



Thompson Center

For Autism & Neurodevelopmental Disorders

University of Missouri

Autism Spectrum Disorders:
Evidence-Based Practices
and Interventions
Supplemental Slides

Evidence-Based Practices

Antecedent-Based Interventions	Overview
Ages	3-16 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Self-injury, repetitive/stereotypical behaviors, promoting engagement & on-task behaviors
Settings	Clinical, 1:1 teaching sessions, general education classroom, resource room
Description	Group of strategies which modify the environment to change conditions that contribute to problem or interfering behavior
Domains	Academics & Cognition, Behavior

Evidence-Based Practices

Computer-Aided Instruction	Overview
Ages	3-18 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Vocabulary, grammar, communicative functions and initiations, recognition and prediction of emotions in others
Settings	Clinical and school (across all school age groups)
Description	Using computers to teach academic skills, communication & language development. Incorporates computer modeling and tutors
Domains	Academics & Cognition



Evidence-Based Practices

Cognitive Behavior Intervention	Overview
Ages	6-18 years old; Elementary, Middle, & High school
Skills/Goals	Interpersonal, Communication, Social, Cognitive, Behavior
Settings	Clinical and school
Description	Change negative or unrealistic thought patterns and behaviors with the aim of positively influencing emotions and life functioning
Domains	Social, Communication, Behavior, Academic
Learner Characteristics	Fluent verbal language, higher intelligence

Evidence-Based Practices

Differential Reinforcement	Overview
Ages	4-12 years old; Early Childhood, Elementary, & Middle school
Skills/Goals	Decrease challenging behavior, increase desired behaviors, increase communication skills, part of self-management system
Settings	Classroom and home
Description	Reinforcement is delivered for desired behaviors and challenging behaviors are placed on extinction
Domains	Behavior, Communication, Social

Evidence-Based Practices

Discrete Trial Training	Overview
Ages	2-9 years old; Early Childhood and Elementary school
Skills/Goals	Attending, imitation, symbolic play skills, matching, etc. (See Domains)
Settings	Home, school, community (quiet with limited distractions)
Description	1:1 instructional strategy; teaches skills in planned, controlled, and systematic manner; each trial has definite beginning and end; reinforcers are used to promote skill acquisition
Domains	Academics & Cognition, Behavior, Communication, Play, Social

Evidence-Based Practices

Extinction	Overview
Ages	2-12 years old; Early Childhood, Elementary, & Middle school
Skills/Goals	Decrease challenging behaviors (in conjunction with strategies to teach replacement behaviors)
Settings	Home, school, community (by individuals who are familiar with student)
Description	Removing or withholding positive reinforcement that maintains challenging behavior. Possibility of extinction bursts.
Domains	Behavior

Evidence-Based Practices

Functional Behavior Assessment	Overview
Ages	3-15 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Decrease challenging behaviors & teaching replacement behaviors/skills
Settings	Home, school, community
Description	Systematic way to determine function of behavior and develop an effective intervention plan to teach replacement behaviors
Domains	Behavior, Communication

Evidence-Based Practices

Functional Communication Training	Overview
Ages	2-9 years old; Early Childhood & Elementary school
Skills/Goals	Communication skills, decrease interfering behaviors, teach clear forms of communication
Settings	Clinical, school, home
Description	Implemented after an FBA; replace challenging behaviors or subtle communication attempts with more appropriate and effective communication skills
Domains	Behavior, Communication

Evidence-Based Practices

Naturalistic Interventions	Overview
Ages	2-18 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Communication and social skills; i.e., expressive vocab, speech intelligibility, use of gestures, share attention, turn taking, etc.
Settings	School, home, community
Description	Collection of strategies includes: environmental arrangements, interaction techniques, practices based on principles of ABA; Utilizes student interests and natural reinforcers
Domains	Communication, Social
Learner Characteristics	All cognitive levels and expressive language skills

Evidence-Based Practices

Parent Implemented Interventions	Overview
Ages	2-9 years old; Early Childhood and Elementary school
Skills/Goals	Social communication, conversation skills, spontaneous language, use of communication devices, joint attention, interactions in play, compliance, decrease in challenging behavior, eating issues
Settings	Home
Description	Parents learn to implement individualized intervention strategies through structured training program
Domains	Behavior, Communication, Play, Social

Evidence-Based Practices

Peer-Mediated Instruction/Intervention	Overview
Ages	2-18 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Social skills including: responding to others, reciprocity, understanding others, interacting in a group
Settings	Clinical, school
Description	Typically developing peers learn to interact with and assist students with ASD with social and communication skills in natural environments
Domains	Communication, Social

Evidence-Based Practices

Picture Exchange Communication System (PECS)	Overview
Ages	3-12 years old; Early Childhood, Elementary, & Middle school
Skills/Goals	Increase in desired behaviors, communication initiations, conversation skills, etc.
Settings	School, home, therapy, community
Description	Students are taught to give pictures of desired items or response to questions to communication partner in exchange for the desired item
Domains	Behavior, Communication, Social
Learner Characteristics	Articulation problems, ineffective language, poor motivation to speak

Evidence-Based Practices

Pivotal Response Training (PRT)	Overview
Ages	3-16 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Pivotal behaviors: motivation, responding to multiple cues, self-management, self-initiations; Promote: communication, imitation, play, joint attention, decrease challenging behavior
Settings	School, home, community, natural settings
Description	Systematic strategy which builds on student initiative & interests using pivotal skills as a foundation for improvements in many domains
Domains	Academics & Cognition, Behavior, Communication, Play, Social
Learner Characteristics	Use of social initiations, low social avoidance, toy play, stereotypic language

Evidence-Based Practices

Prompting	Overview
Ages	3-22 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Variety including: seeking information, pointing to objects, identifying numbers/objects, promoting “on-task” behavior
Settings	Clinical, 1:1 teaching sessions, classroom, home, community
Description	Procedures for assisting students in learning & performing skills; used in conjunction with other EBP’s such as time delay & reinforcement; Prompts are delivered before or during performance of a skill
Domains	Academics & Cognition, Behavior, Communication

Evidence-Based Practices

Reinforcement	Overview
Ages	3-22 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Variety including: toilet training, speech production, increasing desired behaviors, decreasing challenging behaviors
Settings	Clinical, 1:1 teaching sessions, classroom, home, community
Description	A type of consequence that increases the likelihood of the skill/behavior in the future; delivered immediately after a skill/behavior; based on individual preferences; 2 types: positive & negative; used with other EBP's
Domains	Academics & Cognition, Behavior, Communication

Evidence-Based Practices

Response Interruption & Redirection	Overview
Ages	3-21 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Reduction of severe repetitive and stereotypical behaviors which interfere with daily living, engagement, or attention; Includes: vocal stereotypy
Settings	Clinical, 1:1 teaching sessions, classroom, home, community
Description	Used after an FBA to determine function of interfering behaviors; effective with sensory-maintained behaviors; adults interrupt the student from engaging in the behavior & redirect to more desired behaviors
Domains	Academics & Cognition, Behavior

Evidence-Based Practices

Self-Management	Overview
Ages	3-21 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Decrease disruptive classroom behaviors, difficulty finishing work or chores independently or efficiently, giving compliments to others, responding, sharing, increase engagement, initiating, daily living skills, play skills, conversation skills
Settings	Clinical, school
Description	Student learns to distinguish between appropriate and inappropriate behaviors, correctly monitor and record own behavior, & provide reinforcement to self for appropriate behaviors
Domains	Academics & Cognition, Behavior, Communication, Play, Social, Transition
Learner Characteristics	Mastery of skills/behaviors they are taught to monitor

Evidence-Based Practices

Social Narratives	Overview
Ages	3-21 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Challenging behaviors, teach social skills, improve communication skills, explain upcoming events that may be new or different
Settings	Clinical, school, home, community
Description	Written individualized short stories which describe new, social, or challenging situations; help the student adjust to changes or learn new social skills; can include pictures or visual aides; includes descriptive, directive, perspective, affirmative, control and cooperative sentences/phrases
Domains	Academics & Cognition, Behavior, Communication, Play, Social

Evidence-Based Practices

Social Skills Groups	Overview
Ages	4-18 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Perspective-taking, conversation skills, friendship skills, problem-solving, social competence, emotion recognition, theory of mind, problem-solving, initiations, responding, maintaining conversations, greetings, giving compliments, turn taking, sharing, asking for help, offering assistance
Settings	Clinical, school
Description	Small groups of 2-8 students with ASD and an adult facilitator; includes instruction, role-playing/practice, and feedback; teach and practice appropriate social skills
Domains	Communication, Social
Learner Characteristics	Spoken language, interest in or awareness of others, ability to work in small groups

Evidence-Based Practices

Speech Generating Devices	Overview
Ages	3-20 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Variety of communication skills including: initiating, expressive language, joint attention, gestures, conversation skills
Settings	Clinical, school, home
Description	Portable electronic devices which produce speech for the student. Come many varieties (picture buttons, alphabet keys)
Domains	Communication



Evidence-Based Practices

Structured Work Systems	Overview
Ages	3-22 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Adaptive skills: on-task, task completion, transitions, increasing response chain length, independent performance across areas (play, self-help, academics)
Settings	Classroom, home, group home, employment
Description	Visually & physically structured sequences which provide opportunities for students to work on previously learned skills or activities with more independence and reduced teacher prompts or oversight; 4 pieces of information should be included: tasks to be done, how many tasks are to be completed, how the student knows he/she is done, what to do when finished
Domains	Academics & Cognition, Play, Transition

Evidence-Based Practices

Task Analysis	Overview
Ages	4-18+ years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Any skill that can be broken down into smaller steps (i.e., teeth brushing, washing hands, art projects, writing a paper)
Settings	School, home, community
Description	Break a skill into smaller steps in order to teach the skill in a more manageable format; each step is taught and mastered and the student becomes more independent in performing the larger skill
Domains	Academics & Cognition, Behavior, Communication, Social

Evidence-Based Practices

Time Delay	Overview
Ages	6-11 years old; Elementary school
Skills/Goals	Variety of skills within the domains listed below which utilize prompting procedures
Settings	Clinical, school, home, community
Description	Procedure for fading the use of prompts during teaching activities; brief delay is given between the instruction and any additional directions or prompts; length of the time delay is gradually increased across time; allows student the opportunity to respond before prompt is given
Domains	Academics & Cognition, Communication, Play, Social

Evidence-Based Practices

Video Modeling	Overview
Ages	3-18 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Social, adaptive, play, communication skills can be used
Settings	Clinical, school, home, community
Description	Teaching a new skill/behavior using video recordings of a model performing the target skill/behavior and the student watching the recordings prior to practicing the target skill/behavior; Types: basic, self-modeling, point-of-view modeling, and video prompting
Domains	Academics & Cognition, Behavior, Communication, Play, Social

Evidence-Based Practices

Visual Supports	Overview
Ages	3-14 years old; Early Childhood, Elementary, Middle, & High school
Skills/Goals	Task engagement, independent performance, transitions, increasing response chain length, play skills, social interactions, social initiations, reduction of challenging behaviors
Settings	School, home
Description	Any tool presented visually; offers guidance; used as a component of a comprehensive program; Can include: pictures, written words, objects, arrangement of environment, schedules, maps, labels, timelines, scripts, etc.
Domains	Academics & Cognition, Behavior, Communication, Play, Social, Transition

