills through related services in a student's IEP or through practice in the community Includes riding public transportation, carpooling with a friend, driving self, and transportation safety

Independent/ Interdependent Living	 Adaptive behaviors, such as personal hygiene, obtaining and maintaining a home, cleaning, cooking, and managing one's finances Understanding when one needs support or assistance
Work-Readiness (Employment)	 General skills related to working, such as following instructions, being punctual and responsible, and taking criticism Occupational skills, such as how to search and apply for jobs, integrating oneself into a new work environment, working well independently or as a member of a team, communicating effectively, and adapting to work environment changes Vocational skills, or those that are specific to a job, such as being able to take someone's temperature, weight, height, and vitals for someone working in an entry-level health care position
College-Readiness	 Further education and training options Awareness of application procedures and admission requirements

Note: Based on *Transition Education and Services for Students With Disabilities, 5th Edition,* by Sitlington, Neubert, & Clark, 2010.

RESOURCES

Resources by Topic Area

Cartooning

- Arwood, E., & Brown, M. M. (1999). *A guide to cartooning and flowcharting: See the ideas*. Portland, OR: Apricot.
- Gray, C. (1995). *Social stories unlimited: Social stories and comic strip conversations.* Jenison, MI: Jenison Public Schools.
- Hamersky, J. (1995). *Cartoon cut-ups: Teaching figurative language and humor*. Eau Claire, WI: Thinking Publications
- Howlin, P., Baron-Cohen, S., & Hadwin, J. (1999). *Teaching students with autism to mindread: A practical guide for teachers and parents.* New York, NY: John Wiley and Sons.
- Laba, A. (2015). The use of comic strip conversations in shaping social behavior of students with autism in the context of play. *The New Educational Review*, 39(1), 201–211.

Incredible 5-Point Scale

- Buron, K. D. (2003). When my autism gets too big! A relaxation book for students with autism spectrum disorders. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Buron, K.D. (2007). A 5 is against the law! Social boundaries: Straight up! An honest guide for teens and young adults. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Buron, K. D., & Curtis, M. (2012). The incredible 5-point scale: The significantly improved and expanded second edition, Assisting students in understanding social interactions and controlling their emotional responses. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Buron, K. D., Brown, J. T., Curtis, M., & King, L. (2012). Social behavior and self-management: 5-point scales for adolescents and adults. Shawnee Mission, KS: Autism Asperger Publishing Company.

Power Card Strategy

- Campbell, A., & Tincani, M. (2011). The power card strategy: Strength-based intervention to increase direction following of students with autism spectrum disorder. *Journal of Positive Behavior Interventions*, 13, 240–249.
- Gagnon, E., & Myles, B. S. (2016). *The power card strategy 2.0: Using special interests to motivate students and youth with autism spectrum disorder.* Shawnee Mission, KS: Autism Asperger Publishing Company.

Spencer, V. G., Simpson, C. G., Day, M., & Buster, E. (2008). Using the power card strategy to teach social skills to a student with autism. *Teaching Exceptional Students Plus*, *5*, 1–10.

Self-Advocacy Skills

- Gensic, J. (2015, September 28). *5 tips for teaching autism self-advocacy*. Retrieved from <u>http://learnfromautistics.com/autism-self-advocacy-tips/</u>.
- The National Autism Resource and Safety Center & The Autistic Self-Advocacy Network. (2015, February). *A curriculum for self-advocates*. Retrieved from <u>http://autistic</u> <u>advocacy.org/wp-content/uploads/2015/02/CurriculumForSelfAdvocates_r7.pdf</u>.
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- Thompson, B. (2016). *Self-advocacy & self-determination*. Retrieved from <u>http://milestones.</u> <u>org/individuals-with-asd/self-advocacy/</u>.
- University of Oklahoma Zarrow Center. (2016). *Choicemaker Self-Determination Curric-ulum*. Retrieved from <u>http://www.ou.edu/content/education/centers-and partner-ships/zarrow/choicemaker-curriculum.html</u>.
- Virginia Board of Education. (2015). *The I'm Determined Project: Educators*. Retrieved from <u>http://www.imdetermined.org/educators/</u>.

Social Skills Curricula

- Bellini, S. (2016). *Building social relationships 2: A systematic approach to teaching social interaction skills to students and adolescents on the autism spectrum* (2nd ed.). Shawnee Mission, KS: Autism Asperger Publishing Company.
- Buron, K. D. (2017). *The social times curriculum*. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Cardin, T. A. (2004). Let's talk emotions: Helping students with social cognitive deficits, *including AS, HFA, and NVLD, learn to understand and express empathy and emotions.* Shawnee Mission, KS: Autism Asperger Publishing Company.
- Coucouvanis, J. (2005). Super skills: A social skills group program for students with Asperger Syndrome, high-functioning autism and related challenges. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Dunn, M. A. (2005). S.O.S. social skills in our schools: A social skills program for students with pervasive developmental disorders, including high-functioning autism and asperger syndrome, and their typical peers. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Mataya, K., & Owens, P. P. (2012). Successful problem-solving for high-functioning students with autism spectrum disorders. Shawnee Mission, KS: Autism Asperger Publishing Company.

