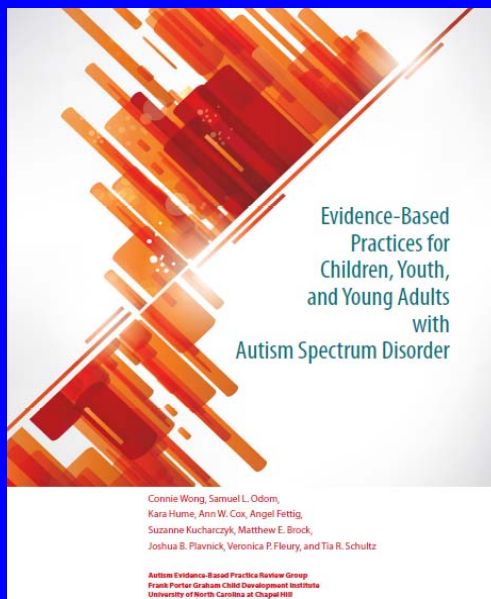




# CAPTAIN

California Autism Professional Training  
and Information Network

## What are Evidence-Based Practices (EBPs) for ASD?



Ann England, M.A., CCC-SLP-L  
Assistant Director, Diagnostic Center, CDE \*Co-Coordinator CAPTAIN

# Learning Outcomes

- Participant will be able to:
  - Name the two resources for Evidence-based Practices for ASD
  - Understand that CAPTAIN is the statewide implementation initiative for ASD
  - Know that the CAPTAIN website and its social media are the statewide “clearinghouse” for ASD resources
  - Articulate why EBPs need to be implemented
  - Understand why fidelity of EBP implementation is critical
  - Name reliable ASD online EBP learning modules
  - Know that there is an online learning course about ASD available at no cost

# PRE-ASSESSMENT





# CAPTAIN

California Autism Professional Training  
and Information Network

**CAPTAIN  
Website  
Hosted by  
DCN!**

Home About News

**CAPTAIN**  
California Autism Professional Training  
and Information Network

**Welcome**

CAPTAIN is a multiplicity network developed to support the understanding and use of Evidence Based Practices for individuals affected by Autism Spectrum Disorder across the state.

CAPTAIN is dedicated to the following:

- Providing statewide access to trainings and resources in Evidence Based Practices (EBPs) that are culturally sensitive, family centered, cost-effective, and competency based.
- Establishing supports that are locally based with trainer of trainers at the local level.
- Emphasizing how to use EBPs to assist students in accessing the California Common Core State Standards and developing College and Career Readiness.
- Providing ongoing training, support, and technical assistance to implement EBPs and ensure fidelity of implementation.
- Supporting the development of local multiplicity collaborations to support consistent use of EBPs.
- Providing an annual training summit and a forum for collegial communication and support to CAPTAIN Cadre members.
- Providing web based access to materials and resources that are vetted and align with current EBPs.
- Providing information and outreach to other interested stakeholders and provider groups who could benefit from learning more about EBPs (i.e., Professional Organizations, Higher Education, Self-Advocates, Allied Health Providers).

**Quick Links**

- National Professional Development Center On Autism Spectrum Disorders
- APPRO ASD Learning Modules
- National Autism Center
- Autism Informed Modules
- CAPTAIN Resources
- EBP Trainings
- SHOWCASE Practitioners
- Autism Fact Sheets
- English/Spanish
- Other Languages
- Ask a Specialist - ASD CAPTAIN Cadre
- Regional News
- CAPTAIN Leadership
- Learn the Signs - Act Early (LEAP)
- Effective Early Childhood Transition Guide
- ASD Toolkit Initiative
- Autism Distance Education Funded Training

**CAPTAIN Partners**

- Diagnostic Centers, CDC
- Family Resource Centers Network of California
- Center for Excellence for Developmental Disabilities at UC Davis MIND Institute
- USC University Center for Excellence in Developmental Disabilities (USC UCEDD)
- California Department of Developmental Services

**CAPTAIN Summary**  
By members only

Home Contact Us/DCN Health November 16, 2015

f t+ y+ v+ w+

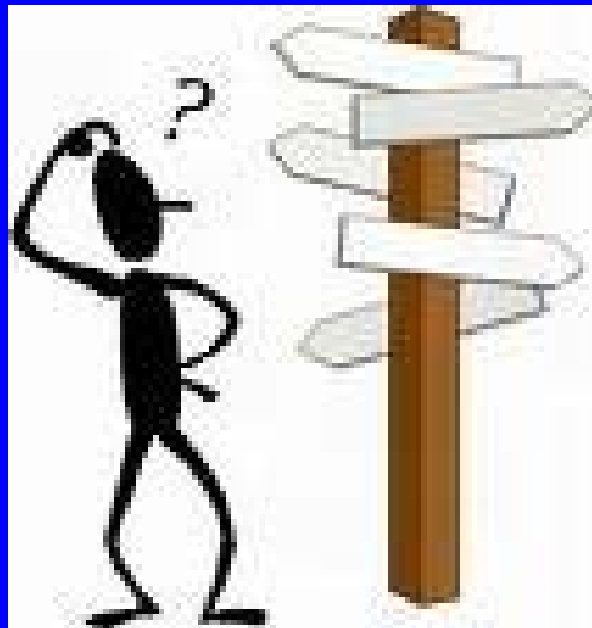
**Links to  
ASD  
Resources**

**CAPTAIN  
Social Media  
Links**

[www.captain.ca.gov](http://www.captain.ca.gov)  
[autismebp@gmail.com](mailto:autismebp@gmail.com)

How many results do you think you would get if you did a  search for:

“AUTISM TREATMENT”?





AUTISM TREATMENT



All

News

Images

Books

Videos

More

Settings

Tools

About 46,500,000 results (0.92 seconds)

Autism Research & Cord Blood - Read about the Phase 1 Trial

Ad [www.viacord.com/autism-research](http://www.viacord.com/autism-research)

New Research on Stem Cell **Therapy** Offers Hope for **Autistic** Kids. Learn ...  
New Era Medicine - Plan Ahead For Your Baby - Rooted In Science

**Results 46,500,000 for "AUTISM TREATMENT"!!!!  
(September 12, 2017)**

From Sensory Avoidant - To Sensory Tolerant

Ad [www.thetouchpointsolution.com/](http://www.thetouchpointsolution.com/)

Touchpoints can relieve stress, manage anxiety & promote calm with neur...  
Start Living Better · Scholarship Program · Applied Neuroscience · Reduce ...

Autism Therapy & Treatment - Best Hyperbaric Therapy @CIHC

# 2 IMPORTANT ASD EBP RESOURCES

## National Professional Development Center (NPDC)

1. 27 Evidence Based Practices
2. AFIRM
3. CSESA
4. EBPs for Young Children

**Released  
March 2014**

<http://autismpdc.fpg.unc.edu>  
<http://afirm.fpg.unc.edu>  
<http://csesa.fpg.unc.edu>  
<http://asdtoddler.fpg.unc.edu>  
[www.captain.ca.gov](http://www.captain.ca.gov)

## National Autism Center (NAC)

1. National Standards Project Report-Phase 2  
NSP2

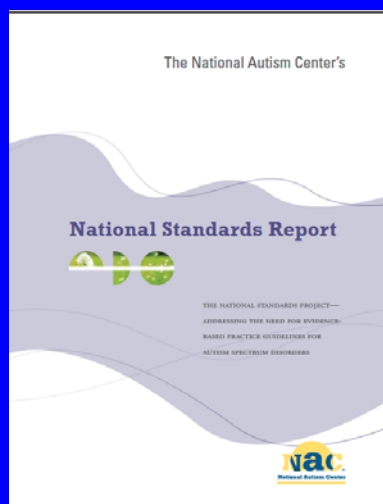
**Released  
April 2015**

[www.nationalautismcenter.org](http://www.nationalautismcenter.org)  
[www.captain.ca.gov](http://www.captain.ca.gov)



# A History of Systematic Reviews of the Literature for Evidence Based Practices (EBPs)

- In 2009, 11 Established Treatments
  - Reviewed by National Standards Project from National Autism Center, Phase 1 (NSP1)
  - Included research for the years: 1957-2007

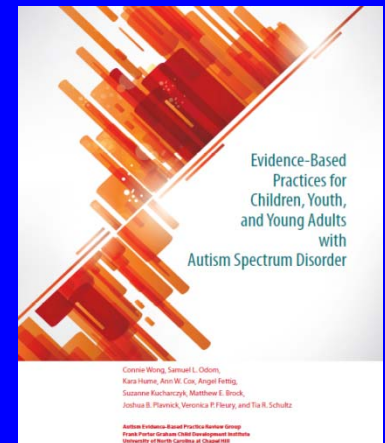


[www.nationalautismcenter.org](http://www.nationalautismcenter.org)



# A History of Systematic Reviews of the Literature for Evidence Based Practices (EBPs)

- **In 2010, 24 EBPs**
  - National Professional Development Center (NPDC)
  - Included 10 years, 1997-2007
- **In 2014, 27 EBPs**
  - 2<sup>nd</sup> review by NPDC
  - Included 22 years, 1990-2011
    - 29,101 possible studies → 456 studies
    - RCT, quasi-experimental, single case design
  - Strength of evidence for assessment
  - Based on number, type of studies using each EBP



<http://autismpdc.fpg.unc.edu/>

# A History of Systematic Reviews of the Literature for Evidence Based Practices (EBPs)



- In 2015, 14 Established Interventions Under Age 22  
1 Established Intervention Age 22+
  - 2<sup>nd</sup> Review by National Standards Project, National Autism Center, Phase 2 (NSP2)
- Reviewed studies published in peer reviewed journals between 2007 and February of 2012
  - 351 articles (ages 0-22) and 27 articles (ages 22+)
  - included studies if the interventions could be implemented in or by school systems, early intervention, home, hospital, vocational. and/or community-based programs or in clinic settings

[www.nationalautismcenter.org](http://www.nationalautismcenter.org)

