

## Evidence Based Practices- EBP

For students with Autism Spectrum Disorder

| <b>Evidence Based Practice</b>                                                        | <b>Date Started</b> | <b>Date Ended</b> | <b>Results?</b> |
|---------------------------------------------------------------------------------------|---------------------|-------------------|-----------------|
| Computer aided instruction                                                            |                     |                   |                 |
| Differential reinforcement                                                            |                     |                   |                 |
| Discrete trial training                                                               |                     |                   |                 |
| Extinction                                                                            |                     |                   |                 |
| Functional Behavioral Assessment- FBA                                                 |                     |                   |                 |
| Functional Communication Training-FCT                                                 |                     |                   |                 |
| Naturalistic interventions                                                            |                     |                   |                 |
| Parent-implemented interventions                                                      |                     |                   |                 |
| Peer-mediated instruction/intervention<br>Picture exchange communication system- PECS |                     |                   |                 |
| Pivotal response training -PRT                                                        |                     |                   |                 |
| Prompting                                                                             |                     |                   |                 |
| Reinforcement                                                                         |                     |                   |                 |
| Response interruption/redirections                                                    |                     |                   |                 |
| Self-management                                                                       |                     |                   |                 |
| Social narratives/stories                                                             |                     |                   |                 |
| Social skills training groups                                                         |                     |                   |                 |
| Speech generated devices                                                              |                     |                   |                 |
| Stimulus control                                                                      |                     |                   |                 |
| Structured work systems                                                               |                     |                   |                 |
| Task analysis and chaining                                                            |                     |                   |                 |
| Time delay                                                                            |                     |                   |                 |
| Video modeling                                                                        |                     |                   |                 |
| Visual supports                                                                       |                     |                   |                 |

## Key Terms

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Computer aided instruction                   | Computer-assisted instruction" (CAI) refers to instruction or remediation presented on a computer. Computer-assisted instruction improves instruction for students with disabilities because students receive immediate feedback and do not continue to practice the wrong skills.                                                                                                                                                                                                                                                                                                                          |
| Differential reinforcement                   | Used to reduce a frequent behavior without <u>punishing</u> it by reinforcing an incompatible response. An example would be reinforcing asking to use the bathroom to reduce nose picking.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Discrete trial training                      | A discrete trial is a single cycle of a behaviorally-based instruction routine. A particular trial may be repeated several times in succession, several times a day, over several days (or even longer) until the skill is mastered.                                                                                                                                                                                                                                                                                                                                                                        |
| Extinction                                   | Reinforcement is discontinued                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Functional Behavioral Assessment- FBA        | FBA is a <u>tool</u> (assessment process) that helps us understand why children engage in problem behavior (i.e., what is the function or purpose of their behavior, what is maintaining the behavior).                                                                                                                                                                                                                                                                                                                                                                                                     |
| Functional Communication Training-FCT        | Focuses on training teachers to recognize Child's subtle attempts at communication and replace these attempts with the use of sign language or picture boards.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Parent-implemented interventions             | Parent follow through with interventions at home on a consistent basis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Naturalistic Interventions                   | Naturalistic intervention is a collection of practices including environmental arrangement, interaction techniques, and behavioral strategies. These practices are designed to encourage specific target behaviors based on insights into the learner's interests and to provide responses that build more elaborate learner behaviors that are naturally reinforcing and appropriate to the interaction. Effective for promoting communication and social skills for learners at the preschool, elementary school, and middle/high school levels. ~ National Professional Development Center for ASD, 2011 |
| Peer-mediated instruction/intervention- PMII | Peer-mediated instruction is used to teach typically developing peers ways to interact with and help learners with ASD acquire new social skills by increasing social opportunities within natural environments. With PMII, peers are systematically taught ways of engaging learners                                                                                                                                                                                                                                                                                                                       |

