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 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
Website
Hosted by
DCN!

Links to ASD Resources

CAPTAIN Social Media Links

www.captain.ca.gov

autismebp@gmail.com

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

"AUTISM TREATMENT"?

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**	1. National Standards Project Report-Phase 2 NSP2 **Released April 2015**
http://autismpdc.fpg.unc.edu http://afirm.fpg.unc.edu http://csesa.fpg.unc.edu http://asdtoddler.fpg.unc.edu www.captain.ca.gov	www.nationalautismcenter.org www.captain.ca.gov

CAPTAIN
California Autism Professional Training and Information Network

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

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**
  - 2nd 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
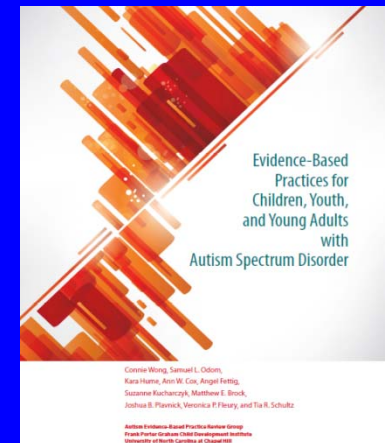
http://autismpdc.fpg.unc.edu/

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

Connie Wong, Samuel L. Odom,
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Autism Evidence-Based Practice Review Group
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University of North Carolina at Chapel Hill

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+

    - **2nd** 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

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**	1. **National Standards Project Report-Phase 2 NSP2** **Released April 2015**
http://autismpdc.fpg.unc.edu http://afirm.fpg.unc.edu http://csesa.fpg.unc.edu http://asdtoddler.fpg.unc.edu www.captain.ca.gov	www.nationalautismcenter.org www.captain.ca.gov

CAPTAIN
California Autism Professional Training
and Information Network