# 2 IMPORTANT ASD EBP RESOURCES

## National Professional Development Center (NPDC)

## National Autism Center (NAC)

1. 27 Evidence Based Practices
2. AFIRM
3. CSESA
4. EBPs for Young Children

**Released  
March 2014**

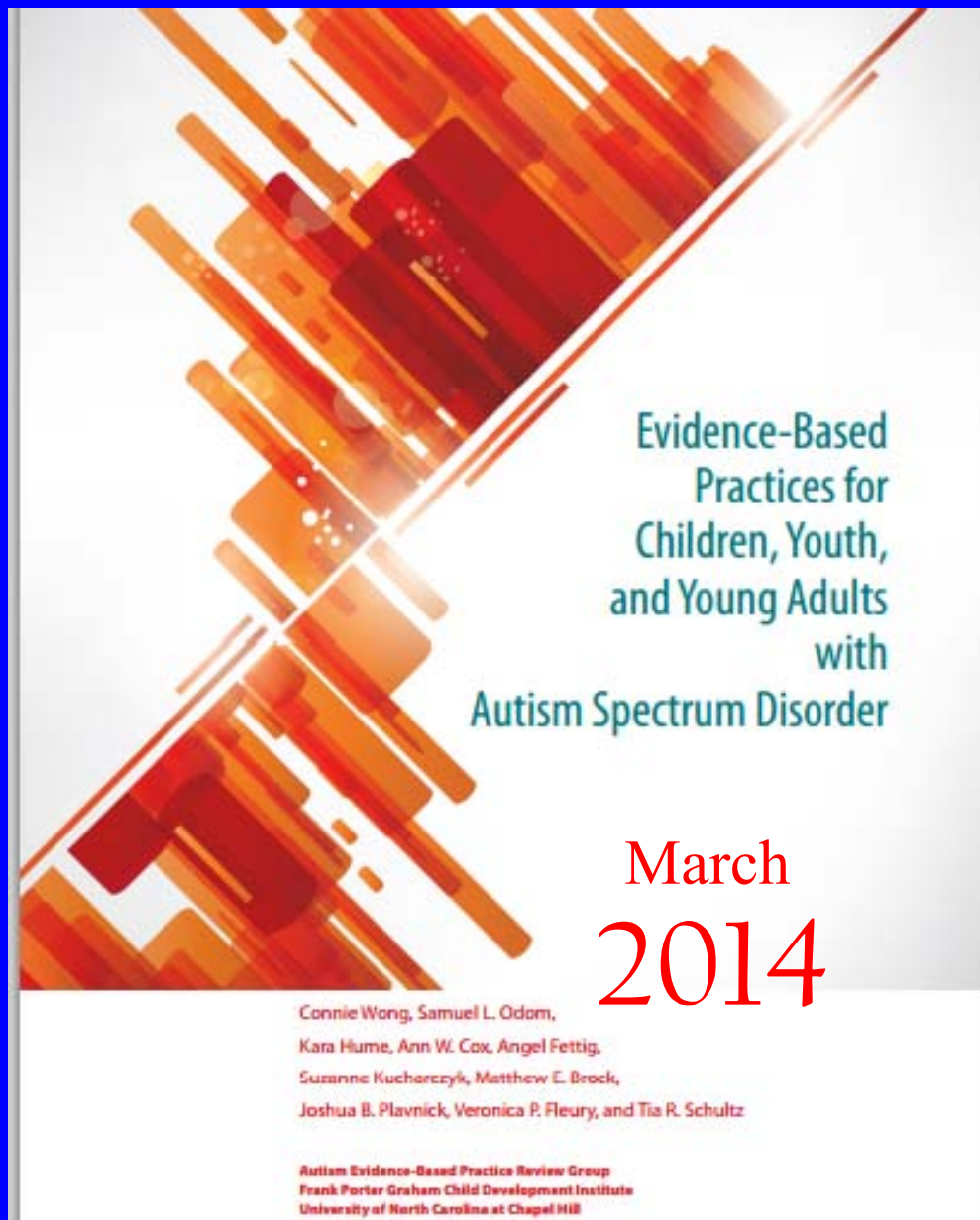
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1. National Standards Project Report-Phase 2  
NSP2

**Released  
April 2015**

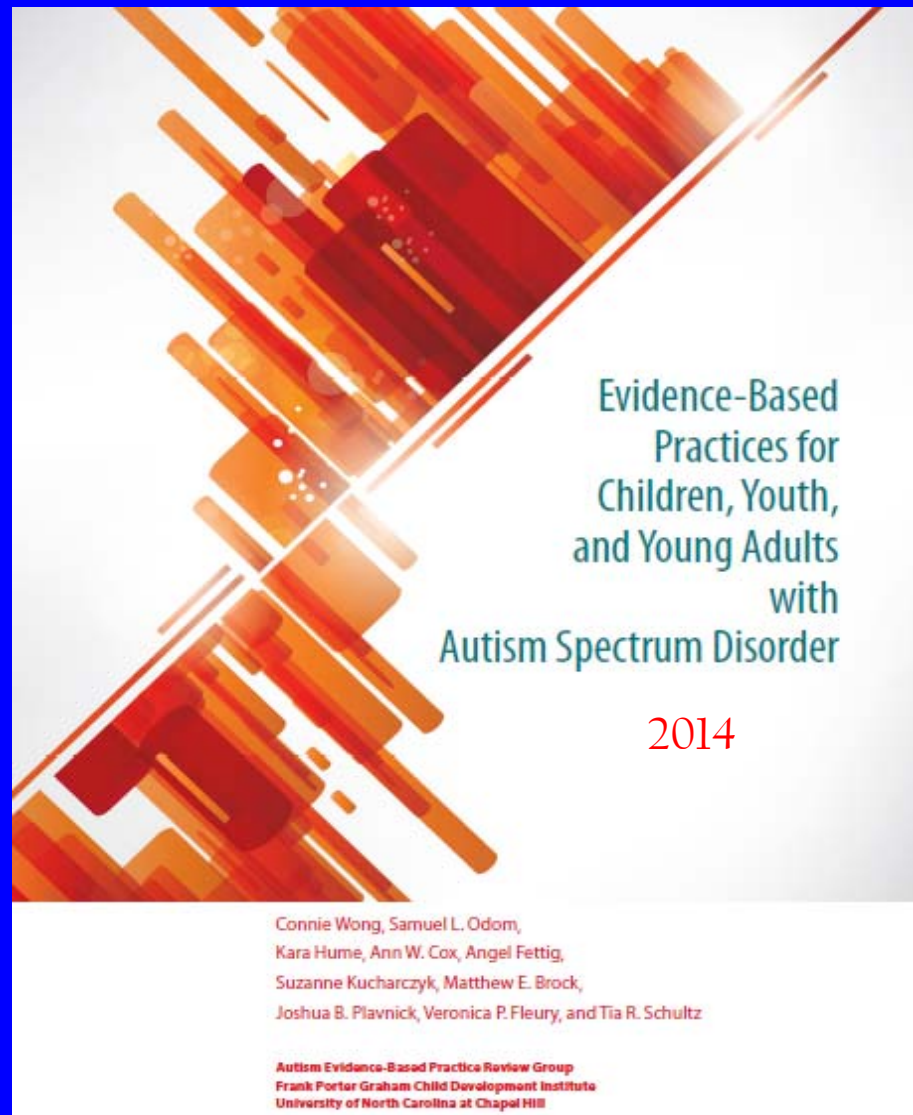
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# What's in this report?



# Definition of EBP (NPDC)



NPDC definition of an EBP:

“Focused intervention practices that have substantial evidence for effectiveness in promoting positive outcomes for learners with ASD”

# NPDC Criteria for EBP



To be considered an EBP for individuals with ASD, efficacy must be established through peer-reviewed research in scientific journals using:

- At least two high quality experimental or quasi-experimental group design articles conducted by at least two different researchers or research groups

OR

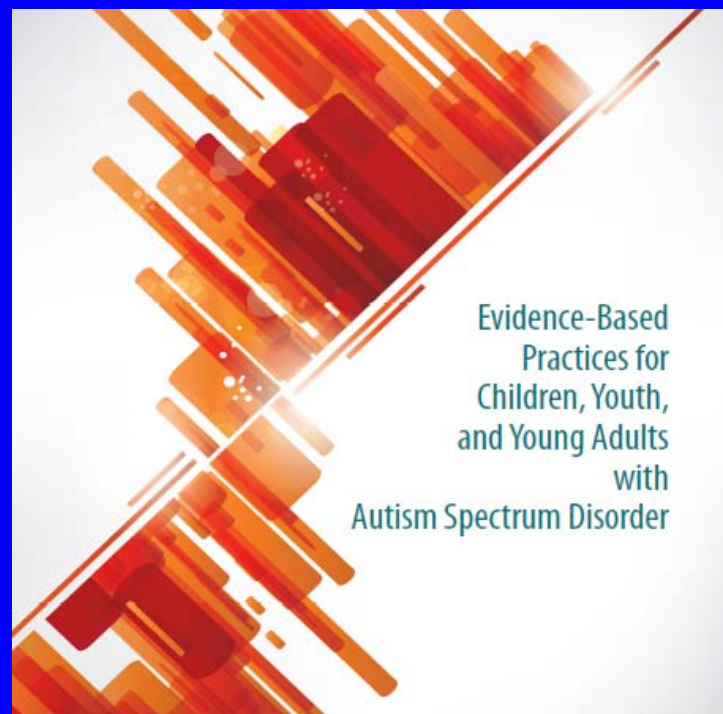
- At least five high quality single case design articles conducted by at least three different researchers or research groups having a total of at least 20 participants across studies

OR

- A combination of at least one high quality experimental or quasi-experimental group design article and at least three high quality single case design articles conducted by at least two different research groups

# What are these 27 EBPs?

The 27 EBPs are listed and defined  
in Table 7 of the report!



Evidence-Based  
Practices for  
Children, Youth,  
and Young Adults  
with  
Autism Spectrum Disorder

Connie Wong, Samuel L. Odom,  
Kara Hume, Ann W. Cox, Angel Fettig,  
Suzanne Kucharczyk, Matthew E. Brock,  
Joshua B. Plavnick, Veronica P. Fleury, and Tia R. Schultz

Autism Evidence-Based Practice Review Group  
Frank Porter Graham Child Development Institute  
University of North Carolina at Chapel Hill