Myles, H. M., & Kolar, A. (2013). *The hidden curriculum and other everyday challenges for elementary-age students with high-functioning autism.* Shawnee Mission, KS: Autism Asperger Publishing Company.

Social StoriesTM

- Gray, C. (2010). The new Social Story[™] book: Revised and expanded 10th anniversary edition: Over 150 Social Stories[™] that teach everyday social skills to students with autism or Asperger's syndrome and their peers. Arlington, TX: Future Horizons Inc.
- Gray, C. (2015).*The new Social Story™ book: Revised and expanded 15th anniversary edition: Over 180 Social Stories™ that teach everyday social skills*. Arlington, TX: Future Horizons Inc.
- Howley, M., & Arnold, E. (2013). *Revealing the hidden social code: Social Stories*[™] *for people with autism spectrum disorders.* Philadelphia, PA: Jessica Kingsley Publishers.
- Timmins, S. (2017). *Developing resilience in young people with autism using Social Stories*[™]. Philadelphia, PA: Jessica Kingsley Publishers.
- Timmins, S., & Gray, C. (2017). Successful Social Stories[™] for school and college students with autism: Growing up with Social Stories[™]. Philadelphia, PA: Jessica Kingsley Publishers.
- Timmins, S., & Gray, C. (2016). *Successful Social Stories*[™] for young students with autism: *Growing up with Social Stories*[™]. Philadelphia, PA: Jessica Kingsley Publishers.
- Williams, C., & Wright, B. (2016). *A guide to writing Social Stories*[™]: *Step-by-step guidelines for parents and professionals*. Philadelphia, PA: Jessica Kingsley Publishers.

Transition

- Bowerman, R., Schuck, L., Gothberg, J., Coyle, J., & Kohler, P. (2014). *Transition fair toolkit*. Kalamazoo, MI: National Secondary Transition Technical Assistance Center.
- Ives, M. (2002). What is Asperger Syndrome, and how will it affect me? A guide for young people. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Kraus, J. D. (2010). *The aspie teen's survival guide: Candid advice for teens, tweens, and parents, from a young man with asperger's syndrome.* Arlington, TX: Future Horizons Inc.
- National Technical Assistance Center on Transition. *Quick guide: Transportation and travel instruction*. Charlotte, NC: Author
- Wehmeyer, M. L., & Shoegren, K. A. (2016). Self-determination and choice. In N. N. Singh (Ed.), Handbook of evidence-based practices in intellectual and developmental disabilities (pp. 561–584). New York, NY: Springer International Publishing.

General Resources

Books

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- Dittoe, C., & Bridgman, H. J. (2017). *Show me! A teacher's guide to video modeling.* Shawnee Mission, KS: Autism Asperger Publishing Company.
- Ernsperger, L. (2016). *Recognize, respond, report: Preventing and addressing bullying of students with special needs.* Baltimore, MD: Paul H. Brookes Publishing.
- Kabot, S., & Reeve, C. E. (2015). *Taming the data monster: Collecting and analyzing classroom data to improve student progress.* Shawnee Mission, KS: Autism Asperger Publishing Company.
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- Myles, B. S., & Southwick, J. (2005). *Asperger Syndrome and difficult moments: Practical solutions for tantrums, rage, and meltdowns* (2nd ed.). Shawnee Mission, KS: Autism Asperger Publishing Company.
- Wilkins, S., & Burmeister, C. (2015). *Flipp the switch: Strengthen executive function skills.* Shawnee Mission, KS: Autism Asperger Publishing Company.
- Wilkinson, L. A. (2016). A best practice guide to assessment and intervention for autism spectrum disorder in schools. London, UK: Jessica Kingsley Pub.

Web Sites

Autism Focused Intervention Resources and Models (AFIRM) <u>http://autismpdc.fpg.unc.edu/</u>

Through the National Professional Development Center on Autism Spectrum Disorder, AFIRM is designed to teach different evidence-based practices (EBP) for students on the spectrum up to 22 years of age. Their modules guide the application of EBP, and professional development certifications are available upon completion.

Autism Society

www.autism-society.org

The Autism Society promotes community promotes community involvement of individuals with autism spectrum disorder through education, advocacy, and public awareness campaigns. Its Web site lists state and local autism societies and provides resources for parents, including legislative information, and answers to frequently asked questions from parents about autism spectrum disorder.

Autism Spectrum Coalition

www.aspergersyndrome.org/

The Autism Spectrum Coalition is a worldwide non-profit organization providing resources, networking opportunities, and referrals for families and professionals concerned with the autism spectrum.

The Council for Exceptional Children

www.cec.sped.org

The Council for Exceptional Children (CEC) publishes numerous books about ASD and IEPs, along with information on professional development and training for teachers. The site also features discussion forums and information on advocacy and special education legislation.

GRASP: Global and Regional Asperger Syndrome Partnership

www.grasp.org

GRASP is an educational and advocacy organization serving individuals on the autism spectrum. Founded and operated by individuals with Asperger Syndrome

and high-functioning autism, GRASP strives to educate the public about ASD, provide a supportive environment for persons on the spectrum, and celebrate the unique strengths and abilities these individuals possess.

Organization for Autism Research

www.researchautism.org

OAR is an organization formed and led by parents and grandparents of students and adults with autism. Its mission is to put applied research to work providing answers to questions that parents, families, individuals with autism, teachers, and caregivers confront each day. OAR accomplishes this by funding research studies designed to investigate treatments, educational approaches, and statistical aspects of the autism community. The website contains monthly newsletters, a comprehensive list of resources, and an overview of practical research underway in autism spectrum disorder.

Multimedia

- Coulter Video. (2006). *Intricate minds: Understanding classmates with Asperger Syndrome*. Winston-Salem, NC: Author. (DVD)
- Coulter Video. (2004). *Asperger syndrome for dad: Becoming an even better father to your student with Asperger syndrome.* Winston-Salem, NC: Author. (DVD)
- Coulter Video. (2013). *Managing puberty, social challenges, and (almost) everything: A video guide for girls.* Winston-Salem, NC: Author. (DVD)
- Coulter Video. (2014). *Manner for the real world: Basic social skills.* Winston-Salem, NC: Author. (DVD)
- Myles, B.S. (2005). *The hidden curriculum: Teaching what is meaningful.* Shawnee Mission, KS: Autism Asperger Publishing Company. (DVD)
- Myles, B. S. (2005). *Difficult moments for students and youth with autism spectrum disorders*. Shawnee Mission, KS: Autism Asperger Publishing Company. (DVD)
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What's Next?

Here are some other resources to help you continue to support students on the spectrum!

Professional Development: The Curriculum in a Box

A comprehensive package designed to offer professional development training for middle and secondary school teachers in the general education classroom. The evidence-based strategies and supports are modeled and discussed in the video DVD presentations, and presented in detail in the educator guidebooks.

Peer Acceptance Programs:

Kit for Kids

Our *Kit for Kids* program is designed to teach elementary and middle school students about their peers with autism. Each story teaches students that students with autism may think differently or need some accommodations, but that all students are of equal worth and should be treated as such.

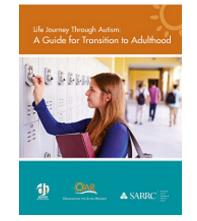
Autism Tuned In

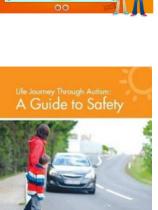
Autism Tuned In is an online extension of our Kit for Kids peer education program, using engaging animations and games to address universal topics like being different, understanding others, expressing oneself, and using one's senses.

Other Helpful Resources:



Navigating the Special Education System





A Guide to Safety

Want to order guidebooks for yourself or student families, or peer acceptance resources for your classroom or school district? Call the Organization for Autism Research at (866) 366-9710, or place an order at our store by visiting <u>researchautism.org/resources/</u>.

A Guide for Transition to Adulthood











Autism spectrum disorder (ASD) is a complex group of disorders that present numerous challenges within the inclusive classroom setting. This book provides guidelines for meeting the level 1 support needs of the child with ASD in your class, from elementary to high school. Specifically, the guide contains information on:

- Understanding common characteristics of ASD (Level 1 Supports) and how they affect children differently in the classroom
- Promoting positive social goals and educating peers to avoid bullying
- Collaborating with parents and the student's IEP team
- Implementing strategies to better facilitate the learning of students with ASD (Level 1 Supports)

The Organization for Autism Research (OAR) is a national nonprofit organization formed and led by relatives of children and adults with autism and Asperger Syndrome. OAR is dedicated to promoting research that can be applied to help families, educators, caregivers, and individuals with autism find much-needed answers to their immediate and urgent questions. Committed to excellence in its service to the autism community, OAR seeks to fund applied research that will make a difference in individual lives; provide information that is timely, useful, and cost efficient; and offer opportunities for the autism community to collaborate and make advances together.



Production and distribution of *Life Journey Through Autism: An Educator's Guide to ASD (Level 1 Supports)* was made possible thanks to the generous support of the American Legion Child Welfare Foundation.





ORGANIZATION FOR AUTISM RESEARCH www.researchautism.org