

# Curriculum Guidebook



2023-1-CZ01- KA 220-SCH-000156079





#### PROJECT NAME

#### **Teaching School Readiness Through an ABA-based Preschool Programme**

Project number: 2023-1-CZ01-KA220-SCH-000156079

#### Disclaimer

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Website: https://ready4school.eu/

Contact: ready4schoolerasmus@gmail.com

Ready4School Lesson Plans © 2024 by Masarykova Univerzita, Sina Svetulka, Vimodo ltd, Centar za autizam, INNOVATION HIVE, Odessa Regional Academy of In-Service Education is licensed under CC BY-NC-ND 4.0. To view a copy of this license, visit <a href="https://creativecommons.org/licenses/by-nc-nd/4.0/">https://creativecommons.org/licenses/by-nc-nd/4.0/</a>







# **Table of Contents**

Introduction to the Curriculum Guidebook	5
School Readiness Skills	6
Teaching Methods	7
Chapter 1: Autism and Applied Behavior Analysis	9
What is ASD?	9
Respecting the Rights of Autistic Children	10
Inclusive Preschool Education	11
History of Autism and Applied Behavior Analysis	12
Effectiveness of Applied Behavior Analysis for Preschoolers	15
Chapter 2: Behaviors Necessary Before Starting School	17
Following Instructions	17
Waiting for Access	17
Sharing with Peer	18
Greeting Peers	18
Empathy	19
Requesting Help	19
Requesting Adult Attention	20
Requesting Peer Attention	20
Time Management	21
Accepting Change	21
Using Coping Strategies	21
Chapter 3: Behavioral Strategies	23
Prompting	23
Reinforcement	23
Visual Schedules	24
Change Card	25
Priming	26
Shaping	26
Modelling	26
Token System	27
Task Analysis	28
Chaining	29
Pairing	29
Alternative Communication Methods	30
Now and Next Board	31
Movement Breaks	32





Transition Management	33
Sensory Mapping	33
Choice Board	
Redirection	36
Chapter 4: Data	
Chapter 5: Assessment	39
Chapter 6: Collaboration	41
Selected References & Further Reading	42





# Introduction to the Curriculum Guidebook

Why do you need a preschool readiness toolkit to support autistic children in their elementary school transition?

School readiness is a crucial factor in a child's educational journey, particularly for children aged 5-7 who are transitioning into elementary school. This critical period marks a significant shift from early childhood education to more structured academic settings. The concept of school readiness encompasses not only academic preparedness but also social, emotional, physical, and cognitive development (High, 2008).

The importance of school readiness cannot be overstated. Research consistently shows that children who enter school with a strong foundation in key developmental areas are more likely to experience academic success, positive social interactions, and overall well-being throughout their educational careers and beyond (Duncan et al., 2007). Conversely, children who struggle with school readiness may face challenges that can persist throughout their academic lives, potentially impacting their long-term educational and career outcomes (Rouse et al., 2005).

It is important to note that school readiness is not a one-size-fits-all concept. Children develop at different rates and may excel in some areas while needing additional support in others. Furthermore, as we recognize the diverse needs of all students, it is crucial to address the specific readiness requirements for children with special educational needs, particularly those on the autism spectrum. Autistic children often face unique challenges in transitioning to elementary school and may require additional support in areas such as social interaction, communication, and sensory processing (Fleury et al., 2014). For autistic children, school readiness takes on additional dimensions. Beyond the typical readiness skills, these children may need:

- Enhanced support in social skills development, including understanding and navigating social norms in a school setting.
- Strategies for managing sensory sensitivities that may be exacerbated in a busy school environment.
- Development of self-regulation techniques to cope with changes in routine and unexpected events.
- Tailored communication supports, which may include visual aids or alternative communication systems.
- Individualized approaches to academic instruction that align with their unique learning styles and interests.





In this curriculum guide, we will examine various domains of school readiness, including cognitive skills (such as early literacy and numeracy), social-emotional competencies, physical development, and language and communication abilities. However, our main focus will not be on cognitive skills, but rather, an overview of autism, evidence-based teaching strategies that have been shown to effectively foster these skills in young learners, and how these concepts can be adapted and enhanced to support the successful transition of autistic children into elementary school. This comprehensive approach aims to provide a holistic understanding of school readiness that encompasses the needs of all learners, ensuring that every child has the opportunity to thrive in their educational journey.

#### **School Readiness Skills**

Specific school readiness skills most needed by autistic children transitioning to elementary school will be discussed later in this curriculum guide. However, it should be noted that a comprehensive review of the literature situates the following school readiness skills are most needed:

#### 1. Cognitive Skills

Cognitive skills form the foundation of academic success. For children aged 5-7, key cognitive skills include:

- Basic Numeracy: Understanding numbers, counting, and simple arithmetic (Duncan et al., 2007).
- Early Literacy: Letter recognition, phonological awareness, and basic reading skills (Whitehurst & Lonigan, 1998).
- Problem-solving: Ability to think critically and solve simple problems (Blair & Razza, 2007).

#### 2. Social-Emotional Skills

Social-emotional skills are crucial for children's overall development and school success:

- Self-regulation: Ability to control emotions and behavior (McClelland et al., 2007).
- Social interaction: Cooperating with peers and adults (Ladd et al., 2006).
- Following instructions: Understanding and following classroom rules and routines (Lin et al., 2003).

#### 3. Physical Development

Physical readiness is often overlooked but is essential for school success:

• Fine motor skills: Holding a pencil, cutting with scissors, and other hand-eye coordination tasks (Grissmer et al., 2010).





• Gross motor skills: Running, jumping, and maintaining balance (Son & Meisels, 2006).

#### 4. Language and Communication

Effective communication is vital for learning and social interaction:

- Expressive language: Ability to communicate thoughts and needs verbally (Dickinson & Tabors, 2001).
- Receptive language: Understanding spoken language and following verbal instructions (Justice et al., 2009).

#### **Teaching Methods**

Specific evidence-based teaching methods that have been proven most successful with autistic children transitioning to elementary school will be discussed later in this curriculum guide. However, it should be noted that a comprehensive review of the literature situates the following general teaching strategies as useful in building school readiness skills:

#### 1. Play-Based Learning

Play-based learning is an effective approach for teaching readiness skills to 5-7 year-olds:

- Guided play: Teacher-facilitated activities that incorporate learning objectives (Weisberg et al., 2013).
- Free play: Unstructured play time that promotes creativity and social skills (Ginsburg, 2007).

#### 2. Differentiated Instruction

Tailoring instruction to individual needs is crucial for this age group. This is something that will be focused on extensively in this guidebook, with an in-depth look at strategies for differentiating instruction for autistic learners. However, general best practices can include:

- Learning centers: Designated areas for different activities catering to various learning styles (Tomlinson, 2001).
- Small group instruction: Targeting specific skills in small, ability-based groups (Connor et al., 2009).

#### 3. Technology Integration

Appropriate use of technology can enhance learning:

• Educational apps: Interactive applications focusing on specific skills (Neumann & Neumann, 2014).





- Digital storytelling: Using multimedia to enhance literacy skills (Verdugo & Belmonte, 2007).
- 4. Multi-Sensory Approaches Engaging multiple senses can improve learning outcomes:
  - Hands-on activities: Manipulatives for math and science concepts (Carbonneau et al., 2013).
  - Movement-based learning: Incorporating physical activities into lessons (Vazou et al., 2012).
- 5. Social-Emotional Learning (SEL) Integration Embedding SEL into daily activities is crucial:
  - Classroom meetings: Regular discussions to build community and problem-solving skills (Kriete & Davis, 2014).
  - Role-playing: Activities to practice social skills and empathy (Jones et al., 2011).





# Chapter 1: Autism and Applied Behavior Analysis

#### What is ASD?

Autism spectrum disorder (ASD) is a neurological and developmental disorder that affects how people interact with others, communicate, learn, and behave. Although autism can be diagnosed at any age, it is described as a "developmental disorder" because symptoms generally appear in the first 2 years of life.

Autism is known as a "spectrum" disorder because there is wide variation in the type and severity of symptoms people experience.

#### Common signs and symptoms of autism spectrum disorders

Every person with an autism spectrum disorder has a unique pattern of behaviour, but there are some common signs and symptoms:

- Communication problems (difficulty using or understanding language) such as delayed speech development and limited vocabulary for their age, repeating a set of words or phrases, focusing attention and conversation on a few topic areas, monotonous and flat speech.
- **Difficulty in social interaction**. This includes having trouble in making friends and interacting with people, difficulty understanding facial expressions, difficulty understanding their own and other people's emotions, not making eye contact, not wanting to be cuddled, not answering when called or refusing to do things when asked.
- Repetitive behaviours and following strict routines. This may include repetitive body movement such as hand flapping and repetitive motions with objects like spinning the wheels of a toy car, performing activities that could cause self-harm such as biting or head-banging, sticking to the same routine every day and having difficulty adjusting to even minor changes.
- **Sensory sensitivity**. Being over or under sensitive to sounds, lights, touch, tastes, smells, pain and other stimuli.

#### **Key facts**

- Autism also referred to as autism spectrum disorder—constitutes a diverse group of conditions related to development of the brain.
- About 1 in 100 children has autism.
- Characteristics may be detected in early childhood, but autism is often not diagnosed until much later.