## 27 Evidence – Based Practices (2014)

Antecedent-based interventions

Cognitive behavioral intervention\*

Differential reinforcement

Discrete trial training

Exercise

Extinction

Functional behavior assessment

Functional communication training

Modeling

Naturalistic interventions

Parent-implemented intervention

Peer-mediated

instruction/intervention

Picture Exchange Communication

System™

Pivotal response training

Prompting

Reinforcement

Response interruption/redirection

Scripting

Self-management

Social narratives

Social skills training

Structured play groups

Task analysis

Technology-aided  
intervention/instruction

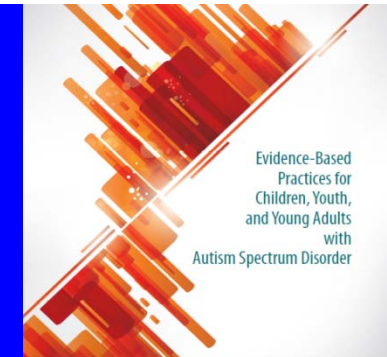
Time delay

Video modeling

Visual supports

**Table 7. Working Definitions for EBPs**

Evidence-Based Practice	DEFINITIONS OF 27 EBPs Definition	Empirical Support	
		Group (n)	Single Case (n)
Antecedent-based intervention (ABI)	Arrangement of events or circumstances that precede the occurrence of an interfering behavior and designed to lead to the reduction of the behavior.	0	32
Cognitive behavioral intervention (CBI)	Instruction on management or control of cognitive processes that lead to changes in overt behavior.	3	1
Differential reinforcement of Alternative, Incompatible, or Other Behavior (DRA/I/O)	Provision of positive/desirable consequences for behaviors or their absence that reduce the occurrence of an undesirable behavior. Reinforcement provided: a) when the learner is engaging in a specific desired behavior other than the inappropriate behavior (DRA), b) when the learner is engaging in a behavior that is physically impossible to do while exhibiting the inappropriate behavior (DRI), or c) when the learner is not engaging in the interfering behavior (DRO).	0	26
Discrete trial teaching (DTT)	Instructional process usually involving one teacher/service provider and one student/client and designed to teach appropriate behavior or skills. Instruction usually involves massed trials. Each trial consists of the teacher's instruction/presentation, the child's response, a carefully planned consequence, and a pause prior to presenting the next instruction.	0	13
Exercise (ECE)	Increase in physical exertion as a means of reducing problem behaviors or increasing appropriate behavior.	3	3
Extinction (EXT)	Withdrawal or removal of reinforcers of interfering behavior in order to reduce the occurrence of that behavior. Although sometimes used as a single intervention practice, extinction often occurs in combination with functional behavior assessment, functional communication training, and differential reinforcement.	0	11
Functional behavior assessment (FBA)	Systematic collection of information about an interfering behavior designed to identify functional contingencies that support the behavior. FBA consists of describing the interfering or problem behavior, identifying antecedent or consequent events that control the behavior, developing a hypothesis of the function of the behavior, and/or testing the hypothesis.	0	10
Functional communication training (FCT)	Replacement of interfering behavior that has a communication function with more appropriate communication that accomplishes the same function. FCT usually includes FBA, DRA, and/or EX.	0	12
Modeling (MD)	Demonstration of a desired target behavior that results in imitation of the behavior by the learner and that leads to the acquisition of the imitated behavior. This EBP is often combined with other strategies such as prompting and reinforcement.	1	4
Naturalistic intervention (NI)	Intervention strategies that occur within the typical setting/activities/routines in which the learner participates. Teachers/service providers establish the learner's interest in a learning event through arrangement of the setting/activity/routine, provide necessary support for the learner to engage in the targeted behavior, elaborate on the behavior when it occurs, and/or arrange natural consequences for the targeted behavior or skills.	0	10
Parent-implemented intervention (PII)	Parents provide individualized intervention to their child to improve/increase a wide variety of skills and/or to reduce interfering behaviors. Parents learn to deliver interventions in their home and/or community through a structured parent training program.	8	12
Peer-mediated instruction and intervention (PMII)	Typically developing peers interact with and/or help children and youth with ASD to acquire new behavior, communication, and social skills by increasing social and learning opportunities within natural environments. Teachers/service providers systematically teach peers strategies for engaging children and youth with ASD in positive and extended social interactions in both teacher-directed and learner-initiated activities.	0	15



Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder

Corinne Wong, Samuel L. Odom, Kara Hume, Ann W. Cox, Angel Fetting, Suzanne Kucharczyk, Matthew E. Brock, Joshua B. Flannick, Veronica F. Henry, and Ta R. Schultz

Autism Evidence-Based Practices Review Group  
Frank Porter Graham Child Development Institute  
University of North Carolina at Chapel Hill

## DEFINITIONS OF 27 EBPs

Evidence-Based Practice	Definition	Empirical Support	
		Group (n)	Single Case (n)
Picture Exchange Communication System (PECS)	Learners are initially taught to give a picture of a desired item to a communicative partner in exchange for the desired item. PECS consists of six phases which are: (1) "how" to communicate, (2) distance and persistence, (3) picture discrimination, (4) sentence structure, (5) responsive requesting, and (6) commenting.	2	4
Pivotal response training (PRT)	Pivotal learning variables (i.e., motivation, responding to multiple cues, self-management, and self-initiations) guide intervention practices that are implemented in settings that build on learner interests and initiative.	1	7
Prompting (PP)	Verbal, gestural, or physical assistance given to learners to assist them in acquiring or engaging in a targeted behavior or skill. Prompts are generally given by an adult or peer before or as a learner attempts to use a skill.	1	32
Reinforcement (R+)	An event, activity, or other circumstance occurring after a learner engages in a desired behavior that leads to the increased occurrence of the behavior in the future.	0	43
Response interruption/redirection (RIR)	Introduction of a prompt, comment, or other distracters when an interfering behavior is occurring that is designed to divert the learner's attention away from the interfering behavior and results in its reduction.	0	10
Scripting (SC)	A verbal and/or written description about a specific skill or situation that serves as a model for the learner. Scripts are usually practiced repeatedly before the skill is used in the actual situation.	1	8
Self-management (SM)	Instruction focusing on learners discriminating between appropriate and inappropriate behaviors, accurately monitoring and recording their own behaviors, and rewarding themselves for behaving appropriately.	0	10
Social narratives (SN)	Narratives that describe social situations in some detail by highlighting relevant cues and offering examples of appropriate responding. Social narratives are individualized according to learner needs and typically are quite short, perhaps including pictures or other visual aids.	0	17
Social skills training (SST)	Group or individual instruction designed to teach learners with autism spectrum disorders (ASD) ways to appropriately interact with peers, adults, and other individuals. Most social skill meetings include instruction on basic concepts, role-playing or practice, and feedback to help learners with ASD acquire and practice communication, play, or social skills to promote positive interactions with peers.	7	8
Structured play group (SPG)	Small group activities characterized by their occurrences in a defined area and with a defined activity, the specific selection of typically developing peers to be in the group, a clear delineation of theme and roles by adult leading, prompting, or scaffolding as needed to support students' performance related to the goals of the activity.	2	2
Task analysis (TA)	A process in which an activity or behavior is divided into small, manageable steps in order to assess and teach the skill. Other practices, such as reinforcement, video modeling, or time delay, are often used to facilitate acquisition of the smaller steps.	0	8
Technology-aided instruction and intervention (TAII)	Instruction or interventions in which technology is the central feature supporting the acquisition of a goal for the learner. Technology is defined as "any electronic item/ equipment/ application/or virtual network that is used intentionally to increase/maintain, and/or improve daily living, work/productivity, and recreation/leisure capabilities of adolescents with autism spectrum disorders" (Odom, Thompson, et al., 2013).	9	11



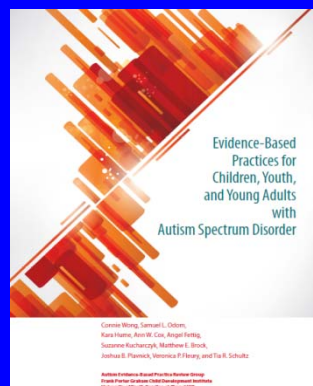
Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder

Conor Wang, Sammi L. Odom, Kara Hume, Ann W. Cox, Angel Felling, Suzanne Kucharczyk, Matthew S. Block, Joshua S. Thomas, Vanessa F. Frank, and T. B. Schultz

Autism Evidence-Based Practices Review Team  
 Lead: Peter Odom, Child Development Institute  
 University of North Carolina at Chapel Hill

# DEFINITIONS OF 27 EBPs

Evidence-Based Practice	Definition	Empirical Support	
		Group (n)	Single Case (n)
Time delay (TD)	In a setting or activity in which a learner should engage in a behavior or skill, a brief delay occurs between the opportunity to use the skill and any additional instructions or prompts. The purpose of the time delay is to allow the learner to respond without having to receive a prompt and thus focuses on fading the use of prompts during instructional activities.	0	12
Video modeling (VM)	A visual model of the targeted behavior or skill (typically in the behavior, communication, play, or social domains), provided via video recording and display equipment to assist learning in or engaging in a desired behavior or skill.	1	31
Visual support (VS)	Any visual display that supports the learner engaging in a desired behavior or skills independent of prompts. Examples of visual supports include pictures, written words, objects within the environment, arrangement of the environment or visual boundaries, schedules, maps, labels, organization systems, and timelines.	0	18



# FACT SHEETS AVAILABLE FOR EACH OF THE 27 EBPs

Definition of the intervention

Age range of participants

Type of outcomes it has generated

- Citations for the specific articles that provide the evidence for the efficacy of the practice

## Video Modeling Fact Sheet

### Brief Description

Video modeling (VM) is a method of instruction that uses video recording to provide a visual model of the targeted behavior or skill. The model learner, who then has an opportunity to perform the target behavior, either a later point in time. Types of video modeling include basic video modeling, point-of-view video modeling, and video prompting. *Basic video modeling* and involves recording someone besides the learner engaging in the target *self-modeling* is used to record the learner displaying the target skill or behavior editing to remove adult prompts. *Point-of-view video modeling* is when the skill is recorded from the perspective of what the learner will see when he or she responds. *Video prompting* involves breaking the behavior into steps and recording each step with incorporated pauses during which the learner may view and then attempt a step before viewing and attempting subsequent steps. Video prompting can be implemented with other, self, or point-of-view models. Video modeling strategies have been used in isolation and also in conjunction with other intervention components such as prompting and reinforcement strategies.

### Qualifying Evidence

VM meets evidence-based criteria with 1 group design and 31 single case design studies.

### Ages

According to the evidence-based studies, this intervention has been effective for toddlers (0-2 years) to young adults (19-22) years with ASD.

### Outcomes

VM can be used effectively to address social, communication, behavior, joint attention, play, cognitive, school-readiness, academic, motor, adaptive, and vocational skills.

### Research Studies Providing Evidence

Akmanoglu, N., & Tekin-İftar, E. (2011). Teaching children with autism how to respond to the lures of strangers. *Autism, 15*(2), 205-222. doi: 10.1177/1362361309352180  
Allen, K. D., Wallace, D. P., Greene, D. J., Bowen, S. L., & Burke, R. V. (2010). Community-based vocational instruction using videotaped modeling for young adults with autism spectrum disorders performing in air-inflated mascots. *Focus on Autism and Other Developmental Disabilities, 25*(3), 186-192. doi: 10.1177/1088357610377318

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Autism Evidence-Based Practices Review Group  
Frank Porter Graham Child Development Institute  
University of North Carolina at Chapel Hill



Evidence Based Practice and Abbreviated Definition	Evidence by Developmental Domain and Age (years)																																			
	Social			Comm.			Beh.			Joint Attn.			Play			Cog.			School Ready			Acad.			Motor			Adapt.			Voc.			Mental Health		
	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22			
<b>Antecedent Based Intervention (ABI):</b> Arrangement of events preceding an interfering behavior to prevent or reduce occurrence	Green	Yellow	Blue	Green	Yellow	Blue	Green	Yellow	Blue				Yellow						Yellow	Yellow	Blue	Yellow														
<b>Cognitive Behavioral Intervention (CBI):</b> Instruction on cognitive processes leading to changes in behavior		Yellow							Blue							Yellow															Yellow					
<b>Differential Reinforcement of Alternative, Incompatible, or Other Behavior (DRA/I/O):</b> Consequences provided for desired behaviors that reduce the occurrence of interfering behaviors	Green	Yellow					Green	Yellow	Blue			Yellow	Yellow			Green	Yellow			Yellow							Blue									
<b>Discrete Trial Teaching (DTT):</b> Instructional process of repeated trials, consisting of instruction, response, and consequence	Green	Yellow		Green	Yellow					Green	Yellow					Green	Yellow								Green	Yellow				Yellow						
<b>Exercise (ECE):</b> Antecedent based physical exertion to reduce interfering behaviors or increase appropriate behaviors							Green	Yellow								Green	Yellow					Yellow														
<b>Extinction (EXT):</b> Removal of existing reinforcement in order to reduce an interfering behavior		Yellow		Green	Yellow	Blue						Yellow													Green	Yellow										
<b>Functional Behavior Assessment (FBA):</b> Systematic protocol designed to identify contingencies that maintain an interfering behavior							Green	Yellow	Blue							Green	Yellow		Green	Yellow																
<b>Function Communication Training (FCT):</b> Replacement of an interfering behavior with communication that accomplishes the same function	Green	Yellow		Green	Yellow	Blue	Green	Yellow	Blue				Green	Yellow		Green	Yellow								Green	Yellow	Blue									
<b>Modeling (MD):</b> Demonstration of a desired behavior that results in skill acquisition through learner imitation			Blue			Blue				Green	Yellow					Green	Yellow													Blue						
<b>Naturalistic Intervention (NI):</b> Intervention strategies that occur with the learner's typical settings and routines	Green	Yellow		Green	Yellow		Green	Yellow		Green	Yellow																									
<b>Parent-Implemented Intervention (PII):</b> Parent delivered intervention learned through a structured parent training program		Yellow		Green	Yellow		Green	Yellow		Green	Yellow				Green	Green	Yellow								Green	Yellow										
<b>Peer-Mediated Instruction and Intervention (PMII):</b> Typically developing peers are taught strategies that increase social learning opportunities in natural environments	Green	Yellow	Blue	Green	Yellow					Green	Yellow		Green	Yellow		Green	Yellow					Yellow	Blue													
<b>Picture Exchange Communication System (PECS):</b> Systematic 6 phase protocol teaching the exchange of pictures between communicative partners	Green	Yellow		Green	Yellow																															

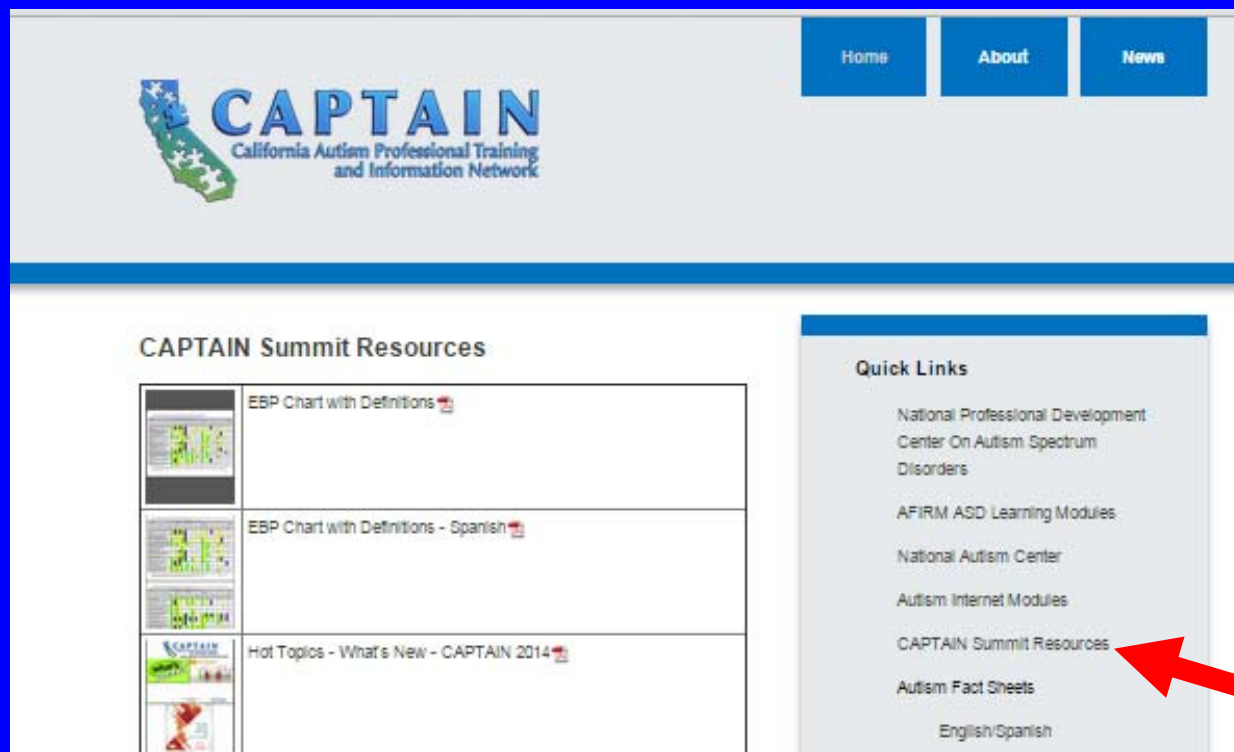
Evidence Based Practice and Abbreviated Definition	Evidence by Developmental Domain and Age (years)																																			
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<b>Pivotal Response Training (PRT):</b> Pivotal learning variables guide intervention implemented in settings that build on learner interests and initiative	Green	Yellow		Green	Yellow								Green	Yellow																						
<b>Prompting (PP):</b> Verbal, gestural, or physical assistance that supports skill acquisition	Green	Yellow						Yellow	Blue	Green	Yellow								Green	Yellow	Blue	Green	Yellow													
<b>Reinforcement (R+):</b> A response occurring after a behavior resulting in an increased likelihood of future reoccurrence of the behavior	Green	Yellow		Blue	Yellow		Green	Yellow	Blue	Green	Yellow	Blue				Yellow			Green	Yellow		Green	Yellow					Yellow	Blue							
<b>Response Interruption/Redirection (RIR):</b> Use of prompts or distracters during an interfering behavior that diverts attention and reduces the behavior	Green	Yellow		Green	Yellow			Yellow	Blue	Green	Yellow								Green	Yellow																
<b>Scripting (SC):</b> A verbal or written model of a skill or situation that is practiced before use in context	Green	Yellow	Blue	Green	Yellow	Blue				Green	Yellow		Green	Yellow					Green	Yellow								Yellow								
<b>Self Management (SM):</b> Instruction on discrimination between appropriate and inappropriate behaviors and accurate self-monitoring and rewarding of behaviors								Yellow	Blue										Green	Yellow	Blue	Green	Yellow							Blue						
<b>Social Narratives (SN):</b> Descriptions of social situations with examples of appropriate responding	Green	Yellow		Green	Yellow		Green	Yellow	Blue	Green	Yellow		Green	Yellow					Green	Yellow		Green	Yellow													
<b>Social Skills Training (SST):</b> Direct instruction on social skills with rehearsal and feedback to increase positive peer interaction.	Green	Yellow	Blue	Green	Yellow		Green	Yellow					Green	Yellow	Blue	Yellow																				
<b>Structured Play Group (SPG):</b> Adult lead small group activities that include typically developing peers and use prompting to support performance								Yellow											Yellow																	
<b>Task Analysis (TA):</b> The process of breaking a skill into small steps that are systematically chained together				Green	Yellow						Yellow									Yellow			Yellow													
<b>Technology-Aided Instruction and Intervention (TAII):</b> Intervention using technology as a critical feature	Green	Yellow	Blue	Green	Yellow	Blue		Yellow	Blue				Green	Yellow					Green	Yellow	Blue		Blue			Blue		Yellow	Blue							
<b>Time Delay (TD):</b> Delaying a prompt during a practice opportunity in order to fade the use of prompts	Green	Yellow		Green	Yellow	Blue	Green	Yellow		Green	Yellow		Green	Yellow					Green	Yellow		Green	Yellow													
<b>Video Modeling (VM):</b> A video recording of a targeted skill that is viewed to assist in learning	Green	Yellow	Blue	Green	Yellow			Yellow		Green	Yellow	Blue				Yellow			Green	Yellow		Green	Yellow			Yellow	Blue	Yellow	Blue							
<b>Visual Support (VS):</b> Visual display that supports independent skill use.	Green	Yellow	Blue	Green	Yellow		Green	Yellow					Green	Yellow		Green	Yellow		Green	Yellow			Yellow													

# 27 EBPs Matrix




Available on the CAPTAIN Website

English and Spanish and German!

[www.captain.ca.gov](http://www.captain.ca.gov)



The screenshot shows the CAPTAIN website interface. At the top left is the CAPTAIN logo with the text "California Autism Professional Training and Information Network". To the right are navigation buttons for "Home", "About", and "News". Below the logo is a section titled "CAPTAIN Summit Resources" containing a table of links:

	<a href="#">EBP Chart with Definitions</a>
	<a href="#">EBP Chart with Definitions - Spanish</a>
	<a href="#">Hot Topics - What's New - CAPTAIN 2014</a>

To the right of this table is a "Quick Links" sidebar with the following items:

- National Professional Development Center On Autism Spectrum Disorders
- AFIRM ASD Learning Modules
- National Autism Center
- Autism Internet Modules
- CAPTAIN Summit Resources** (highlighted with a red arrow)
- Autism Fact Sheets
- English/Spanish





Let's  
Practice!

As you watch the video clips use the EBP Matrix as a reference and see if you can determine which EBPs were in place.

What EBPs did you see?



# Implementation Fidelity is Critical!

**What does this mean?**



“Implementing an intervention in the same manner in which it was done in the evidence-based research”



THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON  
AUTISM SPECTRUM DISORDERS

## Training Outcomes Related to Training Components

<i>Training Components</i>	<b>Training Outcomes</b>		
	<b>Knowledge of Content</b>	<b>Skill Implementation</b>	<b>Classroom Application</b>
<i>Presentation/ Lecture</i>	10%	5%	0%
<i>Plus Demonstration in Training</i>	30%	20%	0%
<i>Plus Practice in Training</i>	60%	60%	5%
<i>Plus Coaching/ Admin Support Data Feedback</i>	95%	95%	95%

**Source:**

Joyce, B., & Showers, B. (2002). *Student achievement through staff development* (3rd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

# Implementation Fidelity is Critical!

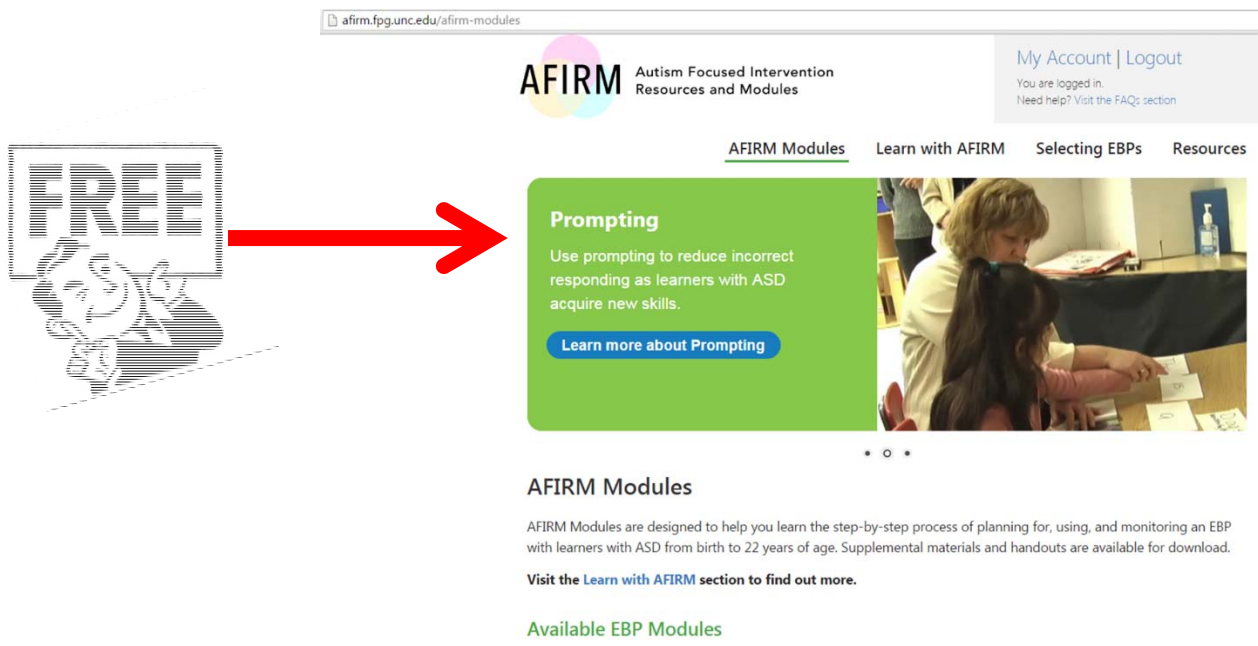
## How implementation fidelity achieved:



1. Use Implementation Checklists for the EBP to capture fidelity of implementation
2. Refer to EBP Fact Sheets
3. Use reliable self-learning modules on EBPs
4. Attend training on the EBPs
5. Access coaching on the EBP until fidelity is attained

# High Quality Training: Autism Focused Intervention Resources and Modules (AFIRM)

Designed to help you learn the step-by-step process of planning for, using, and monitoring EBPs with learners with ASD from birth to 22 years of age



The screenshot shows the AFIRM website interface. At the top left, there is a 'FREE' badge with a cartoon character. A red arrow points from this badge to a green card titled 'Prompting'. The card contains the text: 'Use prompting to reduce incorrect responding as learners with ASD acquire new skills.' and a blue button that says 'Learn more about Prompting'. To the right of the card is a photograph of a woman interacting with a child at a table. The website header includes the AFIRM logo, navigation links for 'AFIRM Modules', 'Learn with AFIRM', 'Selecting EBPs', and 'Resources', and a user account section.

**AFIRM** Autism Focused Intervention  
Resources and Modules

[www.captain.ca.gov](http://www.captain.ca.gov)  
<http://afirm.fpg.unc.edu/afirm-modules>

# AFIRM

## Autism Focused Intervention Resources and Modules

What you'll learn with AFIRM Modules:

- Key components of an EBP
- Behaviors and skills that can be addressed
- A step-by-step process for applying the practice
- Specific resources that you can download and customize for your own use



# AFIRM

[19 of 27 EBPs Available as of 09/12/17]

1. ABI Antecedent-based Intervention
2. DR Differential Reinforcement
3. DTT Discrete Trial Training
4. ECE Exercise
5. FBA Functional Behavior Analysis
6. FCT Functional Communication Training
7. MD Modeling
8. NI Naturalistic Intervention
9. PMII Peer-Mediated Instruction and Intervention
10. PECS Picture Exchange Communication System
11. PP Prompting
12. R+ Reinforcement
13. SC Scripting
14. SM Self-management
15. SN Social Narratives
16. SST Social Skills Training
17. TA Task Analysis
18. TD Time Delay
19. VS Visual Supports

## Upcoming:

- PII Parent-implemented Intervention
- VM Video Modeling
- CBI Cognitive Behavior Intervention

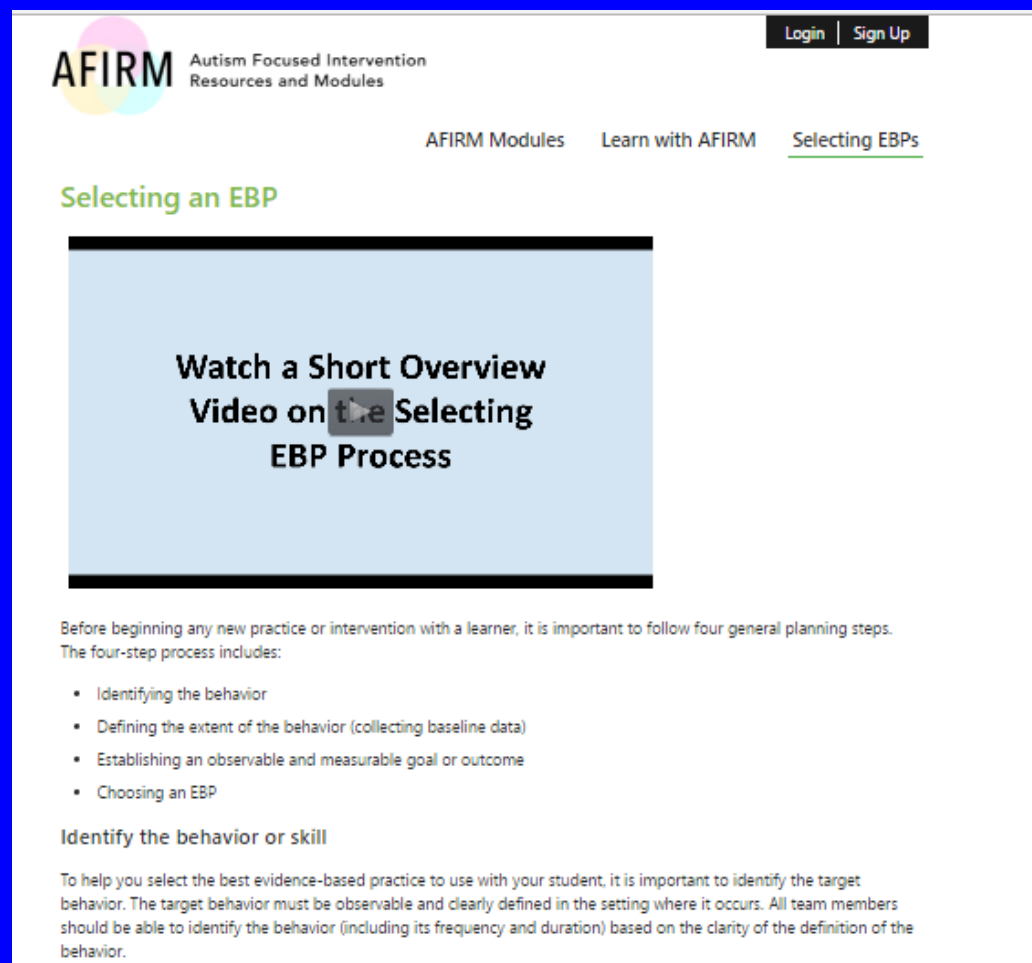
The screenshot shows the AFIRM website header with 'AFIRM Autism Focused Intervention Resources and Modules' and 'Login | Sign Up' links. Below the header are navigation links for 'AFIRM Modules', 'Learn with AFIRM', and 'Selecting EBPs'. A featured module for 'Antecedent-based Intervention' is highlighted with a green background, including a description and a 'Learn more about ABI' button. Below this is a section for 'AFIRM Modules' with a brief description and a 'Get started - it's free and easy!' button. At the bottom, it lists 'Available EBP Modules'.



# Helpful AFIRM Learning Module!

## How to Select an EBP

<http://afirm.fpg.unc.edu/selecting-ebp>



The screenshot shows the AFIRM website interface. At the top left is the AFIRM logo with the text 'Autism Focused Intervention Resources and Modules'. To the right are 'Login' and 'Sign Up' buttons. Below the logo is a navigation menu with 'AFIRM Modules', 'Learn with AFIRM', and 'Selecting EBPs' (which is underlined). The main heading is 'Selecting an EBP'. Below this is a large blue box with the text 'Watch a Short Overview Video on the Selecting EBP Process'. Underneath the video box is a paragraph: 'Before beginning any new practice or intervention with a learner, it is important to follow four general planning steps. The four-step process includes:'. This is followed by a bulleted list: 'Identifying the behavior', 'Defining the extent of the behavior (collecting baseline data)', 'Establishing an observable and measurable goal or outcome', and 'Choosing an EBP'. Below the list is the section heading 'Identify the behavior or skill' and a paragraph: 'To help you select the best evidence-based practice to use with your student, it is important to identify the target behavior. The target behavior must be observable and clearly defined in the setting where it occurs. All team members should be able to identify the behavior (including its frequency and duration) based on the clarity of the definition of the behavior.'

# AFIRM Resources

Select a key word to search for AFIRM resources or filter AFIRM resources by category.

## Keyword Search

Apply

### Browse by Module

- Antecedent-based Intervention
- Exercise
- Functional Behavior Assessment
- Modeling
- Peer-Mediated Instruction and Intervention
- Picture Exchange Communication System
- Prompting
- Reinforcement
- Self-management
- Social Narratives
- Social Skills Training
- Task Analysis
- Time Delay
- Visual Supports

### Browse by Module Lesson

- Lesson 1 - Basics
- Lesson 2 - Planning for the Practice
- Lesson 3 - Using the Practice
- Lesson 4 - Monitoring Progress
- Additional Materials

Implementation  
Resources

### Browse by Document Type

- Evidence-base
- Implementation checklist
- Parent's guide
- Professional standards
- Step-by-Step practice guide
- Tip sheet for professionals
- EBP Brief Packet



## Visual Supports (VS) ---Implementation Checklist---

Checklist  
ensures  
fidelity!

*Before you start:*

*Have you...*

- Identified the behavior?
- Collected baseline data through direct observation?
- Established a goal or outcome that clearly states **when** the behavior will occur, **what** the target skill is, and **how** the team will know when the skill is mastered.

*If the answer to any of these is "no", refer to the "Selecting EBPs" section on the website.*

Observation	1	2	3	4
Date				
Observer's Initials				
<b>Step 1: Planning</b>				
1.1 Identify visual supports needed to acquire or maintain target skills				
1.2 Develop/prepare visual support for learner based on individualized assessments				
1.3 Organize all needed materials				
<b>Step 2: Using</b>				
2.1 Teach learner how to use visual support				
<i>Boundaries:</i>				
<input type="checkbox"/> Introduce boundary to learner				
<input type="checkbox"/> Use modeling to teach learner to stay within boundary				
<input type="checkbox"/> Use reinforcement to encourage learner to stay within boundary				
<input type="checkbox"/> Use corrective feedback when learner does not stay within boundary				
<i>Cues:</i>				
<input type="checkbox"/> Show learner visual cue				
<input type="checkbox"/> Stand behind learner when prompting use of visual cue				
<input type="checkbox"/> Use concise, relevant words/terms while teaching visual cue				
<input type="checkbox"/> Assist learner in participating in activity/event with visual cue				
<i>Schedules</i>				
<input type="checkbox"/> Stand behind learner when prompting use of visual schedule				
<input type="checkbox"/> Place schedule information in learner's hand				
<input type="checkbox"/> Use concise, relevant words/terms				
<input type="checkbox"/> Assist learner in getting to designated activity/location, and prompt				
<input type="checkbox"/> Ensure learner remains in scheduled location until prompted to use				
<input type="checkbox"/> Repeat steps until learner is able to complete the sequence independently across activities/locations				
2.3 Use visual supports consistently and across settings				
<b>Step 3: Monitoring</b>				
3.1 Collect data on target behaviors and use of visual supports (independence during use and progress through forms/types of supports)				
3.2 Determine next steps based on learner progress				

# AFIRM Certificates



## My Account

- Resume your learning from the My Modules tab by selecting the last page viewed.
- View or print module certificates you have earned from My Certificates.

[My Modules](#)

[Module Certificates](#)

You have started the following modules:

**Peer-Mediated Instruction and Intervention**

Module in Progress: Non-certificate Track

Last page viewed:  
Monitoring Activity

[Take the Post-assessment](#)

You have selected not to receive a certificate for this module. While recommended, module assessments and the evaluation are optional.

[Submit Module Evaluation](#)

**Time Delay**

Module in Progress: Certificate Track

Last page viewed:  
Lesson 3: Use TD

[Take the Post-assessment](#)

To receive a certificate, you must:  
1. Complete the Pre-assessment Quiz  
2. Pass the Post-assessment Quiz  
3. Submit the Evaluation Survey

[Submit Module Evaluation](#)

[AFIRM Modules](#)

Visit the AFIRM Modules page to see a list of available and upcoming modules

[FAQs](#)  
Frequently Asked Questions

**Account Information**

**Username:** rossaj

**E-mail:** andrea.ross@unc.edu

**Send me e-mail updates when a new EBP is available:** No

[Edit information or change password](#)

# SELF LEARNING MODULES FOR TODDLERS!

## NPDC-ASD Early Start Website

<http://asdtoddler.fpg.unc.edu>

**ASD toddler initiative**

THE UNIVERSITY OF NORTH CAROLINA @ CHAPEL HILL

AUTISM SPEAKS It's time to listen.

Learning Modules About Resources

Search

Promoting evidence-based practices  
**EBPs** for young children, ages birth to 3, with  
**Autism Spectrum Disorder (ASD)**

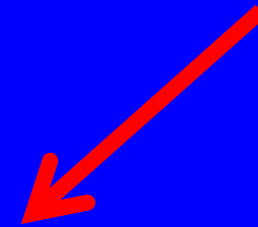
**EBP**  
Evidence-based Practices

Early Intervention  
Professional Development & Coaching

**Guide to ASD**  
Toddler Learning Modules

The Autism Spectrum Disorders (ASD) Toddler Initiative will expand on the work conducted by the [National Professional Development Center on Autism Spectrum Disorders](#) (NPDC-ASD) funded by the Office of Special Education Programs. The ASD Toddler Initiative will develop new materials and modify existing processes to support the use of evidence-based practices for young children (birth-3) and for their families.

# Resources for Older Individuals with ASD



The screenshot shows the CSESA website with the following content:

- Navigation:** ABOUT THE CENTER, RESEARCH, RESOURCES, MATERIALS
- Hero Section:** A large image of a graduation cap with a tassel. Text on the right: "The Center on Secondary Education for Students with Autism Spectrum Disorders. The Center on Secondary Education for Students with Autism Spectrum Disorder (CSESA) is a research and development project funded by the U.S. Department of Education that focuses on developing, adapting, and studying a comprehensive school and community-based education program for high school students on the autism spectrum." A "LEARN MORE >" button is present.
- Statistics:** Three colored boxes: "700+ students and families participated in CSESA research activities", "60 60 schools currently involved in the CSESA study", and "20+ resources available for educators, families, and students".
- Recent Research Activities:** Three items listed with download links:
  - Transition Planning for High School Students with ASD: Measuring Student, Parent, and Teacher Perspectives
  - Quality of High School Programs for Students with ASD in the United States
  - Transitioning Together: A Family-Centered Transition Intervention for High School Students with ASD
- Key Resources:** Three items listed with download links:
  - Understanding Autism Professional Development Curriculum
  - Autism at-a-Glance: Supporting Functional Communication in High School
  - Secondary School Success Checklist

[www.captain.ca.gov](http://www.captain.ca.gov)  
<http://csefa.fpg.unc.edu>



## Presentation 1:

### Characteristics and Practices for Challenging Behavior

## Example of Resources



\*NOTE: If you are having difficulty with the video links embedded as part of the presentation, link to the videos on this page: <http://csea.fpg.unc.edu/understanding-autism-presentation-1-videos>

- Facilitator Notes
- Participant Handout
- Activity Worksheet
- At My School Worksheet

Please review this notification of a video change made for Presentation 1, [Repetitive Behaviors and Restricted Interests video](#) (slide 17).

---

## Presentation 2:

### Strategies for Classroom Success and Effective Use of Teacher Supports

### Welcome

CAPTAIN is a multiagency network developed to support the understanding and use of Evidence Based Practices for individuals affected by Autism Spectrum Disorder across the state.

CAPTAIN is dedicated to the following:

- Providing statewide access to trainings and resources in Evidence Based Practices (EBPs) that are culturally sensitive, family centered, cost effective, and competency based.
- Establishing supports that are locally based with trainer of trainers at the local level.
- Emphasizing how to use EBPs to assist students in accessing the California Common Core State Standards and developing College and Career Readiness.
- Providing ongoing training, support, and technical assistance to implement EBPs and ensure fidelity of implementation.
- Supporting the development of local multiagency collaborations to support consistent use of EBPs.
- Providing an annual training summit and a forum for collegial communication and support to CAPTAIN Cadre members.
- Providing web based access to materials and resources that are vetted and align with current EBPs.
- Providing information and outreach to other interested stakeholders and provider groups who could benefit from learning more about EBPs (E.g. Professional Organizations, Higher Education, Self Advocates, Allied Health Providers)



### Quick Links

National Professional Development Center On Autism Spectrum Disorders

AFIRM ASD Learning Modules

National Autism Center

Autism Internet Modules

CAPTAIN Summit Resources

Autism Fact Sheets

English/Spanish

Other Languages

Ask a Specialist - ASD

CAPTAIN Cadre

Regional Plans

CAPTAIN Leadership

Act Early

Effective Early Childhood Transitions Guide

ASD Toddler Initiative

ADEPT

### CAPTAIN Partners

Diagnostic Centers, CDE

Family Resource Centers Network of California

Center for Excellence for Developmental Disabilities at UC Davis MIND Institute

USC University Center for Excellence in Developmental Disabilities (USC UCEDD)

California Department of Developmental Services

**CAPTAIN Summits**  
[by invitation only]

North: October 15-16, 2015  
South: November 9-10, 2015



Use these Quick Links on the CAPTAIN website to access these EBP resources!



# 2 IMPORTANT ASD EBP RESOURCES

## National Professional Development Center (NPDC)

1. 27 Evidence Based Practices
2. AFIRM
3. CSESA
4. EBPs for Young Children

**Released  
March 2014**

<http://autismpdc.fpg.unc.edu>  
<http://afirm.fpg.unc.edu>  
<http://csesa.fpg.unc.edu>  
<http://asdtoddler.fpg.unc.edu>  
[www.captain.ca.gov](http://www.captain.ca.gov)

## National Autism Center (NAC)



1. National Standards Project Report-Phase 2  
NSP2

**Released  
April 2015**

[www.nationalautismcenter.org](http://www.nationalautismcenter.org)  
[www.captain.ca.gov](http://www.captain.ca.gov)

Released April 2, 2015



National Standards Project, Phase 2  
Now Available! Click Here



- Based on research conducted in the field from 2007 to February 2012
- Provides an update to the previously published summary of empirical treatment literature (2009)
- 351 articles (ages 0-22) and 27 articles (ages 22+) included studies if the interventions could be implemented in or by school systems, early intervention, home, hospital, vocational. and/or community-based programs or in clinic settings

[www.nationalautismcenter.org](http://www.nationalautismcenter.org)

# Strength of Evidence Classification System

## **Established:**

Sufficient evidence is available to confidently determine that an intervention produces favorable outcomes for individuals on the autism spectrum. That is, these interventions are established as effective.

## **Emerging:**

Although one or more studies suggest that an intervention produces favorable outcomes for individuals with ASD, additional high quality studies must consistently show this outcome before we can draw firm conclusions about intervention effectiveness.

## **Unestablished:**

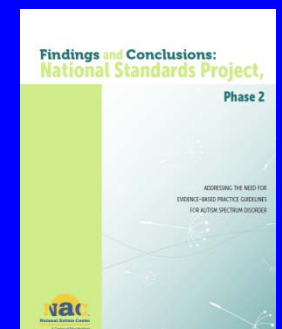
There is little or no evidence to allow us to draw firm conclusions about intervention effectiveness with individuals with ASD. Additional research may show the intervention to be effective, ineffective, or harmful.

# The National Standards Project-Phase 2 (NSP2)



## Overall Findings for Individuals Under Age 22

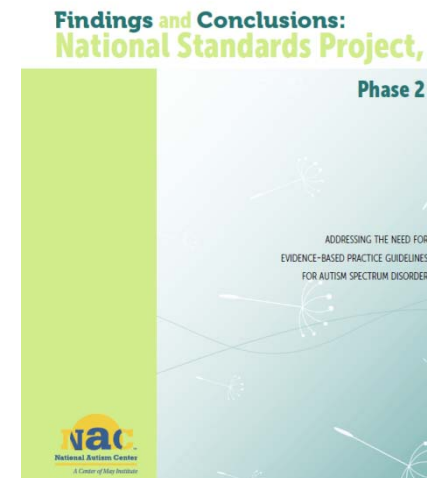
- 14 Established Interventions
- 18 Emerging Interventions
- 13 Unestablished Interventions



The following interventions have been identified as falling into the Established level of evidence:

- Behavioral Interventions
- Cognitive Behavioral Intervention Package
- Comprehensive Behavioral Treatment for Young Children
- Language Training (Production)
- Modeling
- Natural Teaching Strategies
- Parent Training
- Peer Training Package
- Pivotal Response Training
- Schedules
- Scripting
- Self-Management
- Social Skills Package
- Story-based Intervention

**14 ESTABLISHED  
INTERVENTIONS  
(for individuals under age 22)**



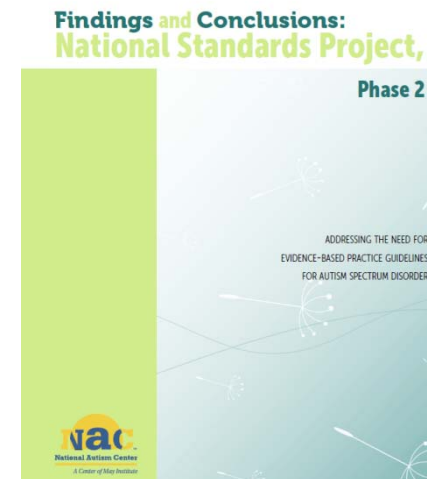
Emerging Interventions are those for which one or more studies suggest they may produce favorable outcomes. However, before we can be fully confident that the interventions are effective, additional high quality studies are needed that consistently show these interventions to be effective for individuals with ASD. Based on the available evidence, we are not yet in a position to rule out the possibility that Emerging Interventions are, in fact, not effective.

A large number of studies fall into the Emerging level of evidence. We believe scientists should find fertile ground for further research in these areas.

The following interventions have been identified as falling into the Emerging level of evidence:

- Augmentative and Alternative Communication Devices
- Developmental Relationship-based Treatment
- Exercise
- Exposure Package
- Functional Communication Training
- Imitation-based Intervention
- Initiation Training
- Language Training (Production & Understanding)
- Massage Therapy
- Multi-component Package
- Music Therapy
- Picture Exchange Communication System
- Reductive Package
- Sign Instruction
- Social Communication Intervention
- Structured Teaching
- Technology-based Intervention
- Theory of Mind Training

**18 EMERGING INTERVENTIONS**  
**(for individuals under age 22)**

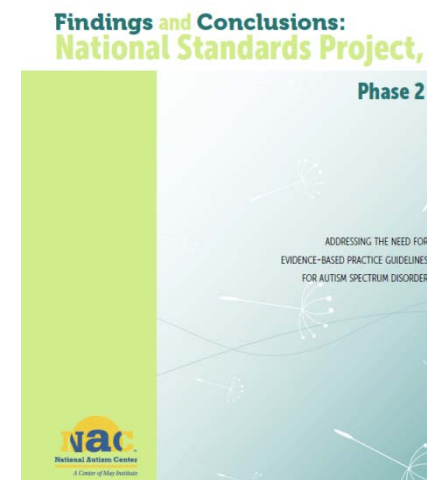


Unestablished Interventions are those for which there is little or no evidence in the scientific literature that allows us to draw firm conclusions about their effectiveness with individuals with ASD. There is no reason to assume these interventions are effective. Further, there is no way to rule out the possibility these interventions are ineffective or harmful.

**The following interventions have been identified as falling into the Unestablished level of evidence:**

- Animal-assisted Therapy
- Auditory Integration Training
- Concept Mapping
- DIR/Floor Time
- Facilitated Communication
- Gluten-free/Casein-free diet
- Movement-based Intervention
- SENSE Theatre Intervention
- Sensory Intervention Package
- Shock Therapy
- Social Behavioral Learning Strategy
- Social Cognition Intervention
- Social Thinking Intervention

## **13 UNESTABLISHED INTERVENTIONS (for individuals under age 22)**





## Research Findings for Adults (22+ Years)

### Established Interventions for Adults **Only 1 Established**

The only intervention to be identified as Established for individuals ages 22 years and older is Behavioral Interventions. The Behavioral Intervention category consists of applied behavior analytic interventions to increase adaptive behaviors and decrease challenging behaviors. Examples of specific strategies identified in the 17 articles supporting Behavioral Interventions are provided in the table on the following page.

### Emerging Interventions for Adults

Emerging Interventions are those for which one or more studies suggest they may produce favorable outcomes. However, before we can be fully confident that the interventions are effective, additional high quality studies are needed that consistently show these interventions to be effective for individuals with ASD. Based on the available evidence, we are not yet in a position to rule out the possibility that Emerging Interventions are, in fact, not effective.

The following intervention has been identified as falling into the Emerging level of evidence:

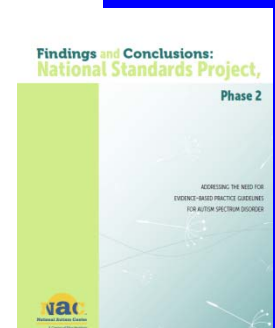
- Vocational Training Package

### Unestablished Interventions for Adults

Unestablished Interventions are those for which there is little or no evidence in the scientific literature that allows us to draw firm conclusions about their effectiveness with individuals with ASD. There is no reason to assume these interventions are effective. Further, there is no way to rule out the possibility these interventions are ineffective or harmful.

The following interventions have been identified as falling into the Unestablished level of evidence:

- Cognitive Behavioral Intervention Package
- Modeling
- Music Therapy
- Sensory Integration Package





# NSP2

## Example of EBP

### Modeling

#### Established Intervention



One of the most effective ways to teach someone what to do is to show him or her how to do it. The goal of modeling is to correctly demonstrate a target behavior to the person learning the new skill, so that person can then imitate the model. Children can learn a great deal from observing the behavior of parents, siblings, peers, and teachers, but they often need to be taught what behaviors should be imitated.

#### Basic Facts



Number of articles reviewed:

NSP1 = 51 NSP2 = 28

Effective ages: Children and adolescents 3-18 years

Skills increased:

- higher cognitive functions (NSP1)
- academic (NSP2)
- communication, interpersonal, personal responsibility, and play (NSP1&2)

Behaviors decreased:

- problem behaviors (NSP1)
- sensory or emotional regulation (NSP1)

#### Detailed Description



There are two types of modeling—live and video modeling.

Live modeling occurs when a person demonstrates the target behavior in the presence of the child with autism spectrum disorder (ASD). When providing live modeling:

- Clearly outline, in writing, the target behavior to model.
- Ensure all individuals modeling the target behavior are doing so in a consistent manner. It may be helpful for parents/caregivers/therapists to practice together to make certain each person provides the same model.
- Obtain the child's attention prior to modeling the target behavior.
- Develop a plan to fade or stop the use of modeling to encourage the child to independently display the target behavior.

Video modeling occurs when you pre-record a person demonstrating the target behavior. Video modeling can be a great option for children/adolescents with an affinity for television shows, movies, or interest in seeing themselves on a monitor (i.e., television screen, computer monitor, video recorder monitor). Some children/adolescents may enjoy assisting in the production of the video.

## NSP2

### Recommendations For Intervention Selection

#### Established Interventions have sufficient evidence of effectiveness

“We recommend the decision-making team give serious consideration to these interventions because:

- these interventions have produced beneficial effects for individuals involved in the research studies published in the scientific literature
- access to interventions that work can be expected to produce more positive long-term outcomes
- there is no evidence of harmful effects

**However, it should not be assumed that these interventions will universally produce favorable outcomes for all individuals with ASD”**

## NSP2

# Recommendations For Intervention Selection

### EMERGING INTERVENTIONS

“We generally do not recommend beginning with these interventions

However, Emerging Interventions should be considered promising and warrant serious consideration if Established Interventions are deemed inappropriate by the decision-making team, or were unsuccessful in producing positive outcomes”

## NSP2

# Recommendations For Intervention Selection

## UNESTABLISHED INTERVENTIONS

“Unestablished Interventions either have no research support or the research that has been conducted does not allow us to draw firm conclusions about intervention effectiveness for individuals with ASD.

When this is the case, decision-makers simply do not know if this intervention is effective, ineffective, or harmful because researchers have not conducted any or enough high-quality research.

Given how little is known about these interventions, **we would recommend considering these interventions only after additional research has been conducted** and this research reveals favorable outcomes for individuals with ASD.”

# CAPTAIN Recommends

- Use 27 EBPs from NPDC
- Use 14 Established Interventions for Ages 0-22 from NAC
- Use 1 Established Intervention for Ages 22+ from NAC



# 2 IMPORTANT ASD EBP RESOURCES

## National Professional Development Center (NPDC)

1. 27 Evidence Based Practices
2. AFIRM
3. CSESA
4. EBPs for Young Children

**Released  
March 2014**

<http://autismpdc.fpg.unc.edu>  
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[www.captain.ca.gov](http://www.captain.ca.gov)

## National Autism Center (NAC)

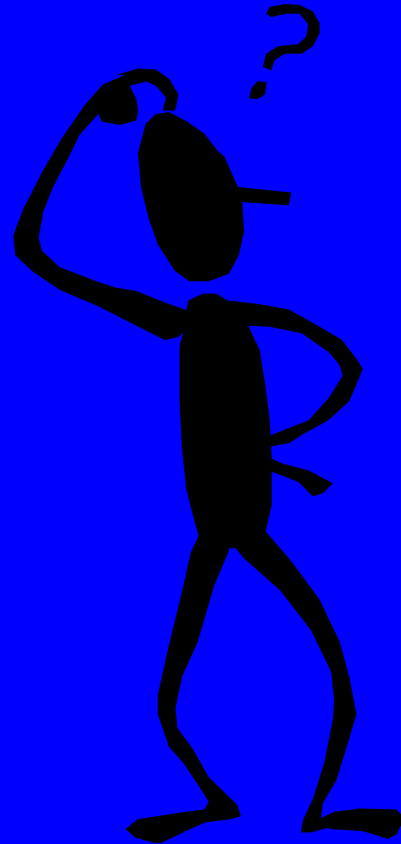
1. National Standards Project Report-Phase 2  
NSP2

**Released  
April 2015**

[www.nationalautismcenter.org](http://www.nationalautismcenter.org)  
[www.captain.ca.gov](http://www.captain.ca.gov)



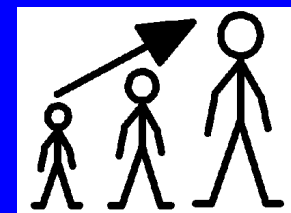
Why Are these EBP resources so important?





## Knowing of these EBPs:

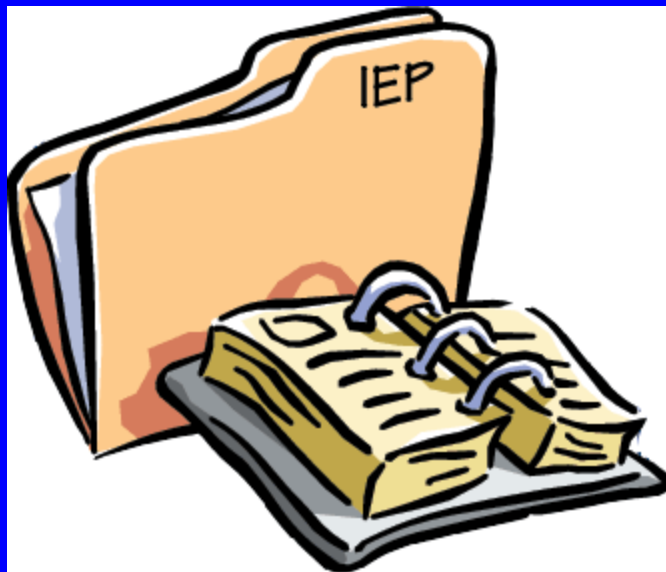
- helps us know which treatments have **evidence of effectiveness** and which treatments do not
- allows us to make **informed decisions** when we select treatments
- provides us with the opportunity to support individuals with ASD in **reaching their full potential**





Implementing EBPs goes right  
along with.....

**The Individuals with Disabilities Education Act**



## IDEA 2004 \* Sec. 300.320

### Definition of Individualized Education Program.....

,,,,,(4) A statement of the special education and related services and supplementary aids and services, **based on peer-reviewed research** to the extent practicable, to be provided to the child, or on behalf of the child, and a statement of the program modifications or supports for school personnel that will be provided to enable the child--

- (i) To advance appropriately toward attaining the annual goals;
- (ii) To be involved in and make progress in the general education curriculum in accordance with paragraph (a)(1) of this section, and to participate in extracurricular and other nonacademic activities; and
- (iii) To be educated and participate with other children with disabilities and nondisabled children in the activities described in this section;.....

# IDEA 2004

## Part C: Infants and Toddlers with Disabilities

### SEC. 635. REQUIREMENTS FOR STATEWIDE SYSTEM

(a) In General.--A statewide system described in section 633 shall include, at a minimum, the following components:

(2) A State policy that is in effect and that ensures that appropriate **early intervention services based on scientifically based research**, to the extent practicable, are available to all infants and toddlers with disabilities and their families, including Indian infants and toddlers with disabilities and their families residing on a reservation geographically located in the State and infants and toddlers with disabilities who are homeless children and their families.

### SEC. 636. INDIVIDUALIZED FAMILY SERVICE PLAN

(d) Content of Plan.--The individualized family service plan shall be in writing and contain--

(4) a statement of specific **early intervention services based on peer-reviewed research**, to the extent practicable, necessary to meet the unique needs of the infant or toddler and the family, including the frequency, intensity, and method of delivering services;

# Every Student Succeeds Act (ESSA) S.1177-290

## (21) **EVIDENCE-BASED.**—

(A) IN GENERAL.—Except as provided in subparagraph (B), the term ‘**evidence-based**’, when used with respect to a State, local educational agency, or school activity, **means an activity, strategy, or intervention that—**

(i) **demonstrates a statistically significant effect on improving student outcomes or other relevant outcomes based on—**

I) **strong evidence** from at least 1 well designed and well-implemented experimental study;

II) **moderate evidence** from at least 1 well designed and well-implemented quasi-experimental study; or

(III) **promising evidence** from at least 1 well designed and well-implemented correlational study with statistical controls for selection bias; or

(ii)(I) demonstrates a rationale **based on high quality research findings** or positive evaluation that such activity, strategy, or intervention is likely to improve student outcomes or other relevant outcomes; and

(II) includes ongoing efforts to examine the effects of such activity, strategy, or intervention.

# Definition of Evidence-based in ESSA

EVIDENCE-BASED.— (A) IN GENERAL.—Except as provided in subparagraph (B), the term 'evidence-based', when used with respect to a State, local educational agency, or school activity, means an activity, strategy, or intervention that—

(i) demonstrates a statistically significant effect on improving student outcomes or other relevant outcomes based on—

(I) strong evidence from at least 1 well-designed and well-implemented experimental study;

(II) moderate evidence from at least 1 well-designed and well-implemented quasi-experimental study; or

(III) promising evidence from at least 1 well-designed and well-implemented correlational study with statistical controls for selection bias; or

(ii)(I) demonstrates a rationale based on high-quality research findings or positive evaluation that such activity, strategy, or intervention is likely to improve student outcomes or other relevant outcomes; and

(II) includes ongoing efforts to examine the effects of such activity, strategy, or intervention.

(B) DEFINITION FOR SPECIFIC ACTIVITIES FUNDED UNDER THIS ACT.—When used with respect to interventions or improvement activities or strategies funded under section 1003, the term 'evidence-based' means a State, local educational agency, or school activity, strategy, or intervention that meets the requirements of subclause (I), (II), or (III) of subparagraph (A)(i).

## CA ED CODE 56345

- (4) A statement of the special education and related services and supplementary aids and services, based on **peer-reviewed research** to the extent practicable, to be provided to the pupil, or on behalf of the pupil, and a statement of the program modifications or supports for school personnel that will be provided to enable the pupil to do the following:
- (A) To advance appropriately toward attaining the annual goals.
  - (B) To be involved in and make progress in the general education curriculum in accordance with paragraph (1) and to participate in extracurricular and other nonacademic activities.
  - (C) To be educated and participate with other individuals with exceptional needs and nondisabled pupils in the activities described in this subdivision.

# Multi-tiered System of Supports (MTSS): A Comprehensive Framework for Implementing the CCSS [www.mydigitalchalkboard.org](http://www.mydigitalchalkboard.org)

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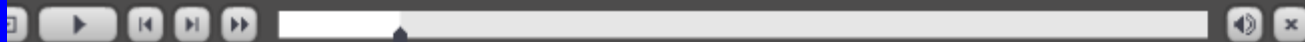
# Multi-tiered System of Supports (MTSS): A Comprehensive Framework for Implementing the CCSS

[www.mydigitalchalkboard.org](http://www.mydigitalchalkboard.org)

## Implementing the CA CCSS Through MTSS

*“ . . . Implementing the Common Core State Standards within a framework of a Multi-Tiered System of Support will help ensure that all students have an evidence-based system of instruction to assist them in achieving success.”*

(Gamm, Elliott, Halbert, et. al., 2012)





# Multi-tiered System of Supports (MTSS): A Comprehensive Framework for Implementing CCSS

[www.mydigitalchalkboard.org](http://www.mydigitalchalkboard.org)

## MTSS Principles and Practices

- Early Intervention
- Multi-tiered model
- Evidence-based supports and practices
- Fluidly driven by data
- Individualized interventions
- Principles of UDL
- Differentiated learning
- Integration of intervention and instructional supports
- Classroom instruction aligned with the CA CCSS
- Strong, predictable, and consistent classroom management structures

([www.kansasmtss.org](http://www.kansasmtss.org))

# Implementing EBPs Aligns With CCSS Instruction and UDL



The principles of **Universal Design for Learning (UDL)** provide a framework for educators to use:

- multiple ways to teach the content
- multiple ways for students to demonstrate knowledge
- multiple ways to engage ALL learners

# Implementing EBPs goes right along with Senate Bill 946.....

Health and Safety Code Section 1374.73 (4)(c)(1)  
Insurance Code Section 10144.51 (4)(c)(1)

"Behavioral health treatment" means professional services and treatment programs, including applied behavior analysis and **evidence-based behavior intervention programs**, that develop or restore, to the maximum extent practicable, the functioning of an individual with pervasive developmental disorder or autism and that meet all of the following criteria..."

# Implementing EBPs goes right along with the Lanterman Act.....

“4686.2. (b) Effective July 1, 2009, notwithstanding any other provision of law or regulation to the contrary, regional centers shall:

(1) Only purchase ABA services or intensive behavioral intervention services that reflect **evidence-based practices**, promote positive social behaviors, and ameliorate behaviors that interfere with learning and social interactions...”

# Implementing EBPs goes right along with Lanterman Act.....

“4686.2. (d) (3) "**Evidence-based practice**" means a decision making process that integrates the best available scientifically rigorous research, clinical expertise, and individual's characteristics. **Evidence-based practice** is an approach to treatment rather than a specific treatment. **Evidence-based practice** promotes the collection, interpretation, integration, and continuous evaluation of valid, important, and applicable individual- or family-reported, clinically-observed, and **research-supported evidence**. The best available **evidence**, matched to consumer circumstances and preferences, is applied to ensure the quality of clinical judgments and facilitates the most cost-effective care. “

# CAPTAIN Recommends

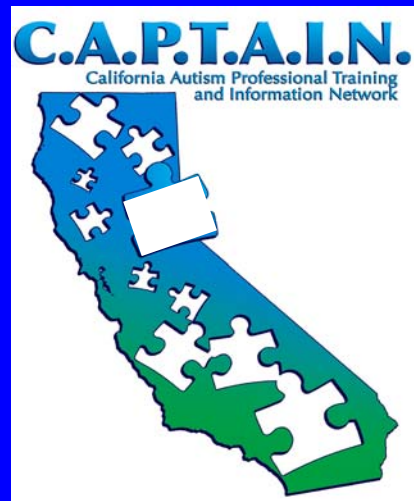
- Use 27 EBPs from NPDC
- Use 14 Established Interventions for Ages 0-22 from NAC
- Use 1 Established Intervention for Ages 22+ from NAC



# CAPTAIN Website

[www.captain.ca.gov](http://www.captain.ca.gov)

You can easily access all these  
EBPs, NPDC tools and EBP  
Resources through the CAPTAIN  
website!







# CAPTAIN

California Autism Professional Training  
and Information Network

**CAPTAIN  
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- National Professional Development Center On Autism Spectrum Disorders
- APPRO ASD Learning Modules
- National Autism Center
- Autism Informed Modules
- CAPTAIN Resources
- ESB Trainings
- SHOWCASE Practitioners
- Autism Fact Sheets
- English/Spanish
- Other Languages
- Ask a Specialist - ASD CAPTAIN Desk
- Regional News
- CAPTAIN Leadership
- Learn the Signs - Act Early (ESQ)
- Effective Early Childhood Transitions Guide
- ASD Toolkit Initiative
- Autism Distance Education Themed Training

**CAPTAIN Partners**

- Diagnostic Centers, CDC
- Family Resource Centers Network of California
- Center for Excellence for Developmental Disabilities at UC Davis SIND Institute
- USC University Center for Excellence in Developmental Disabilities (USC UCEDD)
- California Department of Developmental Services

**Links to  
ASD  
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[autismebp@gmail.com](mailto:autismebp@gmail.com)

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# CAPTAIN

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# Free ASD Course!

## www.captain.ca.gov

<https://www.coursera.org/learn/autism-spectrum-disorder>

The image shows a screenshot of the Coursera website for the course "Autism Spectrum Disorder". At the top, the Coursera logo is on the left, and navigation links for "Catalog", "Search catalog", "Institutions", "Log In", and "Sign Up" are on the right. The course title "Autism Spectrum Disorder" is prominently displayed in the center, with a breadcrumb trail: "Home > Life Sciences > Medicine & Healthcare". Below the title, there is a description of the course: "About this course: Understanding the characteristics of autism spectrum disorder (ASD) and their implications for behavior, learning and the ability to process information is critical for anyone working or interacting with those on the spectrum -- educators, clinicians, counselors, therapists, medical staff, family and employers. This course will give you a fundamental understanding of what ASD is, how it is diagnosed, and how it is treated." A "More" link is visible below the description. The course is created by the University of California, Davis, with the UC Davis logo shown. On the left side, there is a sidebar menu with options: "Overview", "Syllabus", "FAQs", "Pricing", and "Ratings and Reviews". At the bottom of the sidebar, there is a blue "Enroll Now" button with the text "Starts May 23".

**Overview**

Home > Life Sciences > Medicine & Healthcare

## Autism Spectrum Disorder

**About this course:** Understanding the characteristics of autism spectrum disorder (ASD) and their implications for behavior, learning and the ability to process information is critical for anyone working or interacting with those on the spectrum -- educators, clinicians, counselors, therapists, medical staff, family and employers. This course will give you a fundamental understanding of what ASD is, how it is diagnosed, and how it is treated.

▼ More

**Created by:** University of California, Davis

**UC DAVIS**

**Enroll Now**  
Starts May 23



***“Children and families  
cannot benefit from  
evidence-based practices  
that they do not experience.”***

***-Dean Fixsen, NIRN, 2006***



<http://nirn.fpg.unc.edu/>

# Post-Assessment What did you learn?



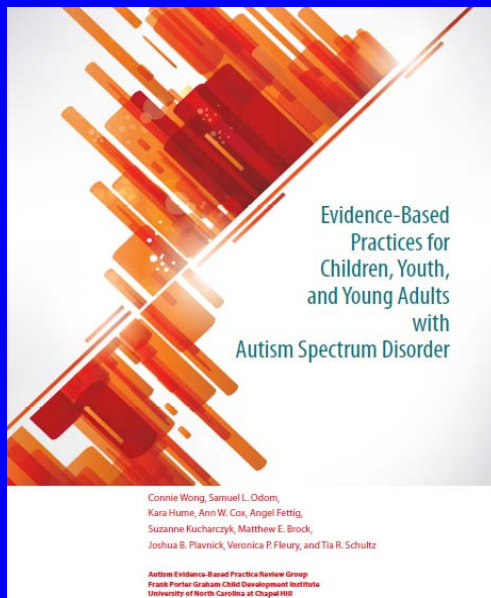


# CAPTAIN

California Autism Professional Training  
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## END

### What are Evidence-Based Practices (EBPs) for ASD?



Ann England, M.A., CCC-SLP-L  
Assistant Director, Diagnostic Center, CDE \* Co-Coordinator CAPTAIN