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                | with ASD in social interactions in both teacher-directed and learner-initiated activities. ~National Professional Development Center for ASD, 2011                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Picture exchange communication system-<br>PECS | Using pictures as a way to communicate/engage/initiate interaction with someone.<br><a href="http://www.pecs-usa.com">www.pecs-usa.com</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Pivotal response training -PRT                 | Choice (shared control to increase motivation)<br>· Clear and uninterrupted instructions or opportunities (make sure child is attending)<br>· Reinforcement of attempts<br>· Reinforcement has a specific relationship to the desired behavior natural reinforcement ("ball" gets ball, not praise. Child chooses object for instruction and that object is used. This is done to increase motivation)<br>· Multiple examples or multiple components presented (e.g., use two different objects but same verb such as "roll car" and then "roll ball" then "throw ball." Multiple components also means using "new pants" or "red suite" versus just "pants" or "suit." This is done to increase responsiveness to multiple cues.<br>( <a href="http://www.spectrumcenter.org/autismpanning.html">http://www.spectrumcenter.org/autismpanning.html</a> ) |
| Prompting                                      | Enticing the person to perform a desired behavior by presenting a prompt. Visual/verbal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Reinforcement                                  | <b>Positive reinforcement:</b> The adding of an appetitive stimulus to increase a certain behavior or response.<br>Example: Father gives candy to his daughter when she picks up her toys.<br><br><b>Negative reinforcement:</b> The taking of an aversive stimulus to increase certain behavior or response.<br>Example: Rolling up the window to block the wind.<br><br><a href="http://en.wikipedia.org/wiki/Reinforcement">http://en.wikipedia.org/wiki/Reinforcement</a>                                                                                                                                                                                                                                                                                                                                                                            |
| Self-management                                | Teaching the student skills to manage stress, behavior, anxiety, self care, and social aspects independently.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Social Narratives/Stories                      | Social stories describe a situation, skill, or concept in terms of relevant social cues, perspectives, and common responses in a specifically defined style and format. The goal of a social story is to share precise social information in text.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    | <p>~The Gray Center</p> <p>Examples: <a href="http://www.polyxo.com/socialstories">www.polyxo.com/socialstories</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Social skills training groups      | <p>Social skills training (SST) is a form of behavior therapy used by teachers, therapists, and trainers to help persons who struggle with relating to other people.</p> <p><a href="http://www.modelmekids.com/">http://www.modelmekids.com/</a> (DVD's that show kids modeling behavior). Peer to peer groups are recommended at the MS/HS.</p> <p>Author to consider: Jed Baker</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Response interruption/redirections | <p>Response interruption/redirection (RIR) is an evidence-based practice used to decrease interfering behaviors, predominantly those that are repetitive, stereotypical, and/or self-injurious. RIR often is implemented after a functional behavior assessment (FBA) has been conducted to identify the function of the interfering behavior. RIR is particularly useful with persistent interfering behaviors that occur in the absence of other people, in a number of different settings, and during a variety of tasks. These behaviors often are not maintained by attention or escape. Instead, they are more likely maintained by sensory reinforcement and are often resistant to intervention attempts. RIR is particularly effective with sensory-maintained behaviors because teachers/practitioners interrupt learners from engaging in interfering behaviors and redirect them to more appropriate, alternative behaviors. ~National Professional Development Center for ASD, 2011</p> |
| Speech generated devices           | <p>DynoVox- Assistive devices that can help students communicate and overcome their speech, language and learning challenges.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Stimulus control                   | <p>Phenomenon of a stimulus increasing the probability of a behavior (operant response) because of a history of that behavior being differentially reinforced in the presence of the stimulus. In other words, stimulus control is basically learning to pay attention to things that we identify in the environment (discriminative stimuli) that give us information about the effectiveness of our behavior: what behavior is likely to be effective or ineffective, under which conditions, and what the behavior gives us (<u>reinforcement</u> or <u>punishment</u>). Therefore, in the presence of those stimuli we are likely to respond differentially.~ Wikipedia</p>                                                                                                                                                                                                                                                                                                                      |

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Structured Work Systems</p>    | <p>Structured work systems are an element of structured teaching developed by Division TEACCH (Treatment and Education of Autistic and related Communication handicapped Children). Structured teaching, as defined by Division TEACCH, is an instructional strategy that emphasizes visual supports. Its aims are to increase and maximize independent functioning and reduce the frequent need for teacher correction and reprimand (Schopler, Mesibov, &amp; Hearsey, 1995). The individual work system is defined as a visually organized space where learners independently practice skills that have been previously mastered under the direct supervision of an adult. A work system visually communicates at least four pieces of information to the learner. ~ National Professional Development Center for ASD, 2011</p> <ul style="list-style-type: none"> <li>• The task the learner is supposed to do</li> <li>• How much work there is to be completed</li> <li>• How the learner knows he/she is finished</li> <li>• What to do when finished</li> </ul>                                          |
| <p>Task analysis and chaining</p> | <p>A behavior chain is a series of related behaviors, each of which provides the cue for the next and the last that produces a reinforcer.</p> <p>Almost everything we do can be considered part of a behavior chain. For example, when you are reciting the alphabet, you start with "A", then "B", then "C" and so on until the task is completed at "Z".</p> <p>Each step serves as a cue for the next step; a chain is really a series of signals and behaviors. The completion of one behavior in a chain produces the signal for the next action. Saying "G" is the signal to say "H" next.</p> <p>Practically any complex behavior we do in the way of operant behavior is part of a chain or a multitude of chains: eating, getting dressed, using the computer, counting, brushing your teeth, riding a bike, walking to school and so on. Behavior chains are very important to all of us; as is the procedure for building chains, which is called <b>chaining</b>.</p> <p>Chaining is the reinforcement of successive elements of a behavior chain. If you are teaching your child the alphabet,</p> |

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <p>you are attempting to build a chain, if you are teaching the tying of shoelaces; you are also attempting to build a chain.</p> <p>~<a href="http://www.bbbautism.com/aba_shaping_and_chaining.htm">http://www.bbbautism.com/aba_shaping_and_chaining.htm</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <p>Time delay</p>      | <p>Gradual delay in the presentation of the verbal/visual prompt. The time delay should increase the child's spontaneous/independent interaction.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <p>Video Modeling</p>  | <p>Video modeling is a mode of teaching that uses video recording and display equipment to provide a visual model of the targeted behavior or skill. Types of video modeling include basic video modeling, video self-modeling, point-of-view video modeling, and video prompting. <u>Basic video modeling</u> involves recording someone besides the learner engaging in the target behavior or skill (i.e., models). The video is then viewed by the learner at a later time. <u>Video self-modeling</u> is used to record the learner displaying the target skill or behavior. <u>Point-of-view video modeling</u> is when the target behavior or skill is recorded from the perspective of the learner. <u>Video prompting</u> involves breaking the behavior skill into steps and recording each step with incorporated pauses during which the learner may attempt the step before viewing subsequent steps. Video prompting may be done with either the learner or someone else acting as a model. ~National Professional Development Center for ASD, 2011</p> |
| <p>Visual supports</p> | <p>Anything that makes VERBAL dialogue into a VISUAL cue!!</p> <div data-bbox="1062 1199 1149 1289" data-label="Image"> </div> <p>Visual supports organize a sequence of events, enhancing the student's ability to understand, anticipate and participate in those events.</p> <p>Visual supports supplement verbal instruction, clarifying the information for the student and increasing comprehension.</p> <p>Visual supports can be used to cue communication, providing reminders of what to do and say in a situation." At the MS/HS level use sticky notes to give directions so confrontation isn't an issue.</p> <p>~Quill, 1995</p>                                                                                                                                                                                                                                                                                                                                                                                                                        |

\*This list is meant as a tool to assist you in identifying Evidence Based Practices. It is neither an endorsement nor a recommendation of any one website, book, person, agency or center although all EBP methods are START (Statewide Autism Resources and Training) and The National Professional Development Center on Autism Spectrum Disorders 05/08/2009 recommended.