- The abilities and needs of autistic people vary and can evolve over time. While some people with autism can live independently, others have severe disabilities and require life-long care and support.
- Evidence-based psychosocial interventions can improve communication and social skills, with a positive impact on the well-being and quality of life of both autistic people and their caregivers.
- Care for people with autism needs to be accompanied by actions at community and societal levels for greater accessibility, inclusivity and support.

#### **Respecting the Rights of Autistic Children**

Throughout the intervention process, ABA practitioners respect the individual's autonomy and self-determination. This involves:

- Involving the individual and their caregivers in decision-making through individualized treatment. ABA interventions are tailored to the unique needs, preferences, and strengths of each individual. This individualization ensures that interventions are respectful of the individual's autonomy and are aligned with their goals and priorities.
- Honouring their preferences and interests via preference assessments. ABA
  practitioners conduct preference assessments to identify the individual's
  preferred activities, items, and reinforcers. This helps ensure that interventions
  are respectful of the individual's preferences and interests, promoting
  engagement and motivation.
- Prioritizing interventions and learning goals that promote independence and quality of life.
- Using positive reinforcement instead of punishment procedures: ABA emphasises the use of positive reinforcement to teach and increase desirable behaviours. By focusing on reinforcing positive behaviours rather than punishing undesirable ones, ABA respects the dignity of autistic individuals and promotes a supportive and nurturing environment. The Behaviour Analyst Certification Board (BACB) provides guidelines for behaviour analysts regarding the use of punishment in their practice. These guidelines are outlined in the Professional and Ethical Compliance Code for Behaviour Analysts. The code emphasizes the importance of using reinforcement-based procedures whenever possible and discourages the use of punishment except under certain conditions.

If punishment procedures are necessary, behaviour analysts must ensure that they meet several conditions:





- Punishment is the least restrictive intervention that effectively addresses the behaviour.
- 2. The potential benefits of using punishment outweigh the potential harmful effects.
- 3. There is a documented need for the use of punishment based on a comprehensive assessment of the individual's behaviour and environmental factors.
- 4. The use of punishment is approved by appropriate stakeholders, such as caregivers or legal guardians.
- 5. Behaviour analysts implement punishment procedures in a manner consistent with applicable laws and regulations.

When using punishment, behaviour analysts must consider ethical principles such as beneficence (acting in the best interest of the client), non-maleficence (avoiding harm), and respecting the dignity and rights of the individual.

#### **Obtaining assent before treatment**

ABA practitioners obtain informed consent from the individual or their legal guardian before implementing any interventions. Since 2022, according to the BACB's Code of Ethics, the BACB requires BCBAs to obtain assent as a part of obtaining informed consent. Assent means that a learner verbally or nonverbally agrees to participate in treatment. Vocal communication, and even functional communication, is not needed. Obtaining assent requires anyone working with the learner, to watch for signs of assent by paying attention to the learner's body language, facial expressions and vocalisations. This is known as assent-based learning, and is a key aspect of modern Applied Behaviour Analysis (ABA). It represents a shift towards a more compassionate approach advocated by figures like Dr. Greg Hanley. Traditional ABA methods were often criticized by autistic individuals and their families, for trying to eradicate autistic traits and changing the autistic individual. Therefore, integrating assent into our practice reflects a respect for our learners' autonomy, granting them the agency to consent to or decline treatment. It also fosters autonomy and self-advocacy skills in learners.

#### **Inclusive Preschool Education**

Inclusive preschool education for children with ASD requires effective data collection. This involves observation and collaboration with parents, special educators and autism specialists. Early childhood educators use a variety of observation techniques, including Reflection Diary, Participatory Observation, Observation Protocol, Technical Tools for Data Collection, Questionnaires (various types), Interviews (various types). These practices ensure a comprehensive understanding of each child's needs and enable the development of individualised support plans. Comprehensive psycho-educational programmes that enhance self-care and social





skills are also critical to the successful integration of children with ASD into the school environment.

Key factors in improving the lives and education of children with ASD include early diagnosis, intensive early intervention and close collaboration with families. Families benefit from specialist support and guidance, while educators are trained to implement individualised intervention programmes based on behavioural approaches. The individualized intervention programmes focus on different approaches, techniques and methodologies (e.g. ABA-based techniques, TEACCH, PECS, Naturalistic Behavioral Analytic Approach) in order to provide a holistic support to the children with ASD.

The use of music in the education of children with ASD is extremely beneficial, especially music and movement. Music with repetitive patterns acts as a tool for learning and interaction, contributing to the development of social skills and emotional maturation. It can act as a bridge to communicate with the outside world. Teachers can incorporate music therapy by using musical instruments and materials that support the child's sensory motor development. At the same time, techniques such as imitating the child's gaze and using symbolic play and role play help with social interaction and understanding others. In addition, building trusting relationships with the child and adapting instruction according to the child's mood, as well as using brief and clear instructions,, are key practices for the successful inclusion of children with autism in preschool education.

Moreover, the combination of therapies and evidence-based behavioral techniques offers a comprehensive and multifaceted framework for supporting children with ASD in preschool settings. For example, the use of symbolic play combined with ABA techniques and the Natural Behavioral Analysis Approach has proven effective in reducing anxiety and promoting social participation. Role-playing scenarios, such as visiting a hairdresser or engaging in everyday classroom activities, can help children overcome specific anxieties and improve peer interactions. Role-playing in classroom settings, for instance, can foster cooperative behaviors and tolerance of sensory experiences. Additionally, the use of sounds and music with ABA and TEACCH techniques is highly impactful in developing communication skills. For example, interactive activities using books with animal sounds, guided by a special educator, can enhance skills such as eye contact and responsiveness to stimuli. Structured play further encourages social engagement, enabling children with ASD to develop communication and cooperation skills in meaningful ways.

#### **History of Autism and Applied Behavior Analysis**

Applied Behavior Analysis (ABA) is a scientific discipline that aims to study behavior as an object of study. Behavior is studied in all its manifestations - from the simplest





movements to complex and challenging behaviors, ABA includes strategies for supporting positive behavior and helping children with ASD. It allows us to understand what factors influence human behavior and how to change it for the better.

In 1913, John Brodus Watson identified observable behavior as an appropriate subject of analysis for psychology and stated that all behavior is controlled by environmental factors. Later, Burrus Frederick Skinner and other scientists outlined the basic principles of behavior, which include reinforcement, cues, gradual elimination of cues, modes of reinforcement, and so on.

Until the 1960s, most behavioral research was conducted in laboratories with animals as experimental subjects (Landrum & McDuffie, 2008). The concept of Applied Behavior Analysis (ABA) emerged in the 1960s and is derived from the radical behaviorism of B. F. Skinner. At this time, a group of scholars including Teodoro Eilon, Jack Michael, Donald Behr, Sidney W. Bijoux, Bill Hopkins, Jay Birnbrauer, Todd Risley, and Montrose Wolfe, researchers from the University of Washington and Kansas State University began to work systematically in the field and founded the Journal of Applied Behavior Analysis, of which Skinner was the permanent president. This journal became a platform for the exchange of ideas and research in the field of ABA.

In the 1960s, Ivar Lovaas began work on systematizing the use of learning science and applied behavior analysis in cases of childhood autism, which will be described later in The Book of Me. Recognizing the possibility and value of applying behavioral theory to problems experienced by real people in real contexts led to the emergence of applied behavior analysis (ABA) (Baer, Wolf & Risley, 1968; Landrum & McDuffie, 2008; Simonsen & Sugai, 2009). Baer, Wolf and Risley (1968).

#### **Key components of ABA**

Decades of basic and applied research and clinical practice have led to evidence that behavior is influenced by events that occur prior to any particular response and events that occur after any particular response.

Typically, behavior unfolds over time as follows: a preceding stimulus provokes or triggers the behavior, the behavior occurs, and the stimulus-consequence occurs as a result of the behavior.

In applied behavior analysis, this is the ABC model: antecedents - behavior - consequences - the "three term contingency"

The specialist's units of analysis are: the antecedents of behavior (external stimuli that make the occurrence of behavior possible), the behavioral manifestations





directly (specific actions of the subject that can be observed), and the consequences of these manifestations.

The point is that the characteristics of the "consequences" (i.e., what happens after the behavioral manifestations) can influence the increase or decrease in the likelihood that a particular behavior will occur in the future. They both influence human behavior. Modifying antecedents and consequences of behavior will lead to changes in behavior. By modifying antecedent factors we can prevent undesirable behavior. By modifying consequences we can attenuate problem behavior and generate socially acceptable behavior.

Stimuli antecedents of behavior can be categorized into **internal and external** factors.

- Internal antecedents include physiological states such as hunger, fatigue, or sensory discomfort, as well as cognitive processes like anxiety or frustration.
- External antecedents encompass environmental factors such as noise levels, lighting conditions, or the presence of certain people.

Knowing which motivational operations influence behavior allows us to modify our actions so that we do not exacerbate the child's behavior while working with the child. Knowing antecedent factors allows us to develop strategies to modify the environment. Such strategies prevent undesirable behavior.

Behavior is determined by specific actions of the subject that can be observed. In ABA, "behavior" is a term used to describe anything an organism does in space and time that can be objectively measured. That is, whether you have a chance to learn about behavior through the lens of behavior analysis. Through this lens, behavior encompasses the movement of organisms that may be more desirable (e.g., talking) or less desirable (e.g., aggression).

Consequences are of three types:

- reinforcement
- punishment
- extinction

**Reinforcement** causes the frequency of behavior to increase. Reinforcement is of two types: positive and negative.

**Punishment** causes the frequency of behavior to decrease. Punishment comes in two types: positive and negative.

**The extinction process** aims to reduce the frequency of the behavior. The extinction procedure is based on a precise definition of the function of the behavior and the consequences that contribute to its occurrence.





Four basic functions of the behavior are identified:

- avoidance of demands
- access to what is desired
- attraction of attention
- self-stimulation.

If the consequences are favorable, the behavior is likely to be repeated. If the consequences are unfavorable, it is unlikely that the behavior will be repeated. Thus, consequences influence the likelihood that a behavior will occur in the future. If we know which consequences reinforce behavior and which consequences weaken behavior, we can modify those consequences to reinforce acceptable behavior and weaken undesirable behavior.

Some behavior can be said to be controlled mainly by the events that precede it (i.e., reflexive or respondent behavior), while other behavior is controlled primarily by the contingent events that follow it (i.e., operant behavior).

#### **Effectiveness of Applied Behavior Analysis for Preschoolers**

ABA as a scientific discipline that studies the patterns of behavior formation and change is used in the work with children with ASD, such as: ABA-therapy, verbal-behavioral therapy, the Denver Model of Early Intervention, etc.

Specialists working within the framework of applied behavior analysis achieve significant success in working with children from preschool age. Progress in correcting children's behavior becomes more pronounced and sustainable when teachers and parents work together in a coordinated manner. When using ABA approaches, adults better understand the behavioral characteristics of a child with ASD, know how to provide supervisory control over it, what methods of training and development to use, and how to reduce the manifestations of problematic behavior.

The method is based on the main principles of behavioral therapy and allows us to identify the factors and consequences of behavior that cause, control, consolidate, and most importantly, change certain behavior. The effectiveness of this approach is explained by the fact that behavior is the only manifestation of a person that can be studied objectively, unlike consciousness, thinking, memory, etc.

As a result of behavioral correction, positive changes are observed in various areas of a child with ASD. In the area of social interaction, the child learns to recognize emotions, establish contact with others and respond to social situations. Communication skills also improve: changes occur from the basics. This technique helps to develop communication skills, from basic speech to more complex communication strategies. ABA therapy helps children with autism develop self-care skills, such as dressing, feeding, and hygiene, which increases their independence.





ABA helps to teach children reading, writing, math and other academic skills that are important for further development. These sessions with a specialist help to reduce undesirable behaviors, such as aggression, self-aggression, or ritualistic acts, and replace them with desirable behaviors.





# Chapter 2: Behaviors Necessary Before Starting School

#### **Following Instructions**

Following rules and instructions is an underpinning of children's success both at school and in social settings. For example, if a teacher asks students in the classroom to raise their hands before speaking, this is one respect shown towards others' boundaries. The same happens when children follow the rules of taking turns in a game: that way, they can work in cooperation with others, understanding fairness. Furthermore, during group activities, such as doing a project with classmates, following instructions teaches children how to work and participate effectively like a team. This is also a skill that transfers into the classroom setting where expectations and routines are clearly in place for an on-task learning environment. Following directions builds a major skill related to listening and comprehension for children. For example, following a set of instructions to complete a task would help the student develop autonomy, responsibility, and self-regulation with which they could negotiate several academic and social challenges. In addition, respect for rules helps children develop respect for fairness and sensitivity to others' needs; it therefore engenders a positive and inclusive classroom climate. Children have to learn to follow rules and instructions in order to manage their basic skills so they achieve success at school and beyond.

Following multi-step instructions can be defined as the ability to understand and complete a series of sequential tasks or actions within a given timeframe, as directed by another person (i.e. a teacher or caregiver). This includes comprehending the steps involved, remembering them in the correct order, and executing them accurately without significant assistance or prompting. This skill prepares children for more complex tasks in school and in daily life, fostering independence and success in various activities. Additionally, mastering this skill enhances their communication and social interactions by allowing them to participate effectively in group activities and follow classroom routines.

#### **Waiting for Access**

Waiting is an important skill, as children often need to wait in various situations (e.g., in the grocery store, in line for lunch, for their favourite toy). Many children struggle with this skill, which can cause issues in environments like kindergarten. When children do not know how to wait, they may exhibit problem behaviours. The first step in teaching waiting is to identify the things or activities the children desire. This can be done through observation or interviews with the children. Once these preferences are identified, data can be collected on how long each child can wait for each item or activity, as the waiting times may vary. To do this, note the time after the child





indicates they want something. If any signs of problem behaviour appear, stop the timer and give the desired item to the child, preventing the behaviour from occurring. Gradually increase the waiting time by a few seconds or even one second, depending on the child's tolerance. If problem behaviour does not occur, give the child what they were waiting for and provide verbal reinforcement.

#### **Sharing with Peer**

Sharing is a fundamental social skill most children typically acquire as they grow and interact with others. It's an important aspect of building positive relationships and navigating social situations. Learning to share is a crucial social skill that helps children build relationships, cooperate, and engage positively with peers. For children with ASD, learning to share can present unique challenges.

Though sharing is a developmental milestone, determining when a child learns this skill will vary from child to child. Typically, most developing children begin to show signs of understanding sharing between the ages of two and three, though they may not fully understand the concept of sharing. Still, they can demonstrate sharing behaviours, such as giving a toy to a peer or taking turns in a game. For children with ASD or those who struggle with sharing, explicit teaching and guidance can make a significant difference. It's best to start with structured sharing opportunities and then move forward with the act of teaching kids to share.

Though there are many different ways that children can be taught to share, some of the best ways to teach sharing to children on the autism spectrum are model sharing, using visual supports, and practicing turn-taking.

#### **Greeting Peers**

Greeting and complimenting play a crucial role in social interactions. They serve as the foundation for building relationships and establishing connections with others. areetinas and complimenting promotes verbal and communication. Children learn to use their words effectively and communicate their feelings and thoughts, but also, it provides an opportunity to practice important nonverbal communication skills, such as making eye contact, using appropriate body language and using a friendly tone of voice. When children learn to greet and compliment one another, they develop important social skills such as turn-taking, active listening, engaging in conversations and development of empathy, as children learn to acknowledge and respond to the emotions of others. And after all, when children are greeted and complimented by their peers and environment, they feel valued and accepted. This sense of belonging contributes to their overall well-being and self-esteem. In children with ASD we often see delayed or absent early social greetings and complimentings. This may be because the child has





not yet learned to seek out social interaction or because some other key skill such as imitation or joint attention is not learned.

Teaching greeting and/or complimenting is absolutely important because it is the first step for initiating with and responding to other people in almost every setting. That's why teaching greeting and/or complimenting is a great step to start with social skills training, success with greeting and/or complimenting can lead to motivation to engage with other interactions.

#### **Empathy**

Teaching children with ASD to communicate their feelings and to understand the feelings of others is essential. When children with ASD learn to express their emotions, they can better navigate social situations, build meaningful relationships and improve their quality of life. In addition, increased empathy not only helps them connect with their peers, but also fosters a supportive and inclusive classroom environment that supports the diverse needs of all students. Through targeted interventions such as social skills training and emotional literacy programmes, children with ASD can learn to recognise and interpret emotions, leading to improved social interactions and a stronger sense of community within the classroom based on respect and mutual understanding.

#### **Requesting Help**

For children with autism spectrum disorders (ASD), the ability to ask an adult for help in a difficult situation is an important social skill for interacting with the world around them, an indicator of response to stimuli and the ability to complete tasks, which is a prerequisite for a preschool child's transition to school.

Children with autism may have limited communication skills and difficulty expressing their needs. This may include social interaction, self-care, and developing the ability to interact in play, learning, and cooperation.

The ability to ask an adult for help helps a child to interact effectively with others, including peers and teachers, and to receive the support they need, to feel safe and secure, and to exercise independence, provided that the child knows how to ask for help.

It is important for children with autism to have clear and specific instructions. When communicating, clear speech structures and simple, understandable instructions from the teacher help the child better understand what exactly they need to do. It is useful to use verbal and non-verbal means of communication to teach a child with ASD: visual cues, picture cards, structural diagrams for building a polite form of asking others for help.





Modeling situations or social stories where an adult or character demonstrates the correct social skills allows the child to observe and imitate the desired social behavior.

Such tools provide children with ASD with stability, predictability and contribute to their successful interaction with others, help them understand the sequence of actions, rules and expectations in different situations, reduce the number of aggressive, undesirable behaviors, which in turn affects academic skills.

Adults should be alert to signals that indicate a child's need for help and be ready to provide it. In general, the right strategies in developing the skill of asking for help helps children with ASD interact with the world around them, accumulate their own positive life experience and develop the skills necessary for their independent functioning.

#### **Requesting Adult Attention**

The skill of using polite forms of attracting the attention of an adult while they are busy is important for a child who learns the norms and rules of behavior in society, and at the same time is one of the useful skills of social interaction with others. For a child with autism spectrum disorders, it is very important to have ready-made tools for social interaction in order to feel confident in society.

To do this, it is necessary to teach the child to identify situations when it is necessary to attract the attention of an adult when he or she is busy, to use a polite form of speech to establish interaction with an adult: "Excuse me," and to learn to make eye contact when addressing.

#### **Requesting Peer Attention**

This behaviour refers to instances when a child seeks the attention of another person or desires access to something valuable. Attention-seeking behaviour encompasses any actions the child engages in—positive or negative—that result in reinforcement through attention from adults or peers. Similarly, seeking access to something involves behaviours aimed at obtaining what the child desires.

The initial step is to assess how effectively the child can request attention or access resources based on their skill level. It's crucial to identify what the child wants and how they can communicate these desires without resorting to problematic behaviours. Developing these skills enables the child to interact with peers in the classroom effectively, reducing the risk of social exclusion due to difficulties in connecting with others. Likewise, mastering the ability to request access to resources without disruptive behaviour is vital for the child's integration into peer





groups and classroom activities. Therefore, these skills are of utmost importance for the child's social development.

#### **Time Management**

Teaching time management skills to children with ASD not only promotes independence, but also improves their executive functioning skills, which are often impaired. Executive functioning skills such as planning, organising and prioritising tasks are essential both in and out of the classroom. Techniques such as structured routines, visual schedules and consistent support promote a sense of predictability and stability that is essential for the well-being and development of children with ASD. By learning to manage their time effectively, children with ASD can improve their ability to complete tasks, meet deadlines and transition smoothly between activities. In addition, the routine, predictability and structured schedules in their environment can help reduce anxiety and promote a sense of security. This stability allows them to manage their day with greater confidence and less stress, becoming more independent and better prepared for future challenges.

#### **Accepting Change**

Accepting change can be defined as the ability to adapt positively and without significant distress to alterations in one's environment, routines, or expectations. This includes being able to understand that changes occur, acknowledging them as part of life, and demonstrating flexibility in one's responses and behaviours. For example, a child should be able to transition smoothly between activities or settings, cope effectively with unexpected events or modifications to plans, and exhibit resilience in the face of new or unfamiliar situations. Additionally, accepting change involves displaying emotional regulation and a willingness to explore and engage with novel experiences or challenges. This resilience supports their overall well-being and mental health by reducing stress and anxiety related to change.

As preschoolers transition to school and eventually to adulthood, they will encounter numerous changes and challenges. Developing the ability to accept change early on prepares them for future transitions, helping them succeed academically, professionally, and personally. Accepting change encourages preschoolers to develop problem-solving skills as they learn to adapt their behaviour and approach to new circumstances. This skill set is valuable for overcoming obstacles and finding creative solutions throughout life.

# **Using Coping Strategies**

Teaching children the skills of identifying and handling adverse sensory situations is relevant in promoting well-being and participation in different environments. Sensory sensitivities overwhelm children with feelings of distress, leading to avoidance





behaviors and challenges to learning or socializing. Children who learn effective coping strategies regulate their sensory experiences, are less anxious, and show fuller participation in their daily lives.

These strategies range from very simplistic, sensory-based techniques like deep pressure or proprioceptive input to much more advanced strategies of executive function skills like mindfulness or visual imaging. Such coping strategies enhance the child's awareness of triggers and how to potentially proactively manage their sensory experiences before these factors become overwhelmingly negative or debilitating.

By working these methods into routine daily life at home and in school, as suggested by Pfeiffer et al. (2011), the children will then be empowered to have much more confident and independent navigation of the sensory challenges.





# **Chapter 3: Behavioral Strategies**

#### **Prompting**

One of the most successful strategies for behavior intervention is the use of prompting, which elicits some sort of desirable response in the child by means of cues or assistance. It sets the child on the road to doing what you would want them to do and increases the chances of completing their work and eliciting good behavior. These may range from highly subtle cues to even direct physical prompts. For instance, a light prompt would be one like simply reminding—"Remember to say please"—while the heavier one would be guiding the child's hand in doing something.

Thus, in relation to children with autism spectrum disorder, the use of prompts proves especially useful in accomplishing skill acquisition, increasing independence, and decreasing challenging behaviors. Gradually fading the prompts over time enables children to learn how to focus on target behaviors all by themselves. This leads to better communication, social interaction, and general functioning in many other settings.

Here are some examples of how prompting can be used with children with ASD:

- The parent uses a visual cue, like a picture of a toothbrush, for prompting a child to brush teeth.
- A teacher provides a verbal reminder, "Look at me when I talk to you," in order to get a child to make eye contact.
- A therapist may use physical guidance to teach a child how to tie her or his shoes.

Using prompts effectively can help caregivers, educators and therapists teach important skills and behaviors to children with ASD that will help them to be successful in the long term.

#### Reinforcement

Reinforcement involves consequences that strengthen behaviour, meaning that behaviours occurring before reinforcement will happen more frequently in the future. Reinforcement can be anything that a child considered valuable, whether it's praise, a favourite toy, or food. It can also involve removing something the child dislikes, such as a loud noise or a particular piece of clothing. The most important aspect is to be certain about what you are reinforcing and what you are using for reinforcement. You





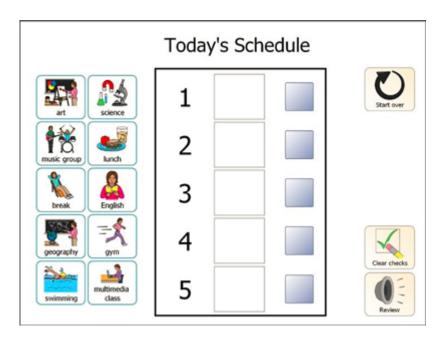
could inadvertently reinforce negative behaviours, such as screaming, simply by giving attention to the screaming. Attention is also considered a form of reinforcement.

Therefore, the first step is to determine what is reinforcing for each child and then use it effectively. You can achieve this by observing the child or by offering them choices. Additionally, you can ask the child what they prefer and what they like. This involves identifying the behaviours you want to encourage in the future and immediately reinforcing them by providing what the child wants and enjoys. Reinforcement must be provided immediately after the behaviour; otherwise, another behaviour might accidentally be reinforced. It's equally vital to adjust reinforcement based on the child's current motivation. Motivation varies for everyone, and what serves as a significant reinforcement one week might differ from the next; for instance, praise may be highly motivating one week, while a piece of chocolate could hold greater appeal the next. Failing to provide appropriate reinforcement may result in the behaviour not increasing in frequency in the future, as it hasn't been reinforced

#### **Visual Schedules**

A visual schedule is a set of pictures, symbols, or words that represent a series of tasks or activities. These schedules help individuals understand what they need to do, in what order, and for how long.

Visuals 1: Today's schedule



By breaking down tasks or activities into visual steps, these schedules offer predictability which can reduce anxiety and increase independence, making it a powerful tool in the field of Applied Behaviour Analysis (ABA). Visual timetables can





be especially useful for children with autism as they can help them manage their daily routines and activities, understand expectations and transitions, promote engagement and reduce disruptive behaviours. A number of studies have indicated that visual schedules used in classrooms and home settings can assist in decreasing transition time and challenging behaviours during transitions, as well as increase student independence during transitions (Dettmer et al., 2000).

Further reading: https://howtoaba.com/teach-visual-schedules/

#### **Change Card**

Change or transition cards are simple yet effective tools for managing transitions and unexpected changes in routines. These cards typically feature visual cues or symbols that signal upcoming changes, helping individuals prepare mentally and emotionally.



In educational environments, change cards assist students in transitioning between activities smoothly, reducing stress and promoting flexibility. By providing a tangible and consistent cue for transitions, change cards support individuals in navigating changes with confidence and ease. You can introduce the change card by first changing a less preferred activity to a preferred one. For example, if the schedule has an activity that you know is not preferred by your student, use the change card and then put up a picture of one of their favourite activities instead (i.e., changing maths to play time). Then change can be introduced as a neutral event (i.e., changing math to language), and finally as something that may be difficult to accept (i.e., changing play time to maths).





Further reading: <a href="https://www.iidc.indiana.edu/irca/articles/change-is-good.html">https://www.iidc.indiana.edu/irca/articles/change-is-good.html</a>

#### **Priming**

Priming is a behavioural strategy that involves preparing someone for a particular activity by providing them with relevant information beforehand. This technique aims to enhance performance, reduce anxiety, and improve overall task engagement. Priming typically involves showing the actual materials that will be used in a lesson the day or morning before the lesson. In practice, priming can take various forms tailored to the individual's needs and preferences, such as:

- Verbal priming (Simple and clear verbal instructions, reminders)
- Visual priming (Social Stories, Schedules, Checklists, Pictograms, Videos, Physical items)
- Physical priming (Gentle guidance or modelling of the expected behaviour, Role-playing)

By activating relevant knowledge and skills before the task begins, priming facilitates smoother transitions and increases the likelihood of successful task completion.

#### Further reading:

https://www.unl.edu/asdnetwork/uploads/featured-articles/Priming.pdf

#### **Shaping**

Shaping is a versatile behavioral strategy that involves reinforcing successive approximations of a desired behavior, gradually guiding an individual toward the target skill. It is particularly useful when complex behaviors cannot easily be acquired in one step. Shaping involves a breakup of the desired behavior into smaller components and requires only that people learn at their own pace, building on each successive approximation until the complete behavior is learned.

Shaping begins by first defining the starting point, or where the learner is in respect to the behavior under question. It involves the presentation of reinforcement for behaviors more and more closely approximating the desired outcome, while the requirements for the reinforcer are progressively increased until attaining the final objective. Shaping is one such important tool that provides the means of teaching new skills and modifying existing ones, and generally promoting positive behavior change in any kind of setting: educational, clinical, or everyday life.

#### **Modelling**

Modeling is a core behavioral strategy whereby a desired behavior is modeled for an individual to observe and imitate. This process capitalizes on the innate human





learning process through observation, hence becoming very effective in teaching new behaviors, encouraging positive behaviors, and reducing undesired behaviors. The models used in behavioral interventions may be parents, teachers, therapists, or peers, depending on the aims and context of application.

Several elements improve modeling. Some are the model's competence and similarity to the learner, clarity and saliency of the behavior to be demonstrated, and appropriateness of reinforcement. Learners themselves perform the behavior after observing a model successfully enacting the behavior and receiving positive consequences for performing it. Modeling is helpful in teaching complicated social skills, communication skills, and adaptive behaviors to children with developmental disabilities since it suggests a concrete example of how to treat people properly and go through various social situations.

#### **Token System**

The token system is a reinforcement strategy that utilises generalised reinforcers, such as tokens, which can be exchanged for specific backup reinforcers. Tokens are used to reinforce targeted skills, aiming to increase their occurrence in the future. In a token system, tokens are never removed for negative behaviour.

How to begin with the token system:

- Select tokens: Choose something simple and tangible as tokens stickers, poker chips, marks on a chart, pictures of favorite characters or activities (avoid edibles).
- Starting the system: Initially, award a token for each correct response or desired behavior to establish the connection between positive actions and rewards.
- Building understanding: In the beginning phase, it's crucial that your child understands tokens lead to rewards. Never remove tokens for incorrect behaviors during this learning period. Once they collect the predetermined number of tokens, immediately exchange them for the backup reinforcer.
- Gradual progression: As your child becomes familiar with the system, gradually increase the requirements. For example, when teaching a skill like motor imitation, you might require 2-3 successful attempts before awarding a token.
- Increasing expectations: Over time, increase the number of tokens needed to earn the backup reinforcer. This helps build persistence and delayed gratification skills.





#### **Task Analysis**

Task analysis is a teaching process that involves breaking down complex activities or skills into smaller, manageable steps that students are able to learn more easily. This is achieved by first identifying the specific behaviours that make up the skill and determining the order in which those behaviours should be taught. This strategy can be used to teach a wide range of skills, including:

- Self-care skills
- Social skills
- Academic skills
- Play skills

For example, if we take the self-care skill "Washing Hands"

- 1. Turn tap on
- 2. Place hands under water
- 3. Dispense soap
- 4. Rub palms to count of 5
- 5. Rub back of left hand to count of 5
- 6. Rub back of right hand to count of 5
- 7. Place hands under water
- 8. Rub palms to count of 5
- 9. Turn off water
- 10. Take paper towel
- 11. Dry hands to count of 5
- 12. Throw paper towel away

Furthermore, breaking down tasks helps identify specific areas where individuals may need additional support or instruction, allowing educators and therapists to create individualized teaching plans that are tailored to each individual's needs. This approach ensures that the individual is not overwhelmed by the complexity of the skill they are learning and can focus on mastering one step at a time. Therefore, the number of steps involved and the wording used will differ depending on the individual. So, for a child with more advanced skills the above Task Analysis could be modified as follows:

- 1. Turn tap on
- 2. Place hands under water
- 3. Dispense soap
- 4. Rub palms and back of both hands
- 5. Rinse soap
- 6. Turn off water
- 7. Dry hands with a paper towel
- 8. Throw paper towel away





Further reading: <a href="https://online.regiscollege.edu/blog/task-analysis/">https://online.regiscollege.edu/blog/task-analysis/</a>

#### **Chaining**

Chaining is based on task analysis. It breaks a task down into small steps and then teaches each step within the sequence by itself. It can be implemented using forward chaining, where each step is taught in the order it occurs, or backward chaining, where the last step is taught first and subsequent steps are added in reverse order. So, for example, for the task analysis of "washing hands" mentioned above, with forward chaining, the child would first learn how to turn on the tap and receive reinforcement every time they correctly turn on the tap. After the individual completes this first step consistently and accurately, they'll move on to the second step in the chain, and receive reinforcement for correctly completing the first 2 steps. When using backwards chaining, the teacher would provide hands-on support for steps 1-7 and ask the child to complete step #8. When the last step is mastered, the child will learn step #7 and continue learning the steps in backward order.

Further reading: <a href="https://www.unl.edu/asdnetwork/virtual-strategies/chaining">https://www.unl.edu/asdnetwork/virtual-strategies/chaining</a>

#### **Pairing**

To accomplish the best educational and behavioral outcomes with an autistic child it is important to begin the relationship by using pairing procedures to build rapport. Pairing is the process of associating yourself with preferred items and activities, making you a conditioned reinforcer or something that is also preferred. The first step in pairing is to identify the most effective reinforcers for the child. This can be done through preference assessments (systematic procedures to determine what items are most preferred), observation, reinforcer sampling (giving the child possibly preferred items to try), and parent interviews. Once the reinforcers, or already most preferred items, have been identified, they can be used to pair yourself with the teaching environment. This is done in multiple ways. One way is by providing the reinforcers contingently for good behavior and making yourself a big part of the delivery. For example, you can have the child look at you when you deliver the reinforcer, provide animated verbal praise, and provide touch if appropriate. It is also important to provide the reinforcers in the teaching area to also start making the teaching area a reinforcing place. Another way is to do this is by pairing yourself with the preferred toys and items in the natural play environment. So, if the child loves trains then you make yourself a part of their train play.

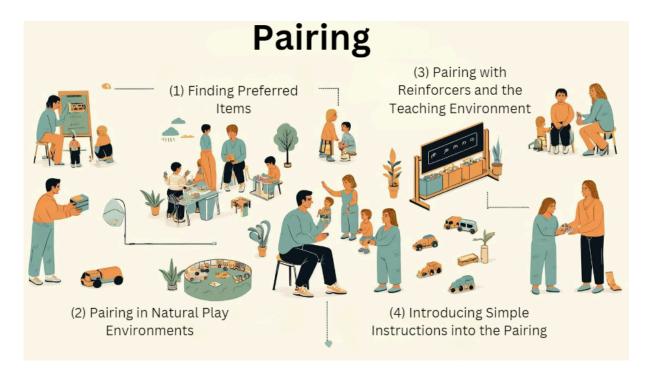
Once pairing has been established, simple instructions can be added to the play. These instructions should be for things that the child is likely to already want to do. For example, if the child is likely and able to complete an insert puzzle, you can take control of all the pieces and deliver them to the child one at a time with a simple instruction like "put in." The child should be reinforced contingently for following the instruction. As the child sees spending time with you as more of a reinforcer, the





amount and difficulty of the instructions can be gradually increased. For the best outcomes, it is a good idea to make the most preferred items only available during pairing times. By following these guidelines, you can use pairing to build rapport with an autistic child and create a positive learning environment.

Visuals 2: Pairing



#### **Alternative Communication Methods**

Augmentative and Alternative Communication (AAC) encompasses a wide array of methods that help individuals with communication difficulties, like autistic children, express their thoughts, needs, and ideas. For children with autism, who may face challenges with verbal communication, AAC can enable them to participate more fully in their daily lives. AAC methods can be broadly categorized into unaided and aided communication.

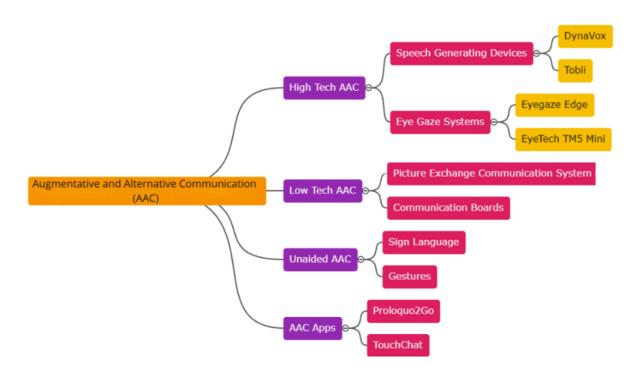
Unaided AAC methods rely on the individual's own body, without external tools. These include gestures, sign language, and facial expressions, which can be used to convey simple messages or supplement spoken language. Aided AAC methods, on the other hand, employ external tools or devices. Low-tech options include communication boards with pictures or symbols, which the child can point to or exchange to communicate, these are often referred to as part of a Picture Exchange Communication System (PECS). High-tech AAC involves electronic devices like speech-generating devices (SGDs) or eye-gaze systems, which can produce spoken words or phrases when the user selects the corresponding symbols or letters. AAC





apps on tablets or smartphones can also be a versatile and engaging way for children with autism to communicate.

Visuals 3: Augmentative and Alternative Communication



#### **Now and Next Board**

A Now and Next board, also known as "First and Then", is a visual support tool used to help individuals understand and transition between current and upcoming activities or tasks. Typically, it consists of two sections: one displaying the current activity (Now) and the other showing the next activity (Next). This visual aid provides individuals with a clear and concrete representation of their schedule, helping them anticipate changes and transitions. In educational settings, Now and Next boards are commonly used to support students with autism or other developmental disabilities, promoting independence and reducing anxiety during transitions between activities.

Visuals 4: Now and Next





The technique involves presenting the child with a sequence of events where the completion of a less preferred task (the "Now") leads to the opportunity to engage in a more preferred activity (the "Next"). This approach utilizes the natural motivation linked with preferred activities to incentivize students to finish tasks they may find less appealing.

Further reading: <a href="https://howtoaba.com/teaching-compliance-first-premack-principle/">https://howtoaba.com/teaching-compliance-first-premack-principle/</a>

#### **Movement Breaks**

Movement breaks are breaks where you get up and get moving. Movement breaks provide ASD students with the chance to get up and move around. This will help them to feel refreshed and give them a break from work. But, it will also help them get prepared to sit back down and work again. This can be in any way – or in a specific way that you show them. There are so many benefits of movement breaks:

- Physical Exercise. Some of the students don't like exercising or don't have the chance to do any. It is great to work on this.
- It's fun. There are so many fun types of movement breaks around that your students can really get into them.
- Research says that movement helps to increase the flow of oxygen and blood.
- It helps improve focus.
- Increases your students' productivity.
- They can help to reduce stress levels.
- It's not just for children. Movement breaks are perfect for anyone, of any age!
- Burning of energy. This is an important one! There are a lot of students who have a lot of energy inside them. These movement breaks give them a chance to move around and burn some of that energy off.





Remember, the break should only be one to five minutes long. Try using a visual timer so students can see the time remaining.

Further reading: <a href="https://teachingautism.co.uk/movement-breaks-what-and-why/">https://teachingautism.co.uk/movement-breaks-what-and-why/</a>

#### **Transition Management**

Transition management involves strategies to facilitate smooth and effective transitions between activities or environments. The strategies attempt to increase predictability for individuals on the autism spectrum and to create positive routines around transitions.

Transitions can be challenging for individuals with autism, leading to anxiety, resistance, or disruptive behaviours. This may be due to a greater need for predictability (Flannery & Horner,1994), challenges in understanding what activity will be coming next (Mesibov, Shea, & Schopler, 2005), or difficulty when a pattern of behaviour is disrupted. Several visual strategies used to support individuals with ASD in preparation for a transition have been researched and include:

- Visual timetables with or without finished box
- Now/Next Board
- Priming
- Visual Timers or Visual countdowns
- Visual cues such as an object or change card

#### Further reading:

https://www.iidc.indiana.edu/irca/articles/transition-time-helping-individuals-on-the-autism-spectrum-move-successfully-from-one-activity-to-another.html

### **Sensory Mapping**

One of the most important aspects of making a school space accessible to a child with autism is sensory safety, as children with autism have specific sensory perceptual difficulties. First, the school or classroom environment should be





assessed to reduce sensory overload in the classroom and identify the areas of the school with the highest levels of sensory overload. Sensory overload can be caused by overstimulation of smell, touch, taste, sight or hearing. Sensory overload is a condition in which a person cannot cope with the flood of sensations coming through the senses and may lose the ability to orient in space, self-control and speech. Anyone can become sensory overload, but children with autism who have a reduced sensory threshold are most at risk. They painfully perceive stimuli that are insignificant or not noticeable to others.



It is not feasible to completely eliminate sensory risks in a school environment, particularly those associated with auditory and visual stimuli. Echoes in the corridor, the noise of other students, unexpected or unusual sounds made by children, the loud voice of the teacher can be no less dangerous than the obvious risks associated with too bright light, a sharp difference in lighting between the corridors of the school or classrooms

But we should not forget that other senses are also affected by stimuli - for example, new and intense smells of furniture, freshly painted classroom walls or the need to climb long, steep stairs. Sometimes overload is caused by the inability to realize the need for some sensory stimulus - you can't rock on a chair in class.

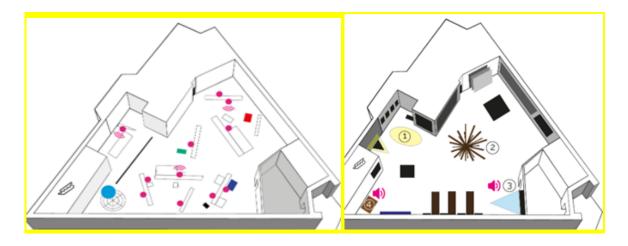
Sensory maps can help children with autism prepare for a school or classroom with sensory risks. These maps identify the risks (crowded areas and areas with bright lights, high noise levels, etc.) and should include areas where the risks are reduced. High and low noise levels, strong smells and large numbers of children in a school can be marked with pictograms, and classrooms or halls with natural and dim lighting can be marked with different colors. Such maps contain detailed information about sensory risks and are certainly useful for children with autism, allowing them to plot a possible route in advance.

It is essential to include information on what a person with a reduced sensory threshold who is in an unfamiliar environment should do to reduce stress.





For example, if a child has a reaction to flashing lights, you need lighting control, diffusing light, you can offer to wear light-protective glasses. Overload from loud cries of children, mechanical sounds - earplugs, sound-absorbing headphones - keep the ability to understand human speech. Background white noise in the room helps to concentrate on the lesson. It is important to leave the place where the child is experiencing sensory overload as soon as possible, move to a room of privacy, a quiet place. Moreover, scheduled sensory breaks are necessary: providing a designated sensory break space equipped with calming sensory tools, such as weighted blankets or non-sense toys, can give children a chance to relax and reboot. Creating a sensory-friendly environment by reducing excessive sensory stimuli (such as noise or bright lights) and providing visual support can increase comfort and focus for children with autism.



#### **Choice Board**

Choice boards are simple visual tools that show a child the different options they can choose from—like activities, toys, or tasks. By letting the child make their own choices, we use proven behavior strategies to help them stay engaged, reduce challenging behaviors, and become more independent.





These boards are especially helpful for children with Autism Spectrum Disorder (ASD). They make it easier for kids to move from one activity to another, express what they want, and stay motivated (Reichow et al., 2011).

Choice boards can be personalized to match each child's interests and needs. They use pictures, symbols, or real objects to show the available choices in a clear and simple way. This helps children feel more in control, which lowers anxiety and frustration. It also encourages cooperation and builds communication skills by teaching them how to show preferences and make requests.

#### Redirection

Redirecting behavior is a technique that involves changing the focus of a child's attention from an undesirable behavior to a more positive one. This approach can be used to guide a child back to the task at hand when they become distracted. Effective redirection is non-intrusive (Get your student's attention, redirect her/him accordingly and move on to teaching the class. Do not make a big deal out of redirection), and often involves using minimal verbal (It can be something as simple as clearing your throat) or physical cues (such as raising your hand) to remind the child of their task without disrupting the flow of the lesson.

Here are some examples of redirection strategies:

- Watch out for students being off task. Get involved before things have a chance to escalate.
- Ignore the behaviour (planned ignoring) if you suspect the goal of the behaviour is to get your attention
- If with the off-task behavior, the student seeks the attention of other students, praise students who are on task
- Establish a system for redirecting and getting the attention of the entire class.
   for example, you can raise your hand and count with your fingers to five. Five fingers signaling it's time to get back to work.
- You can get an off-task student's attention simply by mentioning their name in a sentence.
- Move closer to the student exhibiting off-task behavior. When you have achieved the redirect move out. (be only as intrusive as necessary)
- With some students "interest boosting" might be very effective. If using this strategy, you first engage the student in brief discussion about something of interest to them and then deliver the redirection.

Adapted from: <a href="https://www.wtc.ie/images/pdf/Classroom\_Management/cm17.pdf">https://www.wtc.ie/images/pdf/Classroom\_Management/cm17.pdf</a>

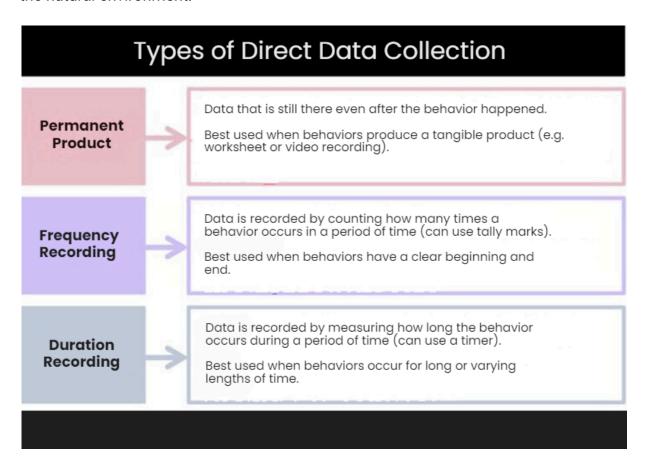




# **Chapter 4: Data**

Data collection is essential when working with autistic children because it allows teachers to track progress, make informed decisions about instruction, and ensure that interventions are effective. By systematically collecting data, teachers can identify patterns in behavior, pinpoint areas of strength and weakness, and monitor the impact of different teaching strategies. This information is invaluable for tailoring instruction to the individual needs of each child and making data-driven decisions that promote optimal learning outcomes.

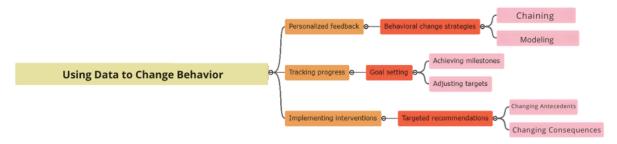
The frequency of data collection can vary depending on the specific goals and needs of the child. However, it is generally recommended to collect data regularly, such as daily or weekly, to ensure that progress is monitored consistently. This allows teachers to identify any changes in behavior or performance promptly and adjust their teaching strategies accordingly. Various methods can be used for data collection, including direct observation, checklists, rating scales, and standardized assessments. The choice of method will depend on the specific behavior or skill being measured and the resources available to the teacher. However, direct data collection is the best choice for gathering information on how the behavior looks in the natural environment.







The conclusions drawn from the data can inform various aspects of the child's educational program. For example, data analysis (looking for increasing, decreasing, or stagnant trends in the data) can help determine whether a particular intervention is effective, identify areas where additional support is needed, and guide decisions about curriculum modifications or adjustments to the learning environment. By using data to inform practice, teachers can ensure that their instruction is evidence-based and tailored to the unique needs of each autistic child, ultimately leading to improved learning outcomes and overall well-being.

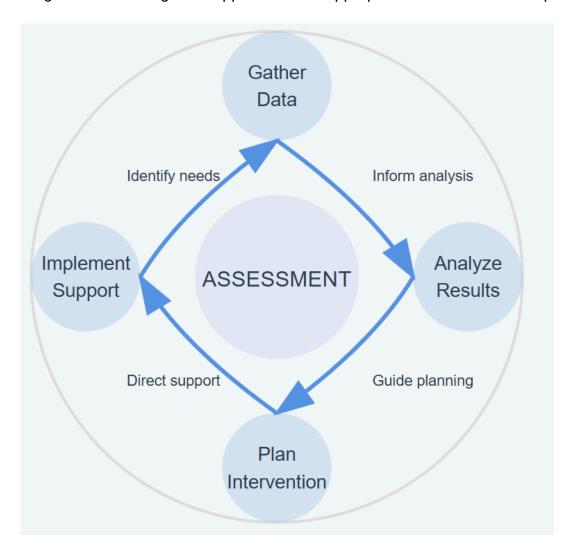






# **Chapter 5: Assessment**

Assessment is crucial when working with autistic children as it helps identify each child's unique strengths, challenges, and support needs. Comprehensive assessment across domains like communication, social interaction, sensory processing, and daily living skills allows professionals to develop targeted, individualized intervention plans. Regular assessment also helps track progress over time, enabling adjustments to strategies and ensuring that support remains appropriate as the child develops.



The Ready4School School Readiness Skills Assessment Tool is a holistic instrument designed to measure multifaceted dimensions of school readiness in young children. It goes beyond traditional academic measures because it was realized that social-emotional competence and self-regulation were the leading factors for success within the classroom. This would provide a big picture about a child's preparedness toward the school setting by rating basic skills, social interaction abilities, and self-regulation strategies.





This assessment is built on research-based practices in child development and early childhood education. It focuses on key areas that are important for a child's success in the classroom.

- **Foundational skills** are the basic abilities children need to take part in everyday classroom activities.
- **Social interaction skills** help children build healthy relationships with their peers and teachers.
- **Self-regulation and advocacy skills** are about managing emotions, solving problems, and knowing when and how to ask for help.

This assessment helps identify both a child's strengths and areas where they may need more support. It gives teachers and caregivers a clearer picture of how to tailor learning and behavioral strategies to each child's unique needs.

The tool uses a simple, easy-to-use **Likert scale**, which makes it quick to complete and easy to track changes over time. This helps monitor progress and adjust support strategies as needed. Ultimately, it helps everyone involved—educators, caregivers, and parents—work together to prepare children for school and support their overall development.





# **Chapter 6: Collaboration**

Effective collaboration between teachers and parents is the key to the successful development of a child and transition to school. The expectations from this relationship are open and honest communication, sharing of information, and cooperation in providing both a consistent and supportive school and home environment. This can be frequent communication that opens channels between parties to communicate observations, concerns, and successes in the form of parent-teacher conferences, informal conversations, or written reports and digital platforms. Part of behavioral assessment would involve sharing relevant information with the parents while being mindful of confidentiality and maintaining a focus on the child's needs. This may be useful information for the parents in terms of better understanding their child's behavior at (pre)school and perhaps for thinking about what additional help they could give their child at home. Teachers explicitly mention specific strategies or activities that the parents should carry through in reinforcing good behavior and eliminating problem behaviors.

Parents can thus actively be involved in data collection about the child's behavior and development at home. This can be based on monitoring certain behaviors, what triggers or antecedents may occur before the behavior, and the child's response to various intervention strategies. By sharing this data with the teachers, parents can be integral in building a more complete picture of the child's needs and allow for joint collaboration on building successful strategies that will benefit their growth and achievements. This collaborative model ensures consistency in the interventions across both environments and eventually creates a more positive and productive learning experience for the child.





# **Selected References & Further Reading**

Alberto, P. A., & Troutman, A. C. (2012). *Applied behavior analysis for teachers* (9th ed.). Prentice-Hall.

Allen, K. D., & Cowdery, G. E. (2015). The exceptional child: Inclusion in early childhood education (8th ed.). Cengage Learning.

Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some contemporary dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 1(1), 91–97. <a href="https://doi.org/10.1901/jaba1968.1-9">https://doi.org/10.1901/jaba1968.1-9</a>.

Behavior Analyst Certification Board. (2020). *Ethics code for behavior analysts*. Littleton, CO: Author.

Blair, C., & Razza, R. P. (2007). Relating effortful control, executive function, and false belief understanding to emerging math and literacy ability in kindergarten. *Child Development*, 78(2), 647–663. <a href="https://doi.org/10.1111/j.1467-8624.2007.01019.x">https://doi.org/10.1111/j.1467-8624.2007.01019.x</a>.

Carbonneau, K. J., Marley, S. C., & Selig, J. P. (2013). A meta-analysis of the efficacy of teaching mathematics with concrete manipulatives. *Journal of Educational Psychology*, 105(2), 380–400. https://doi.org/10.1037/a0031084.

Connor, C. M., Piasta, S. B., Fishman, B., Glasney, S., Schatschneider, C., Crowe, E., ... & Morrison, F. J. (2009). Individualizing student instruction precisely: Effects of child  $\times$  instruction interactions on first graders' literacy development. *Child Development*, 80(1), 77-100. <a href="https://doi.org/10.1111/j.1467-8624.2008.01247.x">https://doi.org/10.1111/j.1467-8624.2008.01247.x</a>.

Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis* (2nd ed.). Columbus, OH: The Ohio State University.

Cooper, J. O., Heron, T. E., & Heward, W. L. (2020). *Applied behaviour analysis* (Global ed., 3rd ed.). Pearson International Content. <a href="https://bookshelf.vitalsource.com/books/9781292324654">https://bookshelf.vitalsource.com/books/9781292324654</a>.

Dettmer, S., Simpson, R., Myles, B., & Ganz, J. (2000). The use of visual supports to facilitate transitions of students with autism. *Focus on Autism and Other Developmental*Disabilities, 15(3), 163–169. https://doi.org/10.1177/108835760001500307.

Dickinson, D. K., & Tabors, P. O. (2001). *Beginning literacy with language: Young children learning at home and school.* Baltimore, MD: Paul H. Brookes Publishing.

Dioses, E. (2022). Inclusive education for preschoolers with autism spectrum disorder. *Journal of Student Scholarship (JOSS)*. Retrieved from <a href="https://joss.tcni.edu">https://joss.tcni.edu</a>.





Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., ... & Japel, C. (2007). School readiness and later achievement. *Developmental Psychology*, 43(6), 1428–1446. <a href="https://doi.org/10.1037/0012-1649.43.6.1428">https://doi.org/10.1037/0012-1649.43.6.1428</a>.

Flannery, K., & Horner, R. (1994). The relationship between predictability and problem behavior for students with severe disabilities. *Journal of Behavioral Education*, *4*(2), 157–176. <a href="https://doi.org/10.1007/BF01544131">https://doi.org/10.1007/BF01544131</a>.

Fleury, V. P., Thompson, J. L., & Wong, C. (2014). Learning how to be a student: An overview of instructional practices targeting school readiness skills for preschoolers with autism spectrum disorder. *Behavior Modification*, 39(1), 69–97. <a href="https://doi.org/10.1177/0145445514551384">https://doi.org/10.1177/0145445514551384</a>.

Frontiers Editorial Team. (2022). Effectiveness of music therapy in children with autism spectrum disorder: A systematic review and meta-analysis. *Frontiers in Psychiatry*. Retrieved from <a href="https://www.frontiersin.org">https://www.frontiersin.org</a>.

Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182–191. https://doi.org/10.1542/peds.2006-2697.

Grissmer, D., Grimm, K. J., Aiyer, S. M., Murrah, W. M., & Steele, J. S. (2010). Fine motor skills and early comprehension of the world: Two new school readiness indicators. *Developmental Psychology*, 46(5), 1008–1017. https://doi.org/10.1037/a0020104

Hanley, G. (2021, October 19). A perspective on today's ABA from Dr. Hanley. *Practical Functional Assessment*. Retrieved from <a href="https://practicalfunctionalassessment.com/2021/09/09/a-perspective-on-todays-ab-a-by-dr-greg-hanley/">https://practicalfunctionalassessment.com/2021/09/09/a-perspective-on-todays-ab-a-by-dr-greg-hanley/</a>.

High, P. C., & Committee on Early Childhood, Adoption, and Dependent Care and Council on School Health. (2008). School readiness. *Pediatrics*, *121*(4), e1008–e1015. https://doi.org/10.1542/peds.2008-0079

Jones, S. M., Brown, J. L., & Lawrence Aber, J. (2011). Two-year impacts of a universal school-based social-emotional and literacy intervention: An experiment in translational developmental research. *Child Development*, 82(2), 533–554. <a href="https://doi.org/10.1111/j.1467-8624.2010.01560.x">https://doi.org/10.1111/j.1467-8624.2010.01560.x</a>.

Justice, L. M., Bowles, R. P., Pence Turnbull, K. L., & Skibbe, L. E. (2009). School readiness among children with varying histories of language difficulties. *Developmental Psychology*, 45(2), 460–476. https://doi.org/10.1037/a0014324

Katsougkri, A. (2014). Personalised teacher's guide programme for pupils with autism. Retrieved from https://prosvasimo.iep.edu.gr/EDEAY/%CE%9F%CE%B4%CE%B7%CE%B3%CF%8C%C





F%82%20%CE%B5%CE%BE%CE%B1%CF%84%CE%BF%CE%BC%CE%B9%CE%BA%CE %B5%CF%85%CE%BC%CE%AD%CE%BD%CE%BF%CF%85%20%CF%80%CF%81%CE% BF%CE%B3%CF%81%CE%AC%CE%BC%CE%BC%CE%B1%CF%84%CE%BF%CF%82%2 0%CE%B3%CE%B9%CE%B1%20%CF%80%CE%B1%CE%B9%CE%B4%CE%B9%CE%AC %20%CE%BC%CE%B5%20%CE%91%CF%85%CF%84%CE%B9%CF%83%CE%BC%CF%8 C%20\_FINAL.pdf.

Kriete, R., & Davis, C. (2014). *The morning meeting book*. Turners Falls, MA: Center for Responsive Schools, Inc.

Ladd, G. W., Herald, S. L., & Kochel, K. P. (2006). School readiness: Are there social prerequisites? *Early Education and Development,* 17(1), 115–150. https://doi.org/10.1207/s15566935eed1701\_6

Landrum, T. J., & McDuffie, K. A. (2008). Behavioral. In T. L. Good (Ed.), *Education for the 21st century: A reference guide* (Vol. 1, pp. 161–167). Thousand Oaks, CA: Sage Publications.

Leaf, J. B., Cihon, J. H., Ferguson, J. L., Leaf, R., McEachin, J., Mountjoy, T., ... & Rogue, A. (2024). A progressive approach to applied behavior analysis: The Autism Partnership Method. Elsevier Inc.

Lin, H. L., Lawrence, F. R., & Gorrell, J. (2003). Kindergarten teachers' views of children's readiness for school. *Early Childhood Research Quarterly*, 18(2), 225–237. https://doi.org/10.1016/S0885-2006(03)00028-0

Mavroeidi, N., latros, G., Kapelos, T., & Syrogianni, A. (2023). Guide for parents and carers: Quality of life for you and your family – Finding the way between needs, rights, obligations and available resources. Retrieved from <a href="https://autismap.gr/media/attachments/2023/04/03/final\_egxeiridio-aytismos-1.pdf">https://autismap.gr/media/attachments/2023/04/03/final\_egxeiridio-aytismos-1.pdf</a>.

Mavropoulou, S. *Curricula for pupils with autism*. Retrieved from <a href="http://repository.edulll.gr/edulll/retrieve/3292/969\_01.pdf">http://repository.edulll.gr/edulll/retrieve/3292/969\_01.pdf</a>.

McClelland, M. M., Cameron, C. E., Connor, C. M., Farris, C. L., Jewkes, A. M., & Morrison, F. J. (2007). Links between behavioral regulation and preschoolers' literacy, vocabulary, and math skills. *Developmental Psychology*, *43*(4), 947–959. https://doi.org/10.1037/0012-1649.43.4.947

Mesibov, G., Shea, V., & Schopler, E. (2005). The TEACCH® approach to autism spectrum disorders. Plenum Publishers.

Methodology developed in the context of the European Erasmus+ KA2 project "EMTforASD". (2019). Effective teaching methodology for children with ASD in general education schools. Retrieved from <a href="https://dipe.xan.sch.gr/wp-content/uploads/2022/03/%CE%9C%CE%B5%CE%B8%CE">https://dipe.xan.sch.gr/wp-content/uploads/2022/03/%CE%9C%CE%B5%CE%B8%CE</a>%BF%CE%B4%CE%BF%CE%BF%CE%BF%CE%B3%CE%AF%CE%B1-%CE%B4%CE%B9%





CE%B4%CE%B1%CF%83%CE%BA%CE%B1%CE%BB%CE%AF%CE%B1%CF%82-%CE%B3%CE%B9%CE%B1-%CF%80%CE%B1%CE%B9%CE%B4%CE%B9%CE%AC-%CE%BC%CE%B5-%CE%94%CE%91%CE%A6.pdf.

Morris, C., Detrick, J. J., & Peterson, S. M. (2021). Participant assent in behavior analytic research: Considerations for participants with autism and developmental disabilities. *Journal of Applied Behavior Analysis*. https://doi.org/[doplň DOI, pokud je dostupné].

National Institute of Mental Health. (n.d.). Autism spectrum disorder. Retrieved November 28, 2024, from <a href="https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd">https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd</a>.

Neumann, M. M., & Neumann, D. L. (2014). Touch screen tablets and emergent literacy. *Early Childhood Education Journal*, 42(4), 231–239. https://doi.org/10.1007/s10643-013-0608-3.

Pfeiffer, B. A., Koenig, K., Kinnealey, M., Sheppard, M., & Henderson, C. (2011). Effectiveness of sensory integration interventions in children with autism spectrum disorders: A pilot study. *The American Journal of Occupational Therapy, 65*(1), 76–85. <a href="https://doi.org/10.5014/ajot.2011.09205">https://doi.org/10.5014/ajot.2011.09205</a>.

Reichow, B., Doehring, P., Cicchetti, D. V., & Volkmar, F. R. (Eds.). (2011). *Evidence-based practices and treatments for children with autism*. Springer Science + Business Media. <a href="https://doi.org/10.1007/978-1-4419-6975-0">https://doi.org/10.1007/978-1-4419-6975-0</a>.

Rouse, C., Brooks-Gunn, J., & McLanahan, S. (2005). Why gaps in school readiness matter. In *School readiness: Closing racial and ethnic gaps* (pp. 5–14). *The Future of Children, 15*(1). https://doi.org/10.1353/foc.2005.0005.

Roussel, B. (2006). A review of Schramm's (2006) Educate toward recovery: Turning the tables on autism: A teaching manual for the verbal behavior approach to ABA. Journal of Early and Intensive Behavior Intervention, 3(1), Article 10. <a href="https://doi.org/10.1037/h0100342">https://doi.org/10.1037/h0100342</a>.

Simonsen, B., & Sugai, G. (n.d.). School-wide positive behavior support: Applying behavioral principles at a systemic level. In A. Akin-Little, S. G. Little, M. A. Bray, & T. J. Kehle (Eds.), *Behavioral interventions in schools: Positive evidence-based strategies* (pp. 125–140). Washington, DC: American Psychological Association.

Son, S. H., & Meisels, S. J. (2006). The relationship of young children's motor skills to later reading and math achievement. *Merrill-Palmer Quarterly*, *52*(4), 755–778. <a href="https://doi.org/10.1353/mpq.2006.0033">https://doi.org/10.1353/mpq.2006.0033</a>.

The Journal of the Experimental Analysis of Behavior. (n.d.). Retrieved from <a href="https://search.worldcat.org/title/964806678">https://search.worldcat.org/title/964806678</a>.





Tomlinson, C. A. (2001). How to differentiate instruction in mixed-ability classrooms. Alexandria, VA: ASCD.

Vazou, S., Gavrilou, P., Mamalaki, E., Papanastasiou, A., & Sioumala, N. (2012). Does integrating physical activity in the elementary school classroom influence academic motivation? *International Journal of Sport and Exercise Psychology, 10*(4), 251–263. <a href="https://doi.org/10.1080/1612197X.2012.682368">https://doi.org/10.1080/1612197X.2012.682368</a>.

Verdugo, D. R., & Belmonte, I. A. (2007). Using digital stories to improve listening comprehension with Spanish young learners of English. *Language Learning & Technology*, *11*(1), 87–101. <a href="https://doi.org/10125/44065">https://doi.org/10125/44065</a>.

Weisberg, D. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2013). Guided play: Where curricular goals meet a playful pedagogy. *Mind, Brain, and Education, 7*(2), 104–112. <a href="https://doi.org/10.1111/mbe.12015">https://doi.org/10.1111/mbe.12015</a>.

Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development*, 69(3), 848–872. <a href="https://doi.org/10.1111/j.1467-8624.1998.tb06247.x">https://doi.org/10.1111/j.1467-8624.1998.tb06247.x</a>.

World Health Organization. (2019). Autism spectrum disorders. Retrieved from <a href="https://applications.emro.who.int/docs/EMRPUB\_leaflet\_2019\_mnh\_215\_en.pdf?ua=1">https://applications.emro.who.int/docs/EMRPUB\_leaflet\_2019\_mnh\_215\_en.pdf?ua=1</a>.

World Health Organization. (n.d.). Autism spectrum disorders. Retrieved December 6, 2024, from <a href="https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders">https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders</a>.

Кордонець, В. В., & Назаренко, М. М. (2019). Система комплексного впливу на корекційну роботу для дітей раннього віку із розладами аутистичного спектру. *Науковий часопис НПУ імені М. П. Драгоманова. Серія 19. Корекційна педагогіка і психологія*, 38, 99–105. Retrieved from <a href="https://sj.udu.edu.ua/index.php/kpsp/article/view/754">https://sj.udu.edu.ua/index.php/kpsp/article/view/754</a>.

Користь ABA-терапії для дітей з аутизмом. (n.d.). Retrieved from https://timmi.club/koryst-aba-terapii-dlja-ditjej-z-autyzmom/.