OKLAHOMA STATE DEPARTMENT OF EDUCATION
SPECIAL EDUCATION SERVICES
AUTISM HANDBOOK

Oklahoma Autism Handbook

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INTRODUCTION

Acknowledgements

The Oklahoma Autism Handbook was developed through a collaborative process that engaged the following interdisciplinary contributors from areas across the state and representatives of the Oklahoma State Department of Education Special Education Services (OSDE-SES). The varied perspectives and expertise of the following team members strengthened the structure and content of this handbook, and their time and effort are greatly appreciated.

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Handbook Overview

This handbook was developed to provide guidance regarding identification, interventions and the provision of special education services for students with autism. It is not intended to be a comprehensive resource on all aspects of autism, since every child with autism is different and therefore ways of supporting their classroom experience will be highly individualized.

Most people agree that referring to "autism" as opposed to "autism spectrum disorder/condition" is preferable. In this handbook, the authors have referred to "autism spectrum disorder" and ASD only when necessary to describe diagnostic criteria. For the purpose of this handbook, the term "autism" is used as defined in the Individuals with Disabilities Education Act (IDEA) 2004.

The number of children identified with autism has increased significantly over recent years. The increasing prevalence of students identified with autism in public schools has emphasized a need for a handbook to assist school staff with appropriately identifying and supporting students with autism. At the time of this publication, research on the prevalence of autism is ongoing, and the rates may change over time. Updated information can be found at the CDC the Data & Statistics website.

This handbook orients the reader to important topics related to educating children with autism and provides current information about autism. Information is intended for use by educators, families, students, and community providers. This handbook is a guide and is not intended to replace any existing regulation or policy.

The goal of this handbook is to improve educational outcomes for students with autism by providing:

- Background and current information on the characteristics of autism, including descriptions of the range of behaviors a child with autism might display in the classroom.

- Suggestions on how to collaborate as a team to support children with autism.

- Guidance for school teams to identify children with autism.

- Best practices/evidence-based practices, and reliable resources concerning educational intervention strategies for children with autism.

- Information on smooth secondary transitions for children and youth with autism.

Resources relevant to each section of this handbook are compiled in the "Resources" section included in Appendix A.

Person-First and Identity-First Language

There are differences in opinion about how to talk about autism: person-first language or identity-first language.

- **Person-First Language**, such as "a person with autism," takes the view of talking about the person before the disability and aims to communicate that a person is more than their disability.

- **Identity-First Language**, such as "autistic person," aims to recognize that a disability is an important part of the person, is not inherently negative, and cannot be separated from their experience.

Many studies show that a majority of autistic self-advocates, as well as leading advocacy organizations including the Autistic Self-Advocacy Network, and Association of University Centers on Disabilities prefer identity-first language to person-first (Lei, Jones & Brosnan, 2021).

While there is not a clear consensus on person-first versus identity-first language, it is important to closely consider the language used in different settings with the aim to reduce stigma. Educators should take time to discuss with students and families their preferred terminology and respect those preferences as an important part of creating an inclusive educational environment.

As this handbook is written with educators and educational classifications in mind, the terminology "student with autism" will be used to be consistent with the Individuals with Disabilities Education Act (IDEA).   However, since the Transition to Adulthood section encourages self-advocacy and self-determination, the term "autistic student" will be used.

ABOUT AUTISM

Autism Overview

According to the [Individuals with Disabilities Education Act (IDEA) Sec.300.8 (c)(1)(i),](#)

> "Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three that adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. (ii) Autism does not apply if a child's educational performance is adversely affected primarily because the child has an emotional disturbance. (iii) A child who manifests the characteristics of autism after age three could be identified as having autism if the criteria in paragraph (c)(1)(i) of this section are satisfied. (Authority: 20 U.S.C. § 1401(3), (30))."

Autism is a complex neurological disorder that impacts several different areas of development, including social interaction, nonverbal and verbal communication, behavior, and interests. Autism is a developmental disorder, which means that symptoms show up early in life, typically before three years of age. In the past, multiple names have been used to describe autism, such as Asperger's. While Asperger's is no longer an official diagnosis, some people may still use this term.

There is not one single cause of autism, but research demonstrates that a combination of a person's genes and different aspects of their environment can increase the likelihood of developing autism. Some of these factors include having a sibling with autism, older parents, very low birth weight, and other genetic conditions. There is no evidence that autism is caused by vaccines or anything that caregivers did or did not do during pregnancy or while caring for their child.

At the time of this publication, research on the prevalence of autism is ongoing. The rates may change over time and some population groups may be underrepresented. More detailed and updated information can be found at the [CDC Data & Statistics website](#).

Research suggests autism is around four times more common in males than females. However, there is also growing evidence that, due to differences in autism symptom profiles in females, autism is underdiagnosed in this population (Ratto et al., 2018). More information on how autism can present differently in females is provided later in this section.

There is a wide range of cognitive ability, or thinking and reasoning skills, among children with autism. Some children with autism have average or even gifted cognitive skills. Others have delays across all or multiple areas of development.

Children with autism also have a high prevalence of co-occurring medical and mental health conditions (Neumeyer et al., 2018). Children with autism are twice as likely to experience an anxiety disorder and four times as likely to experience a depressive disorder, compared to their typically developing peers. Children with autism are also more likely to experience bullying, social isolation, and child abuse (Toseeb & Asbury, 2023). The rate of death by suicide has been estimated to be 7.5 times higher for people with autism (Hirvikoski et al., 2016). Other co-occurring medical and mental health conditions can include:

- Sleep disorders

- Gastrointestinal disorders (constipation and feeding difficulties)

- Speech disorders

- Epilepsy

- Hypotonia (decreased muscle tone)

- Pica

- Eczema

- Anxiety disorders

- Attention deficit/hyperactivity disorder

- Developmental delay

Characteristics

It is important to remember that each person is unique, so not all students with autism will have the same behaviors. Most will have at least several of the behaviors listed below. These behaviors can also vary depending on a child's developmental level and unique skillsets.

Communication and Social Interaction
- Differences in language development, ranging from delayed or disordered to early or advanced

- Challenges using communication for social reasons (e.g., directing attention, sharing enjoyment, back-and-forth interaction)

- Difficulty with appropriately initiating interactions, such as conversations or play

- Difficulty maintaining interactions, such as conversations or play

- Challenges using nonverbal communication (e.g., eye-contact, facial expressions, gestures, body language)

- Difficulty adjusting behavior to different social contexts

- Reduced awareness of social expectations or boundaries

- Challenges making and maintaining relationships with same-aged peers
- Unusual tone of voice, volume, or rate of speech (e.g., high pitched, little variation in pitch, sing-song)

Repetitive Activities and Stereotyped Movements

- Repetitive motor behaviors (e.g., hand flapping, finger twisting/flicking, spinning, rocking, facial grimacing, tensing)
- Repetitive speech (e.g., echolalia, undirected speech, scripted/stereotyped speech)
- Repetitive use of objects (e.g., lining up toys, dropping/spinning/flipping objects, sorting)
- Restricted or fixated interests

Resistance to Environmental Change or Change in Daily Routines

- Insistence on sameness (e.g., distress at small changes, difficulty with transitions)
- Inflexible adherence to routines or rituals

Unusual Responses to Sensory Experiences

- Interest or aversion to sensory input (e.g., sound, taste, smell, touch/texture, light, movement)

How Autism May Look in the School Environment

- Many students with autism can use expressive communication skills and coping skills when they are well regulated; however, they may have more difficulty accessing these skills when upset or overwhelmed and may express frustration or disappointment through behavioral or emotional outbursts.
- Some students with autism may have challenges with broad instructions and may perform best with clearly defined expectations for each activity.
- Many students with autism demonstrate repetitive behaviors, such as body or hand movements or repetitive speech. These behaviors can be ways for students with autism to help regulate themselves and focus attention.
- Changes in routine or expectations, along with transitions between activities and environments, can be common sources of anxiety for students with autism.
- Many students with autism have challenges focusing on tasks that are not related to their interests or participating in activities that are not on their own terms.
- Students with autism may show sensory processing differences. They may be over- or under-sensitive to certain things they touch, taste, hear, or smell. For example, a

student with autism may become overwhelmed in a loud, hectic setting such as a cafeteria.

- Some students with autism may prefer working one-on-one or with an adult. They may have more challenges in a group setting with their same-aged peers.

- Students with autism may be able to talk at great length and with a lot of detail about a topic of interest without noticing if other people are not interested or giving others a chance to respond.

- Students with autism may be interested in having friends and playing with their peers, but may tell others what to do and how to play. It can be more challenging to play flexibly with others when it is not on their own terms.

- Many students with autism display difficulty generalizing skills across settings, people, and situations. For example, they may be able to communicate in one setting or with a particular person (such as asking for help), but may have more challenges accessing those same communication skills with other people or in different contexts.

Benefits of Early Identification and Intervention

Research shows early identification and intervention for children with autism are associated with long-term positive outcomes and skill development. During early development, a child's brain is more "plastic" or changeable than at older ages. Interventions during the early development period have been shown to be effective and can help promote long-term success for children with autism as they grow (Reichow & Wolery, 2009). It is recommended that children with autism begin intervention as soon as they are identified with autism or show indicators of possible autism.

A number of different factors may impact when a child is identified with autism. It is possible children with strong intellectual skills may not be referred for an evaluation until they reach school-age. This is likely due in part to adequate development and academic performance in certain areas that mask deficits in early social and adaptive functioning (Katusic et al., 2021). In addition, a prior diagnosis of ADHD, OCD, social anxiety, or sensory processing disorder is often associated with a later age of diagnosis of autism as a child's difficulties may be attributed to a prior diagnosis (Kentrou et al., 2019).

Autism is also a spectrum with a wide range of associated behaviors. A provider without specialized autism training may not recognize a child's autism-related behavior, which can delay referral for an evaluation. Children who are identified as having autism later in life go through much of their childhood without the support they need to understand their experiences. They also miss out on the benefits of early intervention that can help to give them the best start possible and increase the effectiveness of interventions long-term.

Early intervention programs for children with autism often include some or all of the following services:

- Family or parent training

- Speech therapy

- Occupational therapy

- Physical therapy

- Applied Behavior Analysis

Early intervention programs often focus on several core developmental skills:

- Physical skills (e.g., gross of fine motor skills development)

- Thinking skills (e.g., problem solving and knowledge skills)

- Communication skills

- Social skills

- Emotional regulation skills

- Daily living skills

Functioning Labels

Many people have heard the terms "high functioning," "low functioning," "mild," and "severe" when used to describe autism. While these terms are often used as an attempt to describe the abilities of people with autism, they can be misleading and ambiguous. Individuals with autism and professionals have expressed that these terms often fail to consider the complexity of autistic abilities and how they can vary significantly depending on the time, situation, or context. For example, a person with autism may be able to participate in a conversation when they are calm and in a familiar, comfortable environment. That same person may not be able to use expressive communication skills in settings where they are over-stimulated, tired, or overwhelmed. Instead, it is recommended that specific skillsets and support needs that are most salient to the situation or environment are described when referring to the strengths and challenges of a person with autism (Alvares et al., 2020). For example, instead of saying that a person has "high functioning autism," it is more helpful to say that a person has autism with low support needs. As an example of how to describe more specific skills and support needs, a person could say that a student has a sound sensitivity, is overwhelmed in crowds, is verbally fluent, and works well independently.

Females with Autism

There is a growing body of research supporting that autism can sometimes look different in females, causing females with autism to be under-identified. This may be due in part to what is

referred to "camouflaging" or "masking." These terms refer to the ability of a person with autism to learn and perform certain behaviors and suppress other behaviors in order to fit in more with the people around them. Females with autism, particularly those without an intellectual disability, seem to be more likely to engage in camouflaging behaviors and are often misdiagnosed, under-diagnosed, or diagnosed later on in life (Ratto et al., 2018). While camouflaging behaviors can provide some social advantages, they can also lead to disadvantages including experiences of anxiety, depression, exhaustion (Kim, So Yoon, & Bottema-Beutel, 2019).

Many females do not display as many traditional autism characteristics and may have a quieter presentation of autism symptoms. For example, females with autism can show fewer repetitive or restricted behaviors than males, they may be more likely to control their behavior in public, they may be more likely to smile or make eye-contact, mimic others, and they may be more socially motivated. In addition, females with autism are more likely to have restricted interests that seem typical for their age (e.g., books, celebrities, animals) and do not stand out as unusual (Halladay et al., 2015).

BUILDING A COLLABORATIVE TEAM

Effective teams are essential to increase student opportunities for success and coordination of supports. Students with autism are often supported by multiple people and professionals in and out of school, emphasizing the need for collaborative teaming practices to pool knowledge, expertise, and resources. Combining team members' skillsets and experiences can lead to better outcomes for students and increased competency for team members (Griffiths et al., 2021; Kunze & Machalicek, 2022).

Collaboration is Key

Collaboration has been defined as "a complex process built on trust, open communication, and mutual respect (relationship building), with all members focused on shared goals and responsibility with a common understanding (shared values), who are actively participating with a sense of shared responsibility (active engagement) and decision making" (Griffiths et al., 2021).

Effective school teams use strategies to promote collaboration. Examples of strategies include:

- Prioritizing communication and time to collaborate.
- Identifying common goals and priorities (e.g., student safety and success).
- Clearly defining team member roles and responsibilities.
- Structuring timelines and following through on commitments.
- Developing a systematic plan to ensure consistent implementation by all team members across all environments.
- Regularly monitoring and sharing about student progress.
- Making decisions based on student data and team member consensus.
- Sharing responsibility and power among members.
- Using accessible language and defining discipline-specific terminology.
- Engaging students and families in the teaming process.
- Focusing on student strengths.
- Systematically addressing barriers to effective teaming.

Team Member Areas of Expertise

Each team member is important to include because of their unique perspectives and contributions to the student's school experience. Team members have varied expertise and

autism experience. For a detailed description of required IEP team members, please refer to the [OSDE-SES Policies and Procedures.](#)

Team members can contribute specific areas of experience and expertise to benefit students with autism. For example:

- **Parents/Caregivers** can provide critical information about the student's early development and medical history needed to identify students with autism and address co-occurring needs. Parents/caregivers contribute insight regarding their child's strengths, needs, and preferences and provide context regarding the family's culture and priorities.

- **Students** can offer essential information about their needs and preferences when provided developmentally-appropriate opportunities to participate in decision-making.

- **General Education Teachers** (including core and elective teachers) can implement inclusive instructional practices to provide students access to social opportunities and instruction with their grade-level peers.

- **Special Education Teachers** can offer guidance on best practices to provide specially designed instruction for students by helping to identify, implement, and monitor appropriate accommodations, modifications, and interventions.

- **Peers** can facilitate opportunities for learning about social behaviors by receiving training to support their classmate with autism, including talking to them and playing with them. Peers can benefit by learning about teamwork and helping others.

- **Paraprofessionals** can support classroom teachers to promote student inclusion in social and academic contexts. They can facilitate delivery of evidence-based interventions in roles where they are well-prepared and supported. The use of paraprofessional staff does not substitute for the role of the certified teaching team. For additional guidance on the use of paraprofessionals, please refer to the [OSDE-SES Policies and Procedures](#).

- **School Psychologists** can provide expertise in typical versus atypical child development, evidence-based assessment (e.g., standardized autism instruments, functional behavior assessments), intervention strategies (e.g., behavior intervention plans, multi-tiered systems of support), and consult and collaborate with teachers, families, and other professionals to improve support.

- **Speech Language Pathologists** can provide essential knowledge of typical versus atypical communication and language development and can assess a student's functioning (e.g., receptive and expressive language, social pragmatic language) and provide services. They may have expertise in areas like augmentative and alternative communication (AAC) devices, feeding and swallowing, and using visual supports to increase communication and reduce challenging behavior.

- **Occupational Therapists** can assess a student's adaptive skills and implement services and supports to increase their participation in school routines and activities, including coping with sensory issues, participating in social activities, or managing transitions.

- **Physical Therapists** can assess and address a student's physical skills to increase their participation in school routines and activities. They can facilitate a student's progress toward independence by identifying and addressing barriers to safely navigating the school environment.

- **District and Building-Level Administrators** can guide team decision-making to ensure a student's safety and rights to a free and appropriate public education are prioritized. Administrators can allocate resources to autism-related training and professional development for school personnel and student materials (e.g., assistive technology).

- **School Counselors and Social Workers** can facilitate home-school communication, increase access to community resources, and may implement direct services to support social skills and emotion regulation.

- **Specialists** (e.g., behavior, vision, hearing, autism) can provide expertise during the evaluation process. They may assist with accommodations and interventions, collect and monitor student progress, and facilitate data-based decision making.

- **School Support Staff** (e.g., bus drivers, office personnel, cafeteria workers, school resource officers) can build connections with students and assist with implementing accommodations and/or behavior intervention plans, including providing opportunities for students to practice new skills in different situations or places.

- **External Team Members** (e.g., licensed mental health providers, board certified behavior analysts, medical doctors, private therapy providers, transition agency representatives, etc.) can provide information about services a student receives outside of school, inform school-based services and goals, and exchange expertise with the school team. Parents/caregivers or school personnel may invite other individuals to join a student's team, such as child/family advocates, community members (e.g., clergy, tribal elder), or language interpreters. These team members can provide valuable perspectives and support.

Importance of Professional Development

Ongoing training and professional development activities are recommended to expand team members' knowledge of autism and evidence-based practices. Shared understanding can facilitate the teaming process. Professional development opportunities can be accessed through the Local Education Agency (LEA), online resources, and local autism organizations. Please refer to the Resources section in the appendix of this handbook for more information.

Relevant training content for educators should include an understanding of autism, general behavior management strategies, and evidence-based teaching procedures. Training for educators should also include the following opportunities to build competence with evidenced based-techniques for behavior management and instruction:

- Observe a more experienced educator implementing specific techniques.

- Practice specific techniques modeled by a more experienced educator.

- Demonstrate and receive feedback on the use of specific techniques.

- Participate in frequent check-ins until educator is confidently and competently implementing specific techniques.

Case Study

The following case study is an example of collaborative teaming resulting in improved student outcomes.

Michael is a sixth-grade student who was identified with autism at age four. He developed advanced vocabulary at a young age, and his intellectual functioning has been estimated as above average. Michael currently uses fluent verbal communication with difficulties initiating and sustaining back-and-forth conversations, especially on topics unrelated to his interests. He often struggles to notice social cues and misinterprets others' emotions. Michael has struggled to adapt to middle school related to daily transitions across teachers and classroom expectations. Six weeks into the school year, Michael has become more argumentative with his teachers and peers, ripped up his assignments, and left the classroom without permission. Michael's parents are discouraged and upset by his seemingly sudden increase in behavioral difficulties at school, and they have noticed more arguing and withdrawal at home. They are feeling concerned middle school may not be a good fit for him. Before the transition to middle school, Michael was reported to be thriving, with excellent academic progress and positive teacher relationships.

Current members of Michael's educational team include: parents, general education teachers (math, science, reading, social studies, art, music), special education teacher (IEP teacher of record), school psychologist, speech language pathologist, sixth grade principal and counselor, and private social skills group leader. Michael previously received private applied behavior analysis, and he currently attends a private social skills group to provide opportunities to practice peer interaction skills in a supportive setting. Michael receives weekly speech therapy at school to support his development of social pragmatic language skills.

During the first regularly scheduled grade-level staff meeting (attended by the sixth-grade principal, sixth-grade counselor, general education teachers, special

education teacher, and school psychologist), Michael's science teacher shared with the team about challenges Michael has experienced in the classroom. Other teachers commented on similar difficulties including arguing with peers, refusing to complete assignments, and choosing to doodle or read instead of completing assigned work. Michael has left the classroom several times, including leaving and staying in the bathroom or hallway without asking or letting his teacher know. During the grade-level staff meeting, the team discussed possible supportive strategies (e.g., the counselor mentioned she has been working to build a relationship with Michael by talking with him a few minutes at the end of each school day about what he enjoys). The special education teacher offered to contact Michael's fifth grade teachers to learn more about what strategies were effective for him before the transition to middle school, and the school psychologist volunteered to schedule a meeting with Michael's parents. The school psychologist also consulted with Michael's speech-language pathologist since her schedule did not permit her to attend the grade-level staff meeting. The speech-language pathologist shared about his preferred reinforcers and visual support strategies she uses to facilitate transitions when working one-on-one with Michael, and she reported they have been helpful.

The IEP team meeting arranged by the school psychologist included Michael's parents, science teacher, art teacher, sixth-grade counselor, sixth-grade principal, and speech language pathologist. Other team members were unable to attend due to their schedules during the school day, so the sixth-grade counselor took notes and shared with the team. During the meeting, Michael's parents expressed their concerns about his difficulties adjusting to the middle school environment, and school team members were understanding and supportive. They normalized Michael's parents' concerns and talked positively overall about his progress so far. Michael's teachers reported challenges observed, and they described the strengths they have seen in Michael, such as his motivation to complete independent activities with creative elements, like the option to respond with pictures and drawings instead of text. With parent input, the team identified Michael's interests and skills in art and music. Michael's parents gave their permission for the school psychologist to gather information about when Michael's challenging behaviors are occurring across the day, and what happens just before and after. The team set a date in two weeks to review the findings and agree upon a behavior plan tailored to Michael's unique strengths and needs. Between meetings, Michael's teachers regularly communicated with his parents about what was going well for him at school while acknowledging challenges and expressing optimism for the plan in development.

The team reconvened two weeks later and reviewed data indicating Michael's challenging behaviors increase during less structured classroom activities and in situations when student expectations are unclear. With input from Michael's

general education teachers, the school psychologist and speech language pathologist partnered to create a laminated visual schedule of his daily routine on one side, and a first-then visual support strategy on the other side that could be used to aid Michael's teachers in communicating with him about behavioral expectations and provide clear opportunities for Michael to access motivators after successful completion of assigned tasks (e.g., five minutes drawing time after completing his assignment, talking with the teacher or counselor for five minutes about his favorite musical instruments). With input from team members, Michael's special education teacher collaborated with the school psychologist and assistant principal to develop a safety plan so everyone on the team will know what to do when Michael leaves the classroom without permission. They incorporated steps to teach Michael how to appropriately take a break within the classroom or by asking for a pass to the resource room or counselor's office. The team discussed how Michael performs best when provided frequent positive feedback on his successes rather than overemphasizing his challenging behaviors. Michael's parents shared they are also working at home to increase rates of positive reinforcement as recommended by the social skills group leader. After discussion, all team members agreed to implement the current plan and reconvene in one month to review progress.

The school psychologist, speech language pathologist, and special education teacher provided general education and elective teachers with a brief training and checklist to ensure consistent use of the visual supports and safety plan across classroom settings. The team agreed to monitor progress with continued data collection on the frequency of Michael's challenging behaviors and the teachers' consistency of implementation.

At the one-month checkpoint, data reflected consistent implementation by Michael's teachers with improvements in his behavior and participation with assignments. Michael learned to successfully request breaks when needed. Michael's parents expressed feelings of appreciation and felt reassured by the positive behavioral support strategies being used. Michael continued to have intermittent difficulties but showed a significant decrease in the frequency of leaving the classroom without permission, and an increase in his participation with assignments. Another progress review was scheduled to occur in two months with ongoing communication among team members.

BEST PRACTICES FOR IDENTIFYING AUTISM

The Importance of Early Identification

Research shows early identification and intervention for children with autism are associated with long-term positive outcomes and skill development. During early development, a child's brain is more "plastic" or changeable than at older ages. Interventions during the early developmental period have been shown to be effective and can help promote long-term success for children with autism as they grow. Early identification can also be associated with less parental stress. It is recommended children begin intervention as soon as they are identified with autism or show indicators of possible autism, which can significantly improve their quality of life as well as that of their families.

> **Note:** The Center for Disease Control and Prevention (CDC) has more information on typical development and possible signs of ASD listed by age, from two months to five years, on their *Learn the Signs. Act Early.* website.

Early screening and diagnosis for autism is recommended. For many children, autism can be reliably diagnosed in toddlers who are younger than 24 months old. For other children, signs of autism may not be present until between 24 and 36 months old, making repeated screening an important part of early diagnosis. Screening for autism can also occur later on in life, or whenever the question of autism is raised. Children who are showing possible signs of autism based on screening results should be referred for a comprehensive evaluation with a provider who specializes in autism assessment (Ozonoff et al., 2015). While screening tools play an important part in autism identification and can be part of a comprehensive evaluation, they are not considered sufficient for making a diagnosis of ASD or ruling out the possibility of ASD. Please see the OSDE-SES Policies and Procedures for more information on screening.

Clinical/Medical Diagnosis vs. School-Based Eligibility

Receiving a clinical/medical diagnosis of autism does not automatically entitle a student to special education and related services under the IDEA. While there is some overlap, different processes and criteria are used to determine a clinical/medical diagnosis versus classification under the educational category of "autism" and eligibility for special education in the public school.

A clinical/medical diagnosis of Autism Spectrum Disorder (ASD) is made by a doctor or specially trained clinician using the criteria set out in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR), which is published by the American Psychological Association (APA). To meet criteria for ASD using the DSM-5-TR, a student must meet a specific number of symptoms in both social-communication and repetitive/restrictive behavior domains.

Because autism spectrum disorder can be so varied in its presentation from person to person, the DSM-5-TR also includes a level that accompanies a diagnosis of autism. While levels are not part of the IDEA definition of autism, school professionals may encounter information about levels of support when reviewing outside evaluations. There are three levels, each of which refers to how much support a person with autism needs in order to function in their daily life, with Level 3 requiring the highest level of support.

- Level 1 Requiring Support: without supports in place, deficits in social communication/inflexibility of behavior can cause noticeable impairments.

- Level 2 Requiring Substantial Support: marked deficits in social communication and inflexibility of behavior are apparent even with social supports in place.

- Level 3 Requiring Very Substantial Support: severe deficits in social communication skills and inflexibility of behavior are present and cause severe impairments in functioning.

It is important to remember that while the levels can be a helpful descriptor to inform supports and intervention planning, they do not give a complete picture of each person's strengths and challenges.

In contrast, school-based eligibility is determined by an educational team including the student's parents/caregivers and does not result in a clinical/medical diagnosis. To be eligible for special education, a student must meet criteria for a specific disability category (i.e., Autism) and demonstrate a need for special education services.

A primary distinction between a clinical/medical diagnosis of ASD and educational eligibility determination is the impact that autism has on the student's educational performance. To determine educational eligibility, the school team must determine criteria are met for the disability category of Autism **and** that the student needs special education services. Because of this distinction, a student may meet criteria for a clinical/medical diagnosis of ASD but not be eligible for special education services. In addition, a medical diagnosis of ASD is not required to determine if a student is eligible for special education services. If a student is ineligible for special education services, they may still qualify for other educational accommodations.

Comprehensive Autism Evaluation under IDEA

In a school-based evaluation, a team should include the assessment and service providers at that school, such as the school psychologist, speech-language pathologist, occupational therapist, the student's teacher, an autism specialist, and the parents/caregivers. It is also recommended that school teams be involved in intervention and support planning for each child following an evaluation. More information on building and understanding collaborative teams is provided in the "Building a Collaborative Team" section of this handbook.

According to the Special Education Policies and Procedures a comprehensive evaluation for Autism must include the following components:

- Communication/Language

- Intellectual/Cognitive

- Academic Achievement

- Developmental

- Social/Emotional

- Behavior

- Adaptive Behavior

- Background (cultural and educational)

- Observation (classroom/other environment)

- Vision Screening

- Hearing Screening

> ***Note:*** Additional components, such as medical history, may be included as needed. Please see the Oklahoma State Department of Education Special Education Services Evaluation & Eligibility Handbook (2022) for more information on the nature and purpose of assessment in each of these areas.

Types of Autism Assessment Sources and Settings

A comprehensive autism evaluation performed by a school team should use a variety of sources of information that are sensitive to cultural, linguistic, and environmental factors. A student's eligibility should not be based on one measure or a single source of information. Comprehensive evaluations require assessment methods that gather information from (1) multiple sources, (2) multiple settings, and (3) across multiple domains. More information on each of these methods is provided below.

Assessment Sources

The following sources of information should be included in an evaluation:

- **Interviews:** Interviews with parents/caregivers, teachers, and the student (when possible) should be conducted to obtain relevant information from different sources. The parent/caregiver interview should include a comprehensive developmental and medical history.

- **Behavioral Observations:** Observations in two or more settings (can be two different settings within the school) should be conducted to address characteristics related to autism. Observations should also be spread out across multiple days. More

information on assessment settings and observations is provided below in the "Assessment Settings" Section.

- **Norm-Referenced Rating Scales:** Rating scales completed by parents/caregivers, teacher(s), and the student (when possible) on social relationships, adaptive functioning, sensory processing, behavior, etc.

- While gathering information from parents/caregivers and teachers on rating scales and through interviews is an important part of a comprehensive autism evaluation, it is also critical to consider how environmental and cultural factors may impact interpretation. For example, level of parent concern for autism has been shown to impact the sensitivity of parental report-based instruments for autism (Havdahl et al., 2017). As such, it is important for teams to consider multiple sources of information, including direct behavioral observations and in-person, interactive assessment with a professional who has experience and training in autism assessment.

- **Standardized Assessment:** Assessment using a standardized measure of cognitive ability, academic achievement, social and communication skills, and autism-specific areas should be conducted by a trained professional familiar with autism.

- **Review of Existing Data:** Teams should gather existing information from teachers, community agencies, medical/mental health professionals, and parents/caregivers on how behaviors are impacting the student's current functioning across environments as well as their academic achievement. Examples of existing data to review include prior evaluation results, classroom and local/state assessments, classroom observations, and other outside information provided by the parent. When evaluating existing data, it is important to keep in mind:
  - The age of the data
  - Comprehensiveness
  - What instruments were used
  - Qualifications of person providing information

Assessment Settings

Observations of a student's social interaction, communication, and behavior should take place across different environments. This can include multiple settings within the school, such as the classroom, hallway, recess, and cafeteria. For students younger than age three or who have not yet entered the school setting, observations may be conducted in a community location (e.g., park, library), at the child's home or childcare (depending on local policies), using parent-provided video clips, and/or during activities conducted throughout the course of the assessment (e.g., structured task demands, unstructured play). If the child attends childcare or therapy, observations may be conducted by the

child's provider and shared with the evaluation team for consideration. When observing a student, it is important to consider other environmental factors that may impact behaviors such as a group-setting versus one-on-one, structured versus unstructured time, the student's relationship with the adult/teacher in charge (usual teacher versus a substitute), and age of peer-interactions (same-age peers versus older/younger peers). Other factors such as the time of day or the volume of noise in the room may also be important to consider. Some students with autism are able to mask or manage their emotions and behaviors earlier in the day but become more fatigued and overwhelmed as the day progresses.

Several examples of behaviors to observe in different settings are provided below.

- **Hallway:** Observations in a hallway may provide information on how a student is able to transition between classes or activities. It also provides opportunities to observe if a student looks up when other peers pass by, responds when their name is called, avoids bumping into other students, greets others (verbally or nonverbally by smiling, waving, or looking at someone), or engages in unstructured chitchat.

- **Cafeteria:** Observations in the cafeteria may provide information on how a student copes in a loud and more chaotic environment, displays restricted eating habits or sensory sensitivities to loud noise or different smells, initiates conversations with peers, shares enjoyment (smiling and looking at someone else when something good happens), or shares food or other objects.

- **Classroom:** Observations in the classroom may provide information on how a student asks for help, rephrases questions or comments so other students can understand, adjusts the volume or expressiveness of their voice to fit the situation, works collaboratively in small or large-group settings, shares/takes turns, offers encouragement to others, recognizes when the teacher is giving instructions, displays willingness to try a new way to solve a problem, or faces the teacher or person speaking during class or circle time.

- **Playground:** Observations on the playground or during recess can provide information on whether the student prefers to play with other children or alone, needs to be in charge of the play or can accept other students' ideas on how to play, shows concern or worry if someone is hurt, shares emotions (smiles or frowns while looking at others), takes turns, asks other students questions about themselves or their weekend, how the student plays with toys (spinning/banging objects, lining up objects), other challenging behaviors such as hitting, biting, throwing objects, screaming, falling on the ground, and how the student is able to transition to the next activity.

Note: For an example of a behavior observation tool, please refer to the Resource section in the appendix of this handbook.

Assessment Domains

In addition to gathering information from multiple sources and across settings, information should be gathered across several domains.

Developmental History Domain

Signs of autism are typically present in early childhood development, usually by 24 to 36 months of age or earlier. However, it is also possible that children with strong intellectual skills may not be referred for an evaluation until they reach school-age years. Autism evaluations should include a thorough interview with a child's primary caregivers to gather information on the child's social, communication, play, and behaviors beginning around age 24-36 months.

> ***Recommended Assessment Sources***
> · Structured Parent Interview (Please refer to the Resource section in the appendix for a link to an example)
> · Medical History
> · History of Early Childhood Services

Below are some examples of what types of the behaviors to ask about:

Joint Attention: when one person coordinates their attention with another for the purpose of sharing interest (as opposed to making a request).

Example Questions:

Did your child show you things of interest by presenting them for your attention or by pointing to them while looking back at you? Did your child follow your gaze or point to look at something across the room?

Shared Enjoyment: When one person demonstrates enjoyment to another, such as looking at someone while smiling or laughing.

Example Questions:

Did your child smile back at someone smiling at them or in response to something someone says or does to them? How did your child indicate enjoyment of activities or interactions with you?

Response to Name: When a person turns to look at someone or vocalizes when they hear their name.

Example Questions:

Did your child respond consistently to their name? Was it hard to get their attention by calling their name?

Social Games and Interactions: Games and interactions a person engages in for the purpose of enjoyment, rather than to request or get something.

Example questions:

Did your child play with other children or did they prefer to play alone? Was your child interested in other children the same age whom they did not know? Did they ever offer to share things with you or other children? Was your child able to play games chosen by another child? How did your child interact with adults versus other children?

Pretend Play Skills: Spontaneous (rather than repetitive or scripted) imaginative or pretend play, such as pretending that a block is a house, taking care of a baby doll, or using toy figurines to talk to one another and act out scenes.

Example Questions:

Did your child use an object to represent something else, such as using a stick as a spoon or a block as a house? Did your child ever use an object as an agent, such as having a baby doll cry or eat food or have toy figures act out scenes?

Nonverbal Communication: Forms of communication that do not involve the use of expressive language, such as gestures, tone of voice, facial expressions, or eye-contact.

Example Questions:

Did your child point to objects or use other gestures to let you know what they need? Did they look at you in the face when they were interacting with you, or was it hard to catch their eye? Did they ever use your hand or move your body to show you what they wanted?

Communication/Language Domain

When Autism is being considered as a primary category, it is important to prioritize assessment of social communication as well as other aspects of speech and language development.

> ***Recommended Assessment Sources***
> · Structured Parent Interview (Please refer to the Resource section in the appendix for a link to an example)
> · Teacher Report
> · Direct Observation in different settings
> · Standardized Assessment

Below are some examples of aspects of communication and language to ask about:

Receptive Language: Listening and understanding

Example Questions:

Does the student respond consistently to their name? Is the student able to follow simple or multi-step directions? Do they respond appropriately to simple questions?

Expressive Language: Sound and word production and the function of verbal and nonverbal communication

Repetitive or Stereotyped Speech: Immediate or delayed echolalia, which refers to repeating heard words/phrases/sounds/intonations; mechanical-like talk

Non-Directed Speech: Speech or sounds that do not have a clear social purpose or is not directed to another person

Idiosyncratic Language: Words or phrases that are made-up or only hold meaning for the speaker.

Understanding of Non-Literal Language: Understanding joking, sarcasm, figures of speech (such as idioms)

Prosody, Pitch/Tone, Volume, Rhythm, and Rate of Speech: This may include:
- Unusual intonation (high pitched, monotone, growling)
- Adjusting volume to match different contexts
- Smooth or jerky, irregular rhythm
- Rapid rate of speech that is difficult to interrupt or understand

Is there anything unusual about the way the student speaks? Is their volume of speech appropriate to different settings? What about the rate or rhythm of the student's speech? Is there anything different about the intonation or pitch?

Conversation Skills, including:
- Turn taking
- Topic management: perseveration on certain topics, ability to transition between topics, initiating/terminating relevant and shared topics
- Providing appropriate amounts of information in conversations
- Expressing interest in other people's ideas (asking questions to learn more, encouraging others, etc.)

Example Questions:

Can the student have a back and forth conversation (rather than providing responses to direct questions)? Does the student ask other people questions about their interests to learn more about them? Can they build on what other people have said? Does the student ever make socially inappropriate questions or statements?

Social Interaction Domain

There are inherent limitations in the use of standardized, structured assessments for evaluating spontaneous social skills. It is important to combine observations and results gained during standardized assessments with observations in other settings and parent/teacher report. It is also important to note that children with higher cognitive abilities may perform better and display social strengths on standardized assessments of social interaction.

> ***Recommended Assessment Sources***
> - Structured Parent Interview (Please refer to the Resource section in the appendix for a link to an example)
> - Teacher Report
> - Direct Observation in different settings
> - Standardized Assessment

Information about a child's social interaction skills and specific autism characteristics should be gathered from multiple sources (e.g., parents/caregivers, teachers, the student), including:

Nonverbal Communication: Understanding of and ability to use facial expressions, gestures, eye-contact, body posture, physical proximity, joint attention, etc. to initiate, respond, and maintain social interaction

Example Questions:

Is the student looking at you when you expect them to? How do they show their emotions using facial expressions/are they appropriate to the situation? Is the student

aware of personal boundaries? When someone smiles at them, does the student smile in return?

Social Approach, including:
- Initiating conversations and interactions with others
- Asking for help
- Adjusting strategies for initiating interaction to different settings and relationships (such as a teacher versus a peer)

Example Questions:

Does the student ever start interactions with others just to chit chat or share interests (as opposed to making a request)? How does the student let you know if they want something or need help?

Peer Relationships, including:
- Play skills
- Initiating and maintaining peer interactions
- Sharing
- Taking-turns
- Preference to play alone vs with peers
- Need to be in charge/direct the interaction
- Understanding and following rules in group games

Example Questions:

Does the student share things with other children? Are they interested in playing with peers? Do they avoid other children? Will they initiate or actively seek to join in games? Is the student able to take different parts/roles in group games? Do they have a particular friend or best friend?

Social-Emotional Understanding/Reciprocity, including:
- Understanding and recognizing needs and feelings of others
- Identifying and knowing how to respond to emotions of others
- Recognizing how their behavior impacts others
- Seeking shared interests with others

Example Questions:

Does the student try to comfort others if they are sad or hurt? Does the student seek others out to share their enjoyment in an activity? Is the student able to adjust their behavior according to where they are or who they are with?

Restricted and Repetitive Patterns of Behavior Domain

Gathering information from multiple sources regarding specific autism characteristics in this domain is critical. A student does not need to display all of these characteristics to meet criteria for autism. It is also important to keep in mind that a student may have displayed some of these behaviors in their early childhood but not in the present.

> ***Recommended Assessment Sources***
> · Structured Parent Interview (Please refer to the Resource section in the appendix for a link to an example)
> · Teacher Report
> · Direct Observation in different settings
> · Standardized Assessment

Below are some examples of aspects of restricted and repetitive patterns of behavior to ask about:

Inflexibility, including:
- Challenges transitioning between one activity/situation to another
- Insistence on sameness
- Changes to usual schedule or routine are distressing
- Rigid adherence to certain routines or sequences in behavior in daily tasks or situations (e.g., dressing, mealtime, driving routes, bedtime, completing assignments/chores)

Example Questions*:*

How does the student respond to changes in their environment or routine? Are there things that they need to do in a particular way/order? How does the student move from one activity to another?

Repetitive Motor Mannerisms, Vocalizations, or Stereotypies, such as:
- Repetitive movements such as hand flapping, rocking, pacing, picking, chewing, finger flicking or twisting
- Repetitive vocal patterns such as humming or making non-word sounds
- Self-injurious behavior including head banging, biting, or scratching

Example Questions:

Does the student show any self-harming behaviors such as banging their head, biting, or hitting any part of their body? Does the student engage in repetitive body movements such as hand/finger flapping or twisting, whole body movements, tensing, toe walking, putting their hands over their ears, etc.

Preoccupation with Particular Items, Objects, or Topics. These preoccupations can be unusual in *nature* or the *intensity* of the preoccupation may be outside developmental expectations.

- High interest in objects, topics, or themes that are outside typical developmentally appropriate levels
- Has a narrow or restricted range of interests (may or may not be unusual topics)
- Challenges focusing or engaging in tasks or conversations that are not related to strong interests
- Difficulty transitioning away from thoughts, activities, or actions involving their interests

Example Question:

Does the student have any unusual or special interests or preoccupations?

Preoccupation with Parts of Objects, such as:

- Plays or interacts with objects or toys by spinning, twirling, or banging them rather than using them in intended ways
- Focusing on how an object works rather than its function
- Looking closely at objects from different angles (i.e., visual inspection)

Example Question:

Does the student play with the whole toy or do they seem more interested in a certain part (such as spinning the wheels of a car rather than driving on the ground)?

Unusual or Inconsistent Responsiveness to Sensory Input, including:

- An under- or -overreaction to scents, light, touch, temperature, textures, or tastes
- Reaction to sensory input may vary depending on the students' interests or degree of control (for example, a student may become overwhelmed in the cafeteria when it is very loud but may prefer to listen to favorite music at a high volume)
- Under responsiveness to pain, heat, or cold
- Excessive smelling, touching, or licking objects
- Fascination with lights or spinning objects

Example Questions:

Does the student seem overly sensitive to noises, smells, touch, food, lights, etc.? How does the student react to pain or discomfort? Does the student examine objects by smelling, touching, or licking them?

Cognitive/Intellectual Domain

Measuring a student's cognitive and intellectual abilities provides important information on possible co-occurring intellectual developmental disabilities as well as alternative explanations for a student's difficulties. This information is also valuable for informing relevant academic and learning supports based on a child's unique cognitive profile of strengths and weaknesses.

> ***Recommended Assessment Sources***
> · Standardized Assessment (Compare results with parent report and achievement in the classroom)

Important considerations when choosing and interpreting an appropriate cognitive/intellectual measure:

- IQ scores can be unstable for children with autism, particularly in early childhood (Leboyer, 2015)

- There is not a single pattern of cognitive abilities that is indicative of autism

- Social and communication impairments for students with autism may make it more challenging to respond to verbal test items or understand instructions

- Tests that allow for the separation of verbal and nonverbal estimates of ability are preferred

- Consider the student's expressive and receptive language abilities, and native language

- Consider the student's ability to follow along in adult-led structured activities

- Assess the degree to which results reflect the student's autism characteristics rather than underlying abilities. For example, some students may have challenges with joint attention, which may impact their ability to focus on and respond to material that is not related to their interests.

Some students with autism will benefit from additional behavioral strategies and supports to increase their engagement and participation in standardized cognitive testing. Below are several possible supports that may be beneficial. It is important to document what supports were used and to what extent they impacted the validity of scores.

- Prepare the student for what to expect during the testing process in advance

  Examples: test within the student's schedule and allow them to visit the testing room in advance

- Choose a quiet environment with few distractions

- Utilize supports that the student may be already benefit from in the classroom

  Examples: visual reminders to stay seated, frequent breaks, work systems

- For some students with autism, they may benefit from a First – Then format

  Example: allow the student to alternate between a non-preferred task (testing items) and a preferred task (time to play with cars or talk about a favorite subject)

- Create a visual schedule or checklist to show progress

- Use rewards and incentives to increase motivation (contingent on participation, not accuracy of responses)

- Consider the order of testing items in advance to best keep the child's engagement and create momentum

Adaptive Behavior Domain

Adaptive behavior assessment considers how a student is functioning independently with daily living skills, communication skills, and social skills compared to age-expectations. Many students with autism display delays in social and communication skills as well as daily living skills.

> ***Recommended Assessment Sources***
> · Parent and Teacher Report
> · Norm-referenced Scales

An assessment of adaptive behavior is an essential part of an autism evaluation:

- Discrepancies between adaptive functioning and intellectual ability can help inform strategies for intervention and support planning as well as identify adaptive strengths.

- It's also important to keep in mind that discrepancies between adaptive and cognitive functioning may be greater in individuals with higher cognitive abilities.

- In some cases, information regarding adaptive functioning is also a vital part of determining eligibility for disability benefits and evaluating a students' capability to live or work independently.

Adverse Education Impact When Determining Eligibility

Determining if a disability adversely impacts a student's education is an essential part of educational eligibility determination. For a student identified as having autism, it is important to consider skills or activities that may not be considered academic but may be related to a student's educational performance.

When evaluating the presence of an adverse impact, a school team should consider a child's performance and functioning across the following areas:

- Functional/daily life skills

- Social adaptation

- Communication

- Behavior

- Emotional development

- Academic/educational performance

Common considerations for possible adverse effect for students with autism may impact lifelong outcomes, such as employment and living independently. These may include a student's ability to:

- Transfer and generalize new skills across different settings

- Work effectively in group activities

- Communicate effectively using verbal and nonverbal communication

- Remain on-task and/or complete work

- Follow social norms/expectations

- Form and maintain relationships

- Be independent in daily life

- Problem solve

- Access instruction and peer interaction

Note: Determining adverse impact should be made on a case-by-case basis and take the unique needs of each student into account. A student does not need to have failed a course or grade in order for adverse impact criteria to be met. Decisions around determining an adverse impact should not be made solely based on discrepancies in age or grade level academic performance. More information is provided in the OSDE-SES Policies and Procedures.

EDUCATIONAL RECOMMENDATIONS FOR STUDENTS WITH AUTISM

The number of children with the educational categorization of autism has risen dramatically over the past 20 years. This increase has influenced the type and quality of educational opportunities available. The purpose of this section is to outline important components of high-quality services that greatly improve outcomes for students on the autism spectrum. Students with autism often need support in the following areas: functional and spontaneous communication; social interaction; transitions; behavioral support to prevent or reduce challenging behaviors; adaptive skills; and organizational and decision-making skills.

It is important to consider these general instructional recommendations for students with autism when planning their education. These include what skills will be taught and what support is needed.

- Students with autism should have the same broad educational goals as all students: learning skills that will promote independence and social responsibility.

- Intervention should begin as early as possible and as soon as the child begins to show clear signs of autism.

- A systematic plan for how instruction should be provided for a student with autism will help ensure that procedures are implemented consistently across settings.

- Students should be engaged in developmentally and age appropriate activities across the day with the expectation that learning will occur.

- Effective instruction should include behavioral strategies to increase learning opportunities.

Classroom and Individual Supports

There are two primary areas, classroom and individual supports, to address when planning instruction for students with autism.

Classroom Supports

The following classroom practices are recommended for all students, and they are critical for students with autism. Classroom support will vary based on the age or grade of the students. For instance, early childhood classrooms will include elements (e.g., center times, instruction embedded into play, etc.) that are not present in the classroom for older students. However, listed below are some general guiding practices that apply to all ages (Iovannone, et al., 2003).

- The classroom is **well organized**, and expectations of where different learning activities occur are well defined.

- The classroom follows a **consistent schedule** that is communicated in a way accessible to all students (e.g., pictures, written word, time of day included).

- The schedule includes **planned transitions** between activities, and students are taught expected behavior during transitions.

- **Visual supports** are used to provide information and structure.

- Changes to the schedule or routine are **communicated ahead** of the change in a manner understood by each student.

- **Classroom expectations** are displayed and stated in a positive manner (e.g., instead of "no running" use "walk in the hallways," instead of "no using your cell phone in class" use "cell phones are placed on silent and put away during class.")

- **Task organizers are used** to provide structure in a way all students will understand and minimize wait time in the classroom.

- **Instructional responsibilities among staff** are clearly communicated (e.g., a written schedule provided monthly or written on a whiteboard in the classroom).

Individual Supports

These supports are tailored to improve student learning outcomes and address specific areas of need. They are often driven by the student's Individual Education Program (IEP). The goals and objectives identified should then be implemented using evidence-based practices identified as effective for students with autism.

Evidence-Based Practices (EBPs) for Supporting Students with Autism

Instruction based on scientifically validated techniques is required by federal law in both special education (IDEA, 2004) and general education (Every Student Succeeds Act, 2015). While students with autism benefit from good instructional practices that are necessary for all students to succeed, there is additional support needed to ensure positive academic and social outcomes. A variety of instructional approaches are specifically recommended for students with autism to address their diverse learning needs.

For this handbook, evidence-based practices (EBPs) are those practices that incorporate the best available research, rely on knowledge from experts in the field, and are informed by student data and input from families. EBPs are used to identify and provide educational interventions that are then evaluated for each student to ensure progress and positive outcomes. An EBP is only deemed effective if the student is making good progress toward educational goals.

The following practices and strategies provide important guidelines for instruction, and some have been identified as more effective than others. Most experts agree there is no universal strategy that is always effective for students with autism. Hume et al. (2021) has provided a comprehensive review of EBPs. A subset of these practices listed below are strategies that

are more commonly used in school settings and have shown positive results (Machalicek et al. 2008).

The following EBPs are strategies that can be easily integrated into the classroom without formal training.

- **Reinforcement** is anything that occurs after a behavior that increases the likelihood that the behavior will recur. An important distinction here is the difference between the terms "reinforcement" and "reinforcer." A reinforcer is the actual activity, item, food, etc. being used in the process of reinforcement.

    Positive reinforcement is anything that follows a behavior that results in an increase in that behavior. This occurs by presenting an event or item after the behavior that causes the behavior to increase.

Classroom Examples:

The teacher provides praise, access to a favorite activity, item, food, or materials immediately when a student provides a correct answer, pays attention, or attempts to answer the question. The teacher is positively reinforcing the desired response (i.e., correct responding or attention to task) making it more likely the response will be repeated.

The speech language pathologist (SLP) at the local high school facilitates a social skills group for teens with and without autism. During each class, teens earn points for completing in-class activities, and for some teens, that might include earning points for participation in discussions. The points will be used to trade-in for a pizza and video-game party. The SLP lists all the teens' names on the whiteboard in the front of the room, tracking points during every class. She knows that reinforcement comes both from the party and seeing the points that are listed by their name and how that compares to peers. It is important to display the points openly rather than tallying privately. Also, she understands that teens are sensitive to embarrassment in front of peers so she would never remove a point for inappropriate behavior.

    Negative reinforcement is the removal of non-preferred items, activities, or a situation which results in the likelihood of increasing a behavior. Behaviors that continue or increase due to negative reinforcement are often undesired behaviors that the student uses to escape or avoid an unpleasant circumstance. However, negative reinforcement can also be used to increase appropriate behavior as well.

Classroom Example:

A fifth-grade student with autism dislikes completing math problems. The teacher allows the student to "avoid" some of the "unpleasant task" by allowing the student to complete a smaller number of math problems before leaving his desk. Thus, the undesired task (more math problems) is removed after the student completes a

predetermined number of math problems, increasing the successful completion of some math problems.

- **Visual Supports** are prompts that give information to the student in a visual format (e.g., pictures, words, symbols, signs) about expectations, events that will happen, and for teaching new skills. For students with autism, visual supports are not necessarily faded or removed.

Classroom Examples:

The first-grade teacher prepared a schedule of activities that will occur during language/arts. She used words and pictures to show the order in which they would occur.

A middle school student carries a written schedule in the front of her notebook with daily activities listed that she checks off at the end of each class.

- **Modeling** is an adult or peer demonstrating a behavior to produce an imitation of the behavior by the student.

Classroom Example:

A teacher introduces a new material in the classroom. The student with autism picks up the new material, looks at it, and puts it down. The teacher picks up the material and shows the student how to use it and then hands it to the student, and the student uses the material as the teacher modeled.

- **Instructional Prompts** are procedures that aid the student in the learning process by increasing the probability of a correct student response. This allows the student to access reinforcement frequently, making it more likely that the student will learn the skill being taught. Minimizing the number of errors is important for students with autism because frequent errors can reduce motivation to participate in the learning process.

    The most common types of prompts are called response prompts. These are prompts that occur before or as the child is expected to respond. The types of prompts most used to assist with learning include gestural prompts, verbal prompts, picture prompts, model prompts, and physical prompts.

Classroom Examples:

A teacher points to the correct answer before the student is required to respond.

The paraprofessional provides partial physical assistance to follow a new classroom routine.

- **Prompt Fading** is the gradual removal of a prompt by reducing the amount of support needed to complete a task. It is critical to remove prompts as quickly as possible by using prompt fading techniques because students with autism can easily become dependent on prompts.

The teacher uses a hierarchy of prompts to teach independent skills. She first physically assists the young student to place his backpack on the hook. After several days of success, she now reduces the amount of prompting by pointing at the hook, and the student hangs up the backpack. Lastly, the student hangs up the backpack independently.

- **Social Narratives** are written/pictorial narratives of a difficult social situation which describes who, what, when, where, why of the social situation.

A student with autism is telling other students during small group what to do and yelling if they do not complete the activity "correctly." The teacher creates a written social narrative with pictures describing the situation from the student's perspective (e.g., "Sometimes when I work with others, I get angry when they do not follow the rules. My classmates do not like it when I tell them what to do. I will try to ask my friend, "Can I make a suggestion?" or "I have an idea" before getting mad.)

- **Antecedent-Based Intervention** is planned to occur before a target behavior and modifies events or conditions in the environment to increase the likelihood of desired behaviors and reduce the likelihood of problematic behaviors.

A student has difficulty stopping and starting activities. He will often refuse to stop and will not move when asked. The teacher creates a visual schedule of the activities each day and teaches him to identify what activity will be next. The teacher presents his visual schedule before transitions. He is now able to transition without protests for most transitions.

An 11th grade student who uses verbal language and picture symbols to communicate will often hit others when tired of doing work. The teachers modify the student's work by dividing the required work into sections and then allowing the student to take a break before going to the next section of required work.

The following EBPs are strategies that require more in-depth training.

- **Discrete Trial Teaching (DTT)** is an instructional format with repeated learning trials (planned opportunities to respond) provided in a short period of time. Each opportunity includes teacher instruction, student response, teacher prompt (if necessary), and consequence (e.g., positive reinforcement) followed by a pause before the next learning trial.

The teacher schedules a time for focused instruction each day. The teacher has identified that the student needs practice identifying pictures of common objects and

materials in the environment when asked, "What is this?" The instructional materials needed are pictures of common objects in the classroom and community. The teacher identifies the top 10 most useful objects for the student to identify. The teacher holds up a picture and asks the student to label the picture, "What is this?" The student responds with the correct label, and the teacher provides praise and a star on his star board. The star board lets the student know how many pictures he must label before he can access the reward he has chosen. The teacher repeats the "trial" several times using the same procedure and the same pictures.

- **Error Correction** is a supportive prompt provided by the teacher after a student responds incorrectly. This allows the student to respond correctly and access reinforcement. Error correction procedures are intended to be instructional, not punitive. There are many ways to plan an error correction procedure. The important steps to include are:

  1. a corrective statement (e.g., "This is a _____"),
  2. a supportive prompt that will ensure a correct response,
  3. re-deliver the cue or instruction with prompt to ensure correct response, and
  4. provide praise or reinforcement.

Classroom Example:

The teacher asks the student "Wh-" questions about the book they are reading in class. While pointing to a picture in a book the teacher says, "What is the dog doing?" The student replies, "I don't know." The teacher then corrects the response by stating, "The dog is jumping" (demonstrating the correct answer). The teacher repeats the instruction, "What is the dog doing?" and provides a model prompt and says, "The dog is jumping." The student repeats the modeled language and receives praise from the teacher.

- **Peer-Based Instruction and Interventions** are interventions in which peers are actively involved (e.g., instructed in ways to help) in promoting social interaction or other learning goals for students with autism.

Classroom Example:

The teacher meets with a group of students to discuss how they can "help" the student with autism to initiate asking peers questions. The teacher rehearses with the peers what they are going to say and do. A peer asks their classmate with autism, "What are you doing this weekend?" The student with autism responds, "play video games." The peer waits a few seconds and then prompts, "You could ask me what I am doing."

- **Augmentative and Alternative Communication (AAC)** are interventions that teach a student to use a communication system other than speech/verbal to communicate wants or needs. It can be a book with pictures such as PECS (Picture Exchange Communication System), a computerized communication system using a device, or sign language.

A kindergarten student is using a communication device to request materials needed to complete a classroom activity. Seated near classmates, the student presses icons and the computerized device and the voice output states the request. "I want a blue marker." The student's peer hands her a blue marker.

- **Self-Management** is an intervention that teaches students to monitor their own behavior or task completion and provide their own reinforcement.

A fourth-grade teacher wanted her student to increase his independence in getting ready for class to begin. This involved three primary activities: getting his binder out of his backpack, placing homework in the bin, and getting in his seat quickly. The teacher created a check sheet with each of the activities written on the sheet with a checkbox for the student and a checkbox for the teacher. The teacher modeled for the student how to use the checklist and checkboxes. Ten minutes before the end of class, the teacher looked at the sheet and recorded if she agreed by checking her boxes for each step he completed correctly. He knew that if all boxes were checked he was able to get out a favorite task to work on for 10 minutes.

- **Response Interruption and Redirection** is a physical prompt, comment, or cue presented when an undesired behavior is occurring, to direct the student's attention away from problematic behavior to a more pro-social response, thus reducing the problematic behavior.

During group time a student intentionally knocks one of the materials off the table. The teacher knows that this can often escalate to throwing and knocking over chairs. The teacher calmly (no comment about the undesired behavior or reprimand) directs the student to his communication device and gestures toward the button that says, "I want to be done." The student immediately presses the button. The teacher offers a choice between two different activities.

- **Task Analysis** is an assessment procedure that breaks a complex task into smaller manageable steps and then teaches the student to perform each step using instructional procedures such as prompting, modeling, or visual supports.

The fifth-grade teacher identified that she wants her student with autism to be able to independently complete the dismissal routine relying on peers if needed rather than requiring a paraprofessional to complete the routine for him. The general education teacher and special education teacher watched other students perform the routine and recognized that the dismissal routine involved many individual skills linked together. The teachers identified at least 10 individual skills needed (e.g., put papers in

backpack, put folder in backpack, zip backpack, put coat on, carry backpack to the door, stand in line, walk to the bus pick up zone, etc.). To determine which skills the student already had and which skills the teacher needed to teach, she assessed each individual skill and recorded the student's level of independence. She then taught the skills the student needed and used a visual task list to teach the sequence of how all skills should be completed. Two of the steps were difficult for the student so she identified peers who could assist him while he was learning.

- **Social Skills Training** is instruction through role-playing, practice, or discussion to help students with autism understand social interaction and engagement with others. Teaching social skills can also help reduce problem behavior.

Classroom Example:

The tenth-grade special education teacher completed an assessment from a social skills curriculum and interviewed his student and the family to identify priority goals in the area of social relatedness. They all agreed the priority goal was helping the student develop friendships, because she had reported feeling lonely and isolated many times over the past year.

Through his assessment, the teacher identified several skills that were difficult for the student and began purposefully creating times where he was able to show the student examples of effective and ineffective behaviors. The student and teacher discussed the different outcomes of each of the examples and determined that the student wanted to achieve the outcomes associated with the effective behaviors. They began role playing and rehearsing. Once the student was able to quickly use the language and strategies targeted, the teacher recruited peers from the school's leadership program to practice during planned social times. In addition, the teacher identified several school clubs that were of interest to the student.

- **Functional Behavior Assessment (FBA)** is a process of developing a hypothesis for the possible function or purpose of a challenging behavior through interviews with key personnel and direct observation.

Classroom Example:

A middle school special education teacher has been called to his sixth-grade student's homeroom classroom almost every day because she will not enter the classroom. She sits on the ground in the hallway. The only days she will enter the classroom without assistance are when the class starts with computer lab. The general education teacher and paraprofessional have reported that they have tried all different strategies, and nothing will work. Finally, they request that the principal come to assist. Once the principal arrives, the student will enter the classroom.

The special education teacher plans to conduct an FBA to determine what factors in the environment are contributing to maintaining the behavior of refusing to enter the classroom. After observing the student for the morning routine for several days and

requesting that the paraprofessional records what happens before and after the refusal, the teacher analyzes the data identifying patterns in order to determine the function of the behavior. The teacher hypothesizes that when the first activity of the day is something other than computer lab the student will refuse to enter the classroom in order to obtain attention from the principal (reinforcing person) or gain access to a preferred activity (computer).

ABC (Antecedent, Behavior, Consequence) Framework for Teaching New Skills

Many of the EBPs reviewed above come from the field of **Applied Behavior Analysis (ABA)**. This section provides a brief overview of ABA as a foundation to understand and implement EBPs from this field.

ABA is a scientific approach for understanding how the environment reliably influences behavior and learning. ABA is based on the premise that behaviors are learned and can, therefore, be changed through the systematic use of behavioral principles. The field of ABA has made significant contributions to improving the lives of those with disabilities, and the methods of behavior change that have emerged from the field of ABA have been used successfully for the education of children with autism (Alberto & Troutman, 2012; Cooper, Heron, & Howard 2020).

While ABA instructional methods vary, all adhere to the idea that behavior is the result of the environment and the consequence that follows the behavior. The environment and consequence determine if the behavior happens again, how frequently it happens, and under what circumstances.

Learning characteristics associated with autism, such as difficulties attending to critical stimuli in the environment, difficulties generalizing new skills, and communication challenges contribute to the need for careful instructional planning. For students with autism, systematic and planned instruction is critical to ensure student progress. In education, the ABC framework can be applied to teaching new skills or reducing challenging behavior.

> *Note:* Later in this section the ABC framework will also be used to discuss strategies for reducing challenging behavior.

The ABC framework is useful for the systematic planning and implementation of evidence-based instruction. It can be used to teach academic skills and can be used to promote classroom engagement, relationships, and learning. Purposeful arrangement of antecedents and consequences will ensure consistent teaching by all adults working with the student and will make it easier to collect data on student performance.

This model helps to plan instruction by identifying what task or skill is to be taught (behavior) and how it will be taught. The "how" takes into consideration what is going to happen before (antecedent) and what happens after (consequence) the student responds. Systematic and

planned instruction ensures all adults working with the student will provide the same instruction and respond to the student's behavior in the same way.

The ABC model has three main components: antecedents, behavior, and consequences.

- **Antecedents** are events or experiences that happen before a behavior. Both the "setting" and the "instructional cue" can be **antecedent** events. This is important to consider because if the student is not making progress, the setting (what is happening in the environment) and the teacher's instruction can influence student responding in positive ways (student is learning) or negative ways (student learning is stalled).

- **Behavior** is a physical or verbal response. The student response in the ABC model is the target behavior that has been identified before instruction begins. There are several ways a student may respond:

  - The desired response (this is the target),

  - A prompted response,

  - An approximation to the desired response (e.g., providing assistance before the student responds will ensure they access reinforcement and helps keep the student motivated),

  - An undesired response (i.e., an incorrect or inappropriate response), or

  - No response, which is often associated with inattention or motivation and can be addressed with specific strategies.

- **Consequences** are aspects of the environment that increase, decrease, or maintain how frequently or how long a behavior occurs. How the teacher responds based on student behavior is perhaps the most important consideration. The basic learning principle discussed above emphasized that the consequence is what determines if a behavior will occur again and how frequently. If the student responds correctly then the teacher will provide positive reinforcement. The teacher may provide an error correction. Both of these consequences are intended to increase the likelihood that the student will give the desired response in the future.

Examples of the ABC Model for Teaching New Skills

Below are three examples of teaching interactions that highlight the ABC framework for the purpose of planning and organizing instructional interactions.

Example 1

Setting (Antecedent): Classroom during learning center time. Children choose the center where they want to play. Student is playing along with the teacher.

Target Skill: Categorizing familiar objects.

Cue/Instruction (Antecedent)	Teacher provides a verbal cue, "Is a truck a vehicle or animal?" and provides a verbal model, "vehicle." **Prompt:** Verbal model
Student Response (Behavior)	Student says, "animal" or does not reply. — Student says, "vehicle."
Teacher Response (Consequences)	**Incorrect Response:** Teacher provides a corrective statement and models the correct answer. — **No Response:** Teacher marks the response as incorrect and reassesses if antecedents are clear and reinforcers effective. — **Correct Response:** Teacher confirms child response with enthusiasm and a high five, says "Yes, it is a vehicle," and continues to play.

Alt Text Long Description for Example 1 Diagram Above: This diagram includes three sections. Row one (at the top) includes a cue/instruction (also called an antecedent). In this example, the teacher provides a cue, "Is a truck a vehicle or animal?" and provides a verbal model, "vehicle." (The verbal model is a type of prompt.) Row two (below section one) includes examples of a student response (also called behavior) following the

cue/instruction described above in section one. In this example, in response to the teacher's verbal cue and prompt, the student either says "animal" or does not reply, or the student says "vehicle." Section three (at the bottom) includes examples of teacher responses (or consequences) depending on the student's behavior. If the student says "animal", this is an incorrect response, and the teacher's response is to provide the student a corrective statement and model the correct answer. If the student does not reply, this is no response, and the teacher marks the response as incorrect and reassesses if antecedents are clear and reinforcers are effective. If the student says "vehicle," this is a correct response, and the teacher confirms the student's response with enthusiasm and a high five, says "yes, it is a vehicle," and continues to play.

Example 2

Setting (Antecedent): A small group of students seated at the table. Teacher holds an instruction book with words written with phonetic notation.

Target Skill: Sounding out words using phonetic notation.

Cue/Instruction (Antecedent)	Teacher uses a "get ready" cue by holding up her hand and saying "get ready" to gain student attention. Teacher says, "Let's sound out the word and points to m_a_n."	
Student Response (Behavior)	Students sound out word incorrectly.	Students sounds out the word "man" in unison.
Teacher Response (Consequences)	**Incorrect Response:** Teacher provides correction for the group with a verbal model and asks group to respond again. Group responds correctly and gets a point.	**Correct Response:** Teacher praises students for paying attention to the cue and adds points to student cards to trade-in for a favorite game to play.

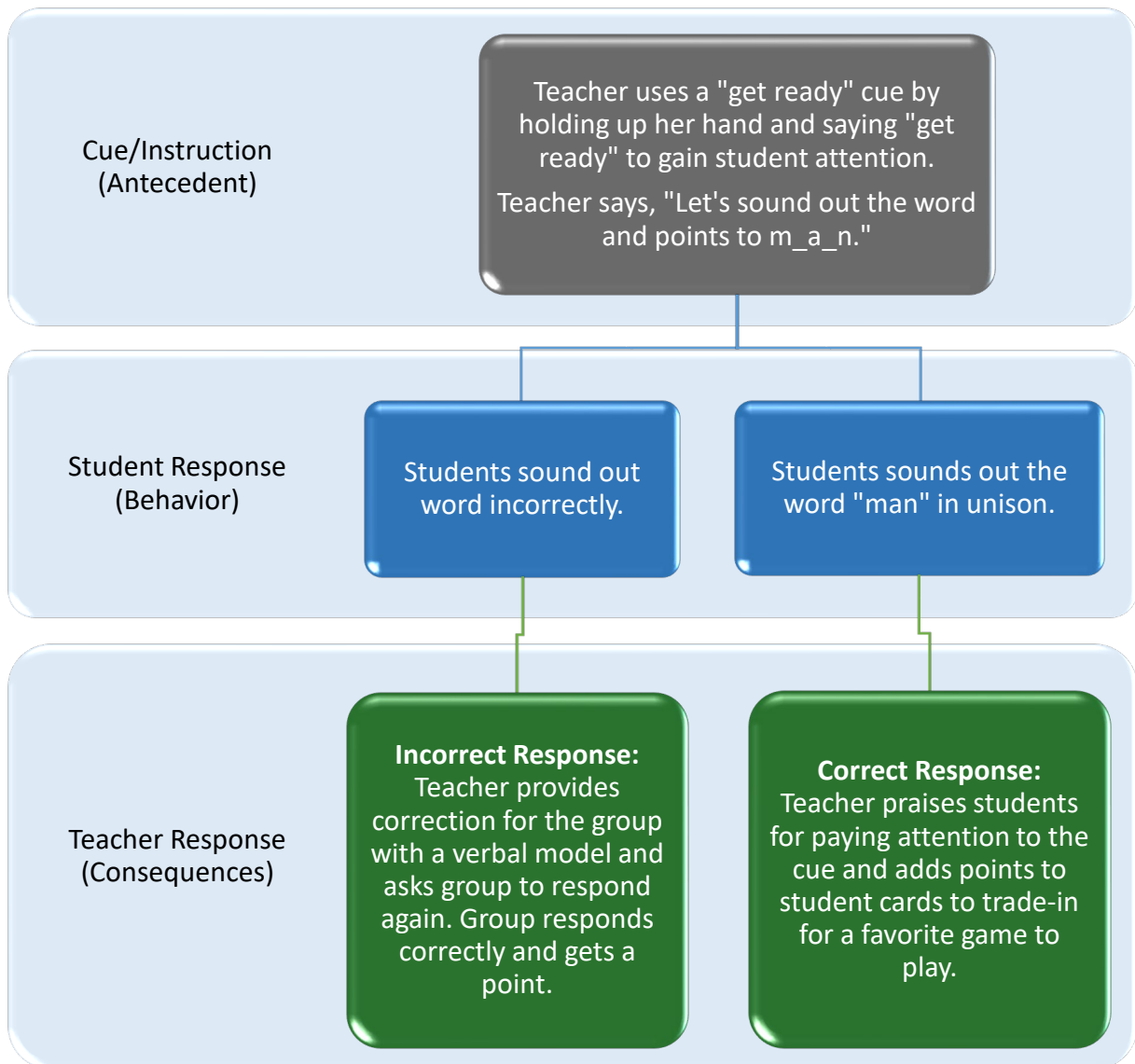**Alt Text Long Description for Example 2 Diagram Above:** This diagram includes three rows. Row one includes a cue/instruction (also called an antecedent). In this example, the teacher uses a "get ready" cue by holding up her hand and saying "get ready" to gain student attention. Next, the teacher says, "Let's sound out the word and points to m_a_n." Row two includes examples of student responses (also called behaviors) following the cue/instruction described above in row one. In this example, in response to the teacher's verbal cue and instruction, the students either sound out the word incorrectly, or they

sound out the word "man" in unison. Row three includes examples of teacher responses depending on the students' behavior. If the students respond incorrectly, the teacher provides correction for the group with a verbal model and asks the group to respond again. Then the group responds correctly and gets a point. Alternatively, if the students respond correctly following the initial cue/instruction, the teacher praises the students for paying attention to the cue and adds points to the students' cards to trade-in for a favorite game to play.

Example 3

The chart below demonstrates how one antecedent can result in multiple behaviors (i.e., responses) with differing consequences that impact learning outcomes. This example is particularly important to consider when strategies to reduce behaviors are discussed.

Antecedent	Behavior	Consequence	Result
Opportunities to respond; can be cue or instruction.	Response from student you want to increase, decrease, or maintain.	*Teacher response to student's behavior. Most effective delivered immediately.*	*The outcome of the event.*
Teacher asks student to complete a worksheet	Student begins working right away	Teacher smiles and gives a thumbs up	Student is more likely to start work quickly when asked (increase in positive behavior)
	Student fiddles with paper and looks out the window	Teacher Reprimands Student	Student argues and delays work (decrease in positive behavior)
		Teacher praises other students for "getting to work right away"	Student wants same recognition and starts future assignments quickly (increase in positive behavior

Alt Text Long Description for Example 3 Diagram Above: This diagram includes four columns. Column one includes a cue/instruction (also called an antecedent or an opportunity to respond). In this example, the teacher asks the student to complete a worksheet. Column two includes examples of student responses (also called behaviors or responses from the student that you want to increase, decrease, or maintain). In this example, in response to the teacher's cue, the student either begins working right away, or the student fiddles with paper and looks out the window. Column three includes examples of teacher responses to the student's behavior (also called consequences, and most effective when delivered immediately). If the student begins working right away, the teacher smiles and gives a thumbs up. If the student fiddles with paper and looks out the window, the teacher can either reprimand the student or praise other students for "getting

to work right away." Column four includes the result or outcome of the event. When the teacher smiles and gives a thumbs up after the student begins working right away, the student is more likely to start work quickly when asked, producing an increase in positive behavior. When the teacher reprimands the student after the student fiddles with paper and looks out the window, the student argues and delays work, producing a decrease in positive behavior. When the teacher praises other students for "getting to work right away" after the student fiddles with paper and looks out the window, the student wants the same recognition and starts future assignments quickly, producing an increase in positive behavior.

Other Considerations to Ensure Instruction is Effective

Understanding how to arrange instructional interactions using the ABC model is a necessary component to the effective delivery of evidence-based practices (EBPs). However, there are also other considerations when planning instruction to improve effectiveness.

The strategies below are particularly relevant for students with autism because the motivation to learn is often not the same as it is for other students (e.g., adult praise or recognition, mastery). The first step to ensure instruction results in positive outcomes is to consider not only how we teach, but also what we choose to teach. It is important to select skills that prioritize independence, quality of life, and capitalize on student's strengths and preferences.

Selection of Target Behaviors

The skill level of students with autism will fall somewhere along a continuum of total dependence to total independence. Ideally, all students would perform independently on all the skills necessary to participate fully in their communities.

This requires the educational team to prioritize those behaviors that will maximize adaptive performance and participation. So, whenever possible, prioritize behaviors that will yield the greatest amount of autonomy and independence.

An example of a skill or behavior that promotes autonomy is the ability to communicate wants and needs. If a student with autism does not have a functional communication system (i.e., verbal, augmentative, gestural), teaching the student to acquire a communication system and use it effectively should be prioritized.

Families and students should actively participate in selecting valued skills and behaviors. Actively involving the family and student to the greatest extent possible in prioritizing skills will likely improve motivation and commitment to achieve mastery of skills. For example, a student with autism values having friends, but lacks the skills to make and keep friendships. Prioritizing social skills to assist in making friends will reflect the student's values and will likely help motivate the student to learn skills necessary to make and keep friends.

Strategies to Increase Effectiveness of Instruction and Student Motivation

- **Be sure the student is paying attention when instructions are given.** Students with autism often have difficulty directing their attention when needed, such as lacking attention to others, paying attention to only one component of a task (i.e., selective attention), or not responding to their name when called.

- **Give instructions in close proximity to the student**. It is easier to gain the student's attention when positioned near the student. This makes it easier to use other strategies to secure attention.

- **Provide clear instructions and expectations.** Use plain language when providing instructions. This means only using the information needed for the student to perform the task. **Expectations can be provided both verbally and visually** so the student can refer to the visual if needed.

- **Intersperse easy and difficult tasks.** Including recently mastered tasks in addition to skills the student is acquiring ensures that the student has frequent access to reinforcement and builds positive learning momentum.

- **Provide opportunity for student choice.** Choice-making is a specific strategy that has been shown to increase student motivation, attention, and cooperation when learning new skills. Choices can be offered to the student related to choosing the materials, location, order of instruction and/or topic. Incorporating choice making systematically across instruction often results in greater student engagement and self-determination.

- **Incorporate preferred materials and interests into the instruction.** Students with autism often have strong interests in topics, materials, videos, etc. Incorporating student interest is a strategy that is effective in increasing motivation and engagement and willingness to participate in learning. For example, if you are teaching numeracy skills you may incorporate manipulatives such as trains or blocks that are of specific interest to the student. These can be used for one-one correspondence, counting or addition and subtraction. Flash cards with numbers, favorite videos, or songs that incorporate numeracy skills could be used. This can also include sensory preferences such as noise level, physical proximity to others, and access to sensory input when indicated.

- **Use Natural, Less Restrictive Procedures if Learning is Equal.** Common ways instructional procedures are categorized are by how intrusive or natural the procedure being used is perceived by the student and others.

Intrusive vs. Natural Instruction

Intrusiveness usually refers to how much a specific procedure impedes a student's freedom, including physical movements. Natural refers to how the consequence being delivered after a student response is directly related to the behavior being taught (i.e., direct reinforcement). In other words, is the consequence following a behavior the consequence that would naturally occur in the environment?

A good example of a natural consequence is the use of food. In the instance that the behavior being taught is communicating wants or needs and the student has asked for a favorite food, then the natural consequence is receiving the favorite food (i.e., natural reinforcer).

It is preferable to use the natural reinforcer if learning is the same. Unfortunately, the natural consequence or reinforcer to a specific behavior may not be reinforcing to the student with autism.

A question that often arises related to the use of positive reinforcement is whether it is appropriate or desirable to use contrived reinforcers (i.e., indirect reinforcement) such as treats or food to reinforce desired behaviors in general. As with all instructional techniques it depends on the circumstances of the situation such as the importance of the behavior being learned, what other types of "direct" or natural reinforcers are available, and whether using some types of reinforcers could interfere with other goals such as controlling a student's weight. If the behavior being taught is important to achieving valued behaviors, then using a contrived reinforcer temporarily may be the best instructional decision (Wolery, Bailey & Sugai, 1988, Wolery et al. 1992).

ABC Framework to Reduce Challenging Behavior

One of the more difficult challenges an educator faces is teaching students who exhibit challenging behaviors. It is expected that educators teaching students with autism will likely be involved in designing effective behavior support strategies to ensure learning and participation.

The ABC framework described earlier in this section referring to how to arrange instruction to teach new skills can also be used to understand the purpose of challenging behavior and to develop effective intervention plans. A challenging behavior can be defined as any behavior that interferes with learning, relationships, and participation for the student with autism. Students with autism often exhibit challenging behavior due to the core difficulties in communication, understanding social expectations, or adapting to change.

To help a student who is exhibiting challenging behavior, the educator must first understand the purpose of the behavior. For example, the student might engage in a challenging behavior to get away from a demand or task that is unpleasant to the student, or the behavior may serve the purpose of gaining the attention of the teacher or peers in the classroom. To develop an effective intervention plan, the adults must understand the purpose or function of the student's behavior (Dunlap, Horner, Sailor, & Sugai, 2009).

The ABC framework allows educators to carefully observe what happens before a challenging behavior occurs and what happens after it occurs. The information gathered from observing antecedents and consequences will inform the educator regarding what could trigger the behavior (antecedent) or what is possibly reinforcing the behavior (consequence) causing the behavior to increase or maintain. A formal process of identifying antecedents and consequences related to a specific behavior is referred to as a Functional Behavior Assessment (FBA). FBA is an evidence-based procedure.

> ***Note:*** It is required by IDEA that an FBA and Behavior Intervention Plan (BIP) be completed or updated if there is an educational placement change due to disciplinary action. The OSDE-SES Policies and Procedures require an FBA to be conducted and a BIP to be included within the student's IEP prior to shortening their school day, with supports and strategies to promote their participation in the full school day and week.

Antecedent Based Strategies to Prevent Challenging Behavior

- **Support independent communication.** Ensure that the student with autism has an effective means to communicate wants, needs and preferences. In addition, ensure that educators and peers offer opportunities for students with autism to communicate these preferences and needs. This can be accomplished by asking students what they want or by asking them to make a choice (e.g., "Would you like to sit with Mary or Trish?") before an activity begins or a demand is made (O'Neill, et al.,1997)

- **Use visual support to communicate expectations.** Provide information about expectations in a way that is understandable to the student. For students with autism, information presented in a visual format (e.g., pictures, line drawings, written words) can be referred to after the teacher has given instructions or explained behavioral expectations in the classroom. For instance, a list of the steps to complete an assignment provided as pictures might help the student understand what to do in the activity or remember the sequence of steps.

- **Teach classroom rules explicitly and provide support as needed.** A teacher might assume that a student with autism understands classroom rules or expectations, especially if the student is verbal. However, students with autism may not be aware of a classroom rule until it is violated. So, providing rules in a format that is easily understood and accessible and teaching the student what the rule means will ensure student understanding. This might include rules presented in a visual format, rule rehearsals, or teaching examples and non-examples of following the rule.

- **Provide for a student's physical or emotional comfort.** When a student with autism is either physically or emotionally uncomfortable, they are more likely to take action to become more comfortable. This could manifest itself in protests and/or challenging behavior if unable to communicate their discomfort or inability to take action to change the situation. Teachers should be alert to physical or emotional discomfort such as aversion to certain textures, sound, lighting or fatigue and learn how students might express their needs through their behavior. While it is often not possible to fully understand the physical discomfort of a student with autism unless they are able to articulate the discomfort, an educated "guess" can be made by closely observing and documenting student behavior and how it changes in response to different stimuli in the environment.

- **Promote active engagement.** Students with autism who are actively engaged in activities or interactions that are interesting and positive will be less likely to engage in challenging behavior. Identifying student interests and ensuring those interests are incorporated into some aspect of an activity can prevent the need for challenging behavior. While it may not be possible to always incorporate student interests, planning for times when a student is asked to wait or stay with an activity that may not be engaging by providing support to assist the student will reduce the likelihood

of challenging behavior. This could be a visual of what is coming next that is enjoyable, or an activity they can do while they wait (e.g., computer game, etc.).

- **Use a first-then contingency.** This preventative strategy refers to the use of a high probability behavior (i.e., preferred activities or actions) which can be used to reinforce the occurrence of a low-probability behavior (i.e., a difficult or non-preferred task). This approach provides a contingency for completing a less preferred or difficult task with the opportunity to engage in one that is highly preferred. The most common method for presenting this information to a student is using a "first-then" statement or by providing a visual of "First-math, Then-computer" using pictures.

- **Provide high rates of positive feedback.** Perhaps one of the most powerful preventative strategies for all students, especially students with autism, is providing high rates of positive feedback (i.e., reinforcement) for engaging in adaptive and expected behaviors. In fact, the ratio for positive feedback should be five positive statements or feedback to every one corrective statement or feedback. However, for students with autism it is important to identify forms of feedback that are perceived as positive. As was discussed previously, praise or other usual forms of positive feedback might not be positive for a student with autism. Other forms of feedback, such as a "high five" gesture or token that they can trade-in for something meaningful might be necessary.

Consequence Based Strategy to Decrease Behavior

- **Extinction** is a procedure to decrease behavior. It is the removal of reinforcement for a behavior that has been previously reinforced. For example, the teacher reprimands a student for yelling out the answers during class, resulting in an increase in the number of times the student yells out. In this situation, the reprimands are not an effective response to the student's yelling and may be reinforcing the behavior.

The teacher could implement extinction by no longer responding to the student every time they yell out an answer, and instead continuing with the lesson by calling on students who raise their hands. Because the behavior was increasing with reprimands (a form of attention) it is assumed that the behavior was being reinforced. By no longer responding and reprimanding, the teacher is not providing the reinforcement that was increasing and maintaining the behavior.

It is common for there to be a temporary increase in the undesired behavior when adults stop responding in a way that was reinforcing the behavior (e.g., attention was given, or a demand was withdrawn). The student may continue to try the undesired behavior to test if the reinforcement will be provided. If the teacher is consistent in not responding to the undesired behavior, then the student will eventually stop engaging in the behavior. The combination of extinction (i.e., ignoring the undesired behavior, such as yelling out)

with providing reinforcement for the positive alternative behavior (e.g., raising hand to speak) is an extremely effective way to address a challenging behavior.

Data-Based Decision-Making

A cornerstone of effective instruction is the use of objective data to determine if an intervention is effective for an individual student.

School teams may plan to teach a student a new skill, but if plans do not result in student learning, then changes to the plans must be made. It is rare that plans to teach new skills or change behavior will always be successful from the beginning, so careful documentation of progress or lack of progress is critical so that corrections can be made. There are many circumstances that can interfere with a student with autism learning a new skill, such as individual learner characteristics, a learning history that may include a negative experience, or sensory sensitivities.

Collecting data is essential to making instructional modifications and can be done in a variety of ways. The most common way is through direct observation of student performance and recording specific events, correct or incorrect responses, levels of assistance, or time-based recording such as how long it takes a student to respond to an instruction. Data can also be collected to monitor the frequency or intensity of challenging behavior. This is critical in order to determine if a behavior intervention plan is effective (Alberto & Troutman, 2012; Cooper, Heron, & Howard 2020).

It is important that data are summarized in a format that is accessible and easy to see changes in behavior. A visual representation of the data is a good way to easily see whether learning is improving, getting worse, or staying the same. A bar graph or line graph is an easy way to quickly inspect the data. The collection and analysis of student performance data will inform the team what changes need to be made to instruction or intervention plans.

The Importance of Fidelity of Implementation of EBPs

To produce desired outcomes evidence-based strategies or behavior plans must be implemented as intended (i.e., with fidelity). If interventions are not implemented with fidelity, student progress can fall below desired levels in a short period of time. For instance, in multiple school-based studies fidelity of behavioral interventions began at 100% following training and decreased significantly in a ten-day follow-up.

The issue of fidelity is often not prioritized with the many demands on educators' time. However, when evidence-based interventions are not implemented as planned it is more likely that no improvement will be made resulting in negative impacts for students and staff. Also, poor fidelity of implementation for procedures using fewer resources will be dismissed as ineffective, leading to the unnecessary need for more resource intensive procedures.

To conduct checks for fidelity, it is important that everyone knows what to do to implement the intervention. This will require using an established protocol, manual, or checklist for a particular procedure. All team members should be involved in the planning and the plan should include:

- Clear steps outlining the procedure.

- How fidelity will be measured (e.g., a simple outline of steps with yes/no criteria).

- A plan to directly teach all team members to implement the procedure.

- Determine level of accuracy needed to indicate someone "knows" what to do (e.g., 85%, 90% accuracy).

- A plan for when additional training and follow-up will be provided (e.g., weekly or bi-weekly).

See the Resource section for example of a Quality Classroom Checklist that can be used to assess overall classroom fidelity.

System-Level Approaches

Inclusion and Students with Autism

The autism spectrum represents students with a wide range of abilities and needs. Students with autism who have strong language and cognitive abilities are often more likely to be included in grade-level academic classes. However, students with autism who demonstrate behavioral or social interaction challenges are often placed in segregated classrooms even if academically they are on grade level.

Inclusion in meaningful activities in general education settings also becomes less likely for students with autism who have significant delays in language and communication, independent skills, or cognitive skills. While classrooms that are only for students with autism may seem like an efficient means to serve children with unique characteristics and similar needs, it is often less effective. In these classrooms, students have fewer opportunities to interact with other students who have different strengths and needs. Another consideration regarding segregated classrooms for students with autism is the missed opportunities for natural supports available in general education classrooms such as peer support, modeling from other students, increased expectations and access to general education curriculum.

Providing an inclusive school environment as defined by the least restrictive environment (LRE) requires that school teams indicate the amount of time a student will spend in general education and a rationale for placement in more restrictive learning environments.

Successful inclusion of students with autism and related disabilities requires a team approach to plan the learning activities, services, and support required to meet a

student's social, academic, and behavioral needs. This will likely involve different professionals, learning environments, student groupings, instructional formats, and methods. The process of determining and implementing plans assumes that the team is making decisions based on sound rationale and team consensus, and made explicit to all involved in implementation. When designing instruction for students with autism who have a wide range of abilities, a key belief is that even if full independent participation in an activity is not a realistic goal for a student, the student can still be actively and meaningfully included in all classroom activities (Ferguson & Baumgart, 1991). An underlying value of meaningful participation and an understanding regarding the benefits of inclusion for all students must be held by all school team members for successful inclusion.

Including all students in the general education setting is not easy and involves a great deal more than placement alone. Successful inclusion requires meeting the underlying expectations listed below, and the resources to support those expectations.

- **A team of professionals is needed to design and implement a comprehensive educational program in the general education settings.** Professionals with expertise from a variety of disciplines will identify learning activities, services, and supports needed to meet the students' academic, functional skills, behavioral, and social support needs.

  The learning activities designed to teach the range of needs will require discipline specific input, a variety of student groupings and learning environments, a range of instructional formats, and teaching methods and materials. For example, students with autism may need academic tasks broken down into smaller objectives with specific teaching procedures outlined. Plans need to be explicitly outlined for how classroom academic tasks will be adapted and how less structured learning will occur during common school activities such as lunch, assemblies, and field trips (Doyle, 2008; Snell & Janney, 2005). Universal Design for Learning (UDL) is a framework that can be used to support the needs of all learners and remove unnecessary barriers to learning. More information about UDL can be found on the [Oklahoma State Department of Education website.](#)

- **Necessary time and resources are available to allow the team to develop explicitly outlined and monitored instruction and support, and decisions will be made through team consensus.** One example could include a student with autism who struggles socially, may be bullied, and responds to social demands with outbursts and threats. These behaviors may result in the student being excluded from general education classes even though the student can complete the academic work. In this case, a team would design a comprehensive plan (e.g., peer mentor, social skills instruction) to better support the student in these situations while directly teaching the student social skills to better respond to bullying or social demands that result in behavioral outbursts. Another example is a student with autism who has more significant communication and cognitive delays. This student may need more

modified academic instruction and well-planned support (e.g., task analysis, explicit instructional procedures for activities of daily living) for learning other important skills, such as communication and independence, while also learning academics.

- **All students will be involved in learning how to create a safe, accepting, and more inclusive environment**. This may include education for all students about autism and how best to support their peers who are on the spectrum. Also, the plan may address bullying and ensure that cooperative and respectful behavior is rewarded more often and that the burden for change is not only placed on the student with autism if other students are also contributing to the challenges.

The benefit of inclusion for students with disabilities, including students with autism, is well supported by research. All students in general education also benefit academically and socially by the supports available to the students with disabilities. While the benefits are numerous, barriers to successful inclusion certainly do exist and school systems are often not designed to support high quality inclusive practices. Change can happen over time with a common vision, goals, and planning to allow for students with autism and other disabilities to participate more fully in educational opportunities available to all students.

Positive Behavior Support (PBS) and Autism

The positive behavior support framework (PBS) was added to the Individuals with Disabilities Education Act (IDEA) reauthorization in 2004. The PBS framework is based on empirically validated procedures primarily from the field of applied behavior analysis (ABA) with an emphasis on achieving community-based, valued outcomes for the person receiving intervention and support. IDEA specifically requires that schools have properly trained professionals to conduct a functional behavioral assessment (FBA) and develop a behavior intervention plan (BIP).

While IDEA specifically addresses when a child with a disability has an educational placement change for disciplinary reasons, the use of the PBS framework is considered best practice in addressing any problem behaviors a student might be displaying.

A hallmark of PBS is the combination of an FBA, which systematically identifies antecedents and consequences that maintain or increase problem behaviors, with an emphasis on prevention, teaching, and promoting alternative positive behaviors that serve the same function as the problem behavior (O'Neill et al., 2015).

This approach is especially relevant for students with autism, because behavioral and skill deficits associated with autism can often lead to the development of challenging behaviors. For example, a student with autism may engage in throwing materials to escape from or delay an activity that they find aversive.

The BIP that is developed from an FBA should include behavioral strategies that are comprised of the following components: preventative strategies, new skills to be taught,

reinforcement for appropriate behaviors, a plan for how adults will respond to the challenging behavior, and de-escalation/crisis management strategies.

Crisis and de-escalation strategies are critical to identify as part of the behavior intervention plan. Common strategies that can often successfully de-escalate potentially dangerous behaviors include: stop touching and talking (e.g., stop giving directions, explanations, or reprimands) to the student, offer a choice or assist the student to use communication to gain control in a positive manner, put distance or objects (e.g., chair or couch) between the student and other individuals.

The most important component of the FBA/BIP process for a student with autism is the identification of another skill (i.e., an alternative to the challenging behavior) that is systematically taught in the same way an academic skill might be approached (see earlier section on systematic instruction). This means that the alternative skill will be practiced, and reinforcement (usually the natural reinforcement) will follow the use of the new skill or behavior. For example, if the student hits, pushes, or grabs other students to get access to a toy, then teaching the student to ask for the toy and then receiving the toy as reinforcement will make it more likely that the student will request the toy before using the old behavior of hitting or pushing. The use of the new more adaptive skill will strengthen the more the student practices the skill and receives reinforcement.

Multi-Tiered Systems of Support (MTSS) and Students with Autism

The beginning stages of the development of PBS focused on providing intensive support for students engaging in more severe challenging behavior. However, early in the PBS development process, researchers and school personnel began to apply the elements of PBS on a broader scale in school settings. This framework is now commonly referred to as multi-tiered systems of support (MTSS). A great deal of research supports the effectiveness of MTSS in achieving a decrease in challenging behaviors and bullying with corresponding increases in academic performance and other prosocial behaviors. (Sugai & Horner, 2009). Schools that utilize MTSS and effectively integrate students with more specialized needs, such as students with autism, will more likely prevent the need for intensive interventions. The OSDE-SES Policies and Procedures include a section on MTSS.

Students with autism benefit from all levels of support identified as part of the MTSS model. However, it is likely that many students with autism will require higher levels of support throughout their schooling, such as small group or individualized teaching, to assist with understanding behavioral expectations and social norms. Potential obstacles for students with autism accessing supports available at each support level include limitations in language and communication skills making it difficult for some students to understand the behavioral expectations at the school-wide level which would impede participation. Possible solutions include using pictures or symbols to explain the behavioral expectations and corresponding consequences (e.g., rewards or loss of a privilege).

TRANSITION TO ADULTHOOD

The Importance of Transition Planning

Autistic students are expected to adapt to a variety of changes beyond the school environment. The adjustments that must be made to different environments and the expectations of society can be extremely challenging without appropriate planning, preparation, and support.

One of the most challenging transitions autistic students and their families must make is leaving the public-school system and entering the adult service system. Some of those challenges include making decisions about employment, post-secondary education, residential support, community involvement, and how to access needed services.

Once an autistic student graduates from high school with a standard diploma or reaches the maximum age of 22 on or before September 1, they are no longer eligible for services under IDEA. This means they will no longer have an Individualized Education Program (IEP). The adult service systems have different criteria for eligibility requiring the young adult to qualify for the specific service they need. Access to supports for employment, post-secondary education, or community living/involvement are not guaranteed for every autistic person. As a result, there are many unknowns that a young adult and family may face during this transition.

There are other factors that make the transition from high school to post high school particularly challenging for autistic students. First, the daily routines that autistic students have relied on to understand expectations are no longer available. Changes, such as leaving public school or getting a new job, are often overwhelming. Second, because peer relationships are often supported by the school environment, making new social connections for young autistic adults can be difficult without support. This can lead to experiences of isolation and loneliness. Third, autistic individuals may have co-occurring difficulties such as depression, anxiety, or an intellectual disability which can increase the complexity of support needed.

Careful planning to prepare the student for transition to adulthood is essential to increase independence and quality of life. Because many autistic students benefit from advanced preparation and the establishment of new routines, **this often requires that the student, family, and the school begin to plan earlier than is typically done for other students with disabilities** to ease the transition and increase the likelihood of success. Autistic students may benefit from participating in or contributing to IEP meetings prior to eighth grade to familiarize them with what to expect. Student participation can include observing their IEP meeting (in-person or by video), sharing their goals, giving information about themselves, or suggesting accommodations and supports. Autistic students can also communicate information during IEP meetings in different ways. For example, some students may feel more comfortable writing down information or making a video recording ahead of time, rather than speaking in front of a group. For more recommendations on how to involve autistic students in their IEP process, refer to the Resources section.

Addressing academic skills during elementary, middle, and high school should not be the only educational focus for autistic students. Other areas of development that will contribute to preparing the autistic student to adjust to life more easily after public school include skills that target social communication, self-advocacy, flexibility, time management, stamina, independent work completion, and teamwork. Therefore, addressing these skills as needed should be an integral part of the instructional program for autistic students.

In Oklahoma, transition services must be in effect before the beginning of the student's ninth grade year or before age 15, whichever comes first. This means that the student will be invited to the IEP meeting and the IEP team will address transition planning at age 14 or during the student's 8th grade year, whichever comes first. However, the IEP team can determine that it is appropriate that transition planning begin earlier than is required. For specific transition requirements for all students with disabilities in Oklahoma, refer to the OSDE-SES Policies and Procedures. In addition, technical assistance is provided in the Oklahoma Secondary Transition Education Handbook.

The Individuals with Disabilities Education Act (IDEA) makes available a free appropriate public education (FAPE) to eligible students with disabilities. For students who receive a standard high school diploma FAPE ends when this diploma is conferred. However, students who are taught to alternate academic achievement standards and participate in the Oklahoma Alternate Achievement Program (OAAP), are not eligible for a standard diploma but can receive an alternate high school diploma upon earning appropriate credits.

If the student has not turned 22 on or before September 1, the student will be offered continued enrollment following graduation with an alternate diploma and the district will continue to provide a FAPE through the school year in which they turn 22. The student can attend the same length of day and week as students without a disability. However, as with any student with a disability, the IEP Team may determine a shortened day/week is appropriate.

Educating students and families about other laws, such as Section 504 and the Americans with Disabilities Act (ADA), becomes more important for young adults with autism. Section 504 is a federal law designed to protect the rights of individuals with disabilities in programs and activities that receive federal financial assistance from the U.S. Department of Education (ED). The ADA protects individuals with disabilities from discrimination in employment, state and local government activities, public transportation, public accommodations, and telecommunications and relay services.

High school transition-planning teams, including students and families, need to be aware that students will be required to self-disclose their disability to the proper postsecondary contact to receive accommodations and services. In addition, secondary planning teams and parents must understand that although accommodations and modifications are available, their use is far more limited at the college level. Thus, the use of accommodations and modifications at the secondary level should be carefully examined and the student should be involved in discussions related to why each is needed, how it is used, and what benefits it provides.

Transition Planning

The goal of the transition plan in the Individualized Education Program (IEP) is to facilitate movement from school to the world of postsecondary education, adult work, living, and community participation. Transition planning is a process to assist students in identifying and building the skills and supports they need to make progress towards their postsecondary goals. Successful transition planning requires support from multiple sources so the student and family can make choices, develop connections, and access services prior to leaving high school.

Planning early and building goals related to life skills, postsecondary education, or employment into the transition plan in the IEP breaks the process into manageable steps. It also helps engage an accessible, ongoing support system of transition team members.

Transition planning is not a single conversation but rather a progression that will evolve over time and should reflect the continuing development and changing needs of the student with autism. It is required by IDEA to review and update the transition plan at least annually to ensure that it is responsive to the student's current needs and interests.

Three critical factors in the transition process that should always remain at the center of the team's efforts are:

- Quality of life as a valued outcome

- Individualizing transition planning for the student

- Facilitating student participation in as much of the transition planning as possible (e.g., independence and self-determination)

Members of the Transition Team

The transition team should include the student, parents, and members of the IEP team working together to help the student make decisions about goals for life after high school. Although schools are responsible for initiating transition planning, team members do not need to be limited to school personnel. Instead, teams should include anyone who knows the student well and who may know about what supports and services the student may need. The process can begin with an initial team meeting to identify the necessary skills and opportunities that the student will need in order to meet the desired goals. The skills and opportunities needed will naturally change over time as the student makes progress or if goals change.

In assembling the transition team, the most important place to start is with the student. Transition should be driven by individual desires, preferences, strengths, interests, needs, and requirements to maintain a high quality of life rather than restricted to a pre-determined program. Every autistic individual is different, so each student will require individualized support and services throughout the transition process. Potential areas of skill development to focus on include teaching communication skills, self-advocacy/self-determination, and

independent skills. All of these skills will assist the student to more actively participate in the process. Preparing a student to participate in meetings is vital. Ways to prepare the student to be an active participant include making the student aware of terminology, roles of the IEP team, and the structure of the meeting. Students can practice providing information, leading the team through the process, listening to others, and providing feedback.

Evaluation of the student's strengths and challenges is a critical component of transition. This process will take time, but if the process starts early and the right steps are taken, a foundation for a successful future for the student can be laid.

Adult Services after Graduation

Transition planning should help connect the young adult with the adult service system before they leave high school. The specific participants and their roles may vary, depending on the goals and needs of the young adult. However, when determining what connections need to be made to more traditional service systems it is also important to consider the natural supports that may exist in settings where the autistic student will be participating. Natural supports are people, resources, training, and forms of assistance that already exist in a particular setting as the first consideration for support before relying on specialized services and personnel.

Involvement of other agencies/entities may be necessary so that the student with autism can seamlessly access adult services following graduation, if they are eligible. The Oklahoma Developmental Disabilities Services (DDS), the Oklahoma Department of Rehabilitation Services (OKDRS), the Oklahoma CareerTech, and college and universities are some examples of agencies/entities that might provide adult services to a student. (See Resource section for some specific programs).

Connecting the student and families with these services during transition planning can facilitate timely application and eligibility determination for adult services.

Critical Skills for the Autistic Student

Autistic students may need specific instruction in developing these critical skills:

Self-Advocacy/Self-Determination

Autistic students need to learn to advocate for themselves to the best of their ability. Self-advocacy should be taught throughout the student's life. Self-advocacy skills that should be part of curricula for students with autism, include:

- Making choices
- Negotiating for yourself
- Decision making

- Disclosing information about their autism

- Speaking up for yourself

- Asking for what you need

- Asking for help

- Understanding rights and responsibilities

- Using available resources

It is critical for young autistic adults to know how to advocate for themselves to ensure that they know how to get the support and services they need as well as the services that they want. The individual must be able to identify that there is an obstacle or difficulty and then know how to seek assistance to have the issue resolved.

It is also critical that the student is aware that they are autistic and to understand that autism has provided them with strengths and certain challenges.

Decision making is another important skill to teach. Decision making can range from selecting what clothes to wear and making their own schedules, to more advanced decision making such as what should be discussed at IEP meetings. Components of decision making important to teach include clearly defining the decision, considering pros and cons, and learning from the outcomes. Autistic adults should be given skills and opportunities to make important decisions that impact their quality of life, including the right to choose and refuse daily activities (Bannerman et al., 1990).

Person-Centered Planning

Person-centered planning is an integral part of transition planning. (Please see the Resources section in the appendix of this handbook.) Many methods of person-centered planning are available; however, all methods have the following characteristics:

- Discussing who the student is, including their strengths, challenges, interests, goals, and preferences

- Bringing together the student with different stakeholders in their life

- Developing an action plan for achieving the student's vision for their future

Developing Independent Living Skills

Skills that foster independence are of utmost importance. Autistic students should begin to develop these skills at an early age and build upon them as they grow. Some ways to build independent living skills are:

- **Strengthening Communication.** If the student struggles with spoken language, consider Alternative/Augmentative Communication (AAC) and visual supports.

These can include picture exchange communication systems (PECS), speech output devices (such as an iPad), and sign language.

- **Visual Schedules.** Help the student to transition from activity to activity with more independence and provide practice for decision making.

- **Self-Care Skills.** Activities of daily living should be part of the student's daily routine.

- **Asking for a Break.** The student needs a mechanism to ask for a break (verbally, communication device, picture). Provide a quiet area for the student to go when feeling overwhelmed. Knowing how to ask for a break allows the student to have some control over their environment and helps them to communicate a need in a socially acceptable manner.

- **Household/School Chores.** Completing chores can teach responsibility and give students useful skills for adult life. These activities may need to be broken down into smaller steps (task analysis). Modeling the steps or providing prompts will help the student learn, especially if they are having difficulty at first.

- **Money Skills.** Learning how to use money is important so the student can become more independent in the community. Teaching these skills in different settings helps students to generalize what they learned.

- **Leisure Skills.** The ability to engage in independent leisure and recreation will help the student throughout their life. Translate the student's special interest into age-appropriate recreational activities.

- **Self-Care During Adolescence.** Adolescence and puberty bring many changes for an autistic teenager, so it is important to introduce hygiene and self-care skills. Visual aids can be useful for establishing new routines, including checklists for activities. Creating a hygiene kit so that all materials are located in one place could be helpful. (Please see the Resources section in this handbook)

- **Vocational Skills.** Use the student's strengths, skills, and interests to guide vocational activities in the IEP.

- **Mental Health and Physical Health.** To maintain health into adulthood, skills useful to teach may include how to take medication, how to schedule doctor appointments, and how to prepare for appointments (e.g., bring personal identification and insurance cards).

- **Personal Relationship Skills.** Explicitly teaching skills for communication and interaction can help with navigating various relationships (e.g., friend, partner, roommate, coworker).

APPENDIX A. RESOURCES

About Autism

A Brief Guide on Autism for Educators
This guide provides a brief introduction for educators to increase understanding of autism and effective classroom strategies.
From Vanderbilt Kennedy Center TRIAD.

Addressing Mental Health Needs in Students with Autism Spectrum Disorders
This online toolkit for school personnel and related professionals provides information, tools, and strategies to support students with autism and co-occurring mental health challenges.
From Vanderbilt Kennedy Center TRIAD.

Introduction to ASD
This collection of resources provides parents and professionals with foundational information for understanding autism spectrum disorders.
From Ohio Center for Autism and Low Incidence (OCALI) Autism Center.

Neurodiversity in School Age Populations
This toolkit for educators and school teams increases understanding of neurodiversity and how to promote neurodiversity in school environments.
From Vanderbilt Kennedy Center TRIAD.

Understanding Undiagnosed Autism in Females
This article provides information on understanding why autism can be underdiagnosed in females.
From UCLA Health.

Autism Assessment

Optimizing the Autism Eligibility Process in Schools: A Team-Based Approach
This toolkit provides a framework for team-based, family- and student-centered autism evaluations that are data-focused and designed to identify the specific areas of educational impact to be targeted for intervention.
From Vanderbilt Kennedy Center TRIAD.

Parent Interview
This form provides prompts to interview caregivers of a child who may have autism. It addresses background, health history, and family concerns with questions about the child's communication, social, and behavioral characteristics as observed by the family.
From the Oklahoma Autism Center.

School Observation Guide

This guide provides a template for observing and recording student behaviors that may be indicators of possible autism. It provides clear descriptions and specific examples of behaviors typically observed in a classroom/school setting.
From the Oklahoma Autism Center.

Team-Based Approach

Collaborative Teaming Case Studies

These case studies feature real examples of successful collaboration and showcase how teamwork and collaboration benefit students and team members.
From American Speech-Language-Hearing Association.

Interprofessional Practice Case Rubric

The interprofessional practice case rubric is a tool that can be used to plan and coordinate collaborative service delivery.
From American Speech-Language-Hearing Association.

Strategies for Effective Teaming for Students with Autism Spectrum Disorder

This brief handout includes tips, resources, and a sample agenda to promote effective teaming.
From the University of New Mexico Center for Development and Disability.

Evidence-Based Instructional Practices

Applied Behavior Analysis for Teachers

This book for educators and school professionals provides accessible and up-to-date information on the principles and procedures of applied behavior analysis and provides examples of how to implement them in education settings.
Alberto, P., Troutman, A., & Axe, J. (2021). *Applied Behavior Analysis for Teachers (10th edition).* Upper Saddle River, NJ Pearson Education.

Autism Focused Intervention Resources & Modules (AFIRM)

AFIRM modules are designed to help educators and other professionals learn the step-by-step process for planning, using, and monitoring an evidence-based practice with students with autism.

Autism Internet Modules (AIM)

AIM provides learning modules for specific evidence-based interventions. The user is required a login and then they can access the modules. Modules include content information and video examples.
From Ohio Center for Autism and Low Incidence (OCALI) Autism Center.

Building Social Skills in Schools
This toolkit offers strategies for educators to support social awareness and relationship skills in students with autism.
From Vanderbilt Kennedy Center TRIAD.

Classroom Pivotal Response Teaching for Children with Autism
This practical resource provides teachers with guidance to embed Pivotal Response Teaching into existing classroom curriculum. This approach has been shown to increase student motivation, participation, learning opportunities, and skill mastery.
Stahmer, A.C., Suhrheinrich, J., Reed, S., Schreibman, L. & Bolduc, C. (2011). *Classroom Pivotal Response Teaching.* New York, NY Guildford Press.

Ethical Applied Behavior Analysis Models for Individuals Impacted by Autism
This book provides teachers, parents, and behavior analysts with a comprehensive analysis of evidence-based, behavior analytic programs for the therapeutic treatment of persons with autism, from infancy through adulthood.
Peterson, S., Eldridge, R., Williams, B.F., Williams, R.L. (2025). *Ethical Applied Behavior Analysis Models for Individuals Impacted by Autism.* New York, Routledge.

National Autism Center at the May Institute
The National Autism Center provides a variety of resources for educators and families. It includes a review of evidence-based interventions called the National Standards Project last updated in 2015.

National Professional Development Center on Autism Spectrum Disorder
The National Professional Development Center has created a variety of resources that include information on evidence-based practices, secondary education and autism, coaching resources, and an assessment tool called the Autism Program Environmental Rating Scale.

No-Tech and Low-Tech AAC for Children with Autism Spectrum Disorders (ASD): A Guide for Parents
This guide provides an overview of augmentative and alternative methods to promote communication in children with delays in speech and language development.
From Vanderbilt Kennedy Center TRIAD.

Peer-based Intervention and Autism Spectrum Disorders: Tips and Resources for Teachers
This tip sheet provides information about implementing peer-based interventions with students with autism.
From Vanderbilt Kennedy Center TRIAD.

PEERS Curriculum for School-Based Professionals
This resource is a curriculum-based resource that provides instruction and lesson plans for teaching social skills that are immediately useful and relevant to adolescents in a variety of social settings.

Langston, E.A., (2014). *PEERS Curriculum for School-Based Professionals: Social Skills Training for Adolescents and Young Adults*. New York, Routledge.

Remaking Recess
An evidence-based psychosocial intervention designed to help children with autism increase inclusion, engagement, and connections with peers at recess.

Teaching Communication Skills: A Toolkit for Educators
This toolkit provides information about how to help students with autism improve their ability to communicate.
From Vanderbilt Kennedy Center TRIAD.

The DATA Model for Teaching Preschoolers with Autism
Help preschoolers with autism thrive in inclusive classrooms with this comprehensive linked program, featuring an assessment checklist and 140+ instructional programming sheets and lesson plans.
Schwartz, I.S., Ashmun, J., McBride, B., Scott, C., & Sandall, S. (2017). *The DATA Model for Teaching Preschoolers with Autism*. Maryland, Brookes Publishing.

Visual Supports and Autism Spectrum Disorders
This introductory guide provides information on using common visual supports to promote communication between a caregiver/educator and a student with autism.
From Vanderbilt Kennedy Center TRIAD.

Quality Classroom Checklist
This tool can be used by educators and administrators as a self-assessment to identify areas of strength and need in classrooms or programs serving students with autism. This tool is intended to be used supportively (not critically) to identify professional development opportunities and classroom support needs.
From the Oklahoma Autism Center.

Transition Planning

Elementary, Middle School, High School - Oklahoma Transition Planning Folders
Folders with information about transition resources, services, and activities for students with disabilities are available through the Oklahoma Department of Rehabilitation Services for Elementary School, Middle School, and High School.
From Oklahoma Rehabilitation Services.

Health and Development Resources
These resources include several toolkits related to personal hygiene, puberty, and healthcare.
From Vanderbilt Kennedy Center.

[I'm Determined (Educators)](#)
This resource helps teachers support students in developing self-determined habits, including involvement in their IEP process. Site also has resources for youth and families.

[Life Journey Through Autism: A Guide for Transition to Adulthood](#)
The Organization for Autism Research developed this resource to facilitate transition planning and to aid autistic individuals in building the skills and establishing the supports that will allow them to take advantage of all that adulthood has to offer.
From the [Organization for Autism Research](#).

[Minnesota Department of Education Person Centered Practices](#)
Tools, strategies and tips are provided to support special education teachers, students with disabilities and families in learning how to engage in person-centered planning.

[Nebraska's Person-Centered Planning Initiate (Department of Health and Human Services)](#)
Initiates that are working to encourage Person-Centered Planning including a resource library and training.

[OU Zarrow Institute on Transition and Self Determination](#)
The Zarrow Institute on Transition & Self-Determination at the University of Oklahoma strives to promote successful transition outcomes for all by implementing innovative research, putting findings into practice, and disseminating knowledge through high-quality products and professional development.

[Pacer's National Parent Center on Transition and Employment](#)
Pacer's National Parent Center on Transition provides quality information on transition for youth with disabilities in a format that's useful to families, youth and professionals.

[Parents Helping Parents](#)
Parents Helping Parents provides parent support for children and adults with disabilities by providing relevant, up-to-date information to individuals with disabilities and their families.

[Project 10 Transition Education Network](#)
Project 10: Transition Education Network provides support to assist school districts in providing appropriate planning and timely transition services and programs to assist youth with disabilities in transition to adulthood. (Florida Department of Education)

[Roadmap to Transition: A Handbook for Autistic Youth Transitioning to Adulthood](#)
This handbook is a plain language resource created to help young autistic people understand and plan for their transition to adult life.
From the [Autistic Self Advocacy Network](#) and [Family Network on Disabilities.](#)

[Secondary Transition: Student-Centered Transition Planning](#)
This module will help users to better understand the benefits of student-centered transition planning, identify ways to involve students in collecting assessment information and

developing goals, and be able to prepare students to actively participate in their own IEP meetings.
From IRIS Center.

Supporting Teens and Young Adults on the Autism Spectrum: Setting and Pursuing Self-Determined Goals
This toolkit helps people who support autistic teens and young adults as they set and pursue self-determined goals. Examples of goals include those related to employment, health, independence, daily living skills, relationships, leisure, recreation, and hobbies.
From Vanderbilt Kennedy Center TRIAD.

The National Technical Assistance Center on Transition
The Collaborative (NTACT:C) is a Technical Assistance Center co-funded by the U.S. Department of Education's Office of Special Education Programs (OSEP) and the Rehabilitation Services Administration (RSA). This resource provides information, tools, and supports to assist multiple stakeholders in delivering effective services and instruction for secondary students and out of school youth with disabilities.

The Self-Determination Interchange
A website for the developmental disabilities community to exchange ideas, information and resources.

Professional Development and Training/Consultation

Ohio Center for Autism and Low Incidence (OCALI) Autism Center
The Autism Center works to build the capacity of school districts and other education agencies to improve their instruction and support for individuals with autism.

Oklahoma Autism Center MESA Program
The MESA Program provides consultation and professional development to educators and professionals who work with children on the autism spectrum. They do this by teaching evidence-based practices in statewide trainings and workshops and through virtual and on-site consultation with individual school teams.

TEACCH Autism Program
UNC School of Medicine offers in-person and virtual training options that provide participants with an overview of learning styles for students with autism and structured TEACCHing methods and principles to promote independence and capitalize on student strengths.

Vanderbilt Kennedy Center Treatment and Research Institute for Autism Spectrum Disorders (TRIAD)
TRIAD offers training and consultation in behavioral and educational assessment and intervention strategies for school personnel, community professionals, and pediatric care providers.

Oklahoma Resources

The Oklahoma organizations below provide a wide range of supports for individuals with autism, families, and educators through research, education, and service. Visit the websites below for more information about services provided at each organization:

Autism Foundation of Oklahoma

Autism Oklahoma

Oklahoma Autism Center

Oklahoma Autism Network

Oklahoma Family Network

Oklahoma Parents Center

Sooner SUCCESS

The Arc of Oklahoma

APPENDIX B. REFERENCES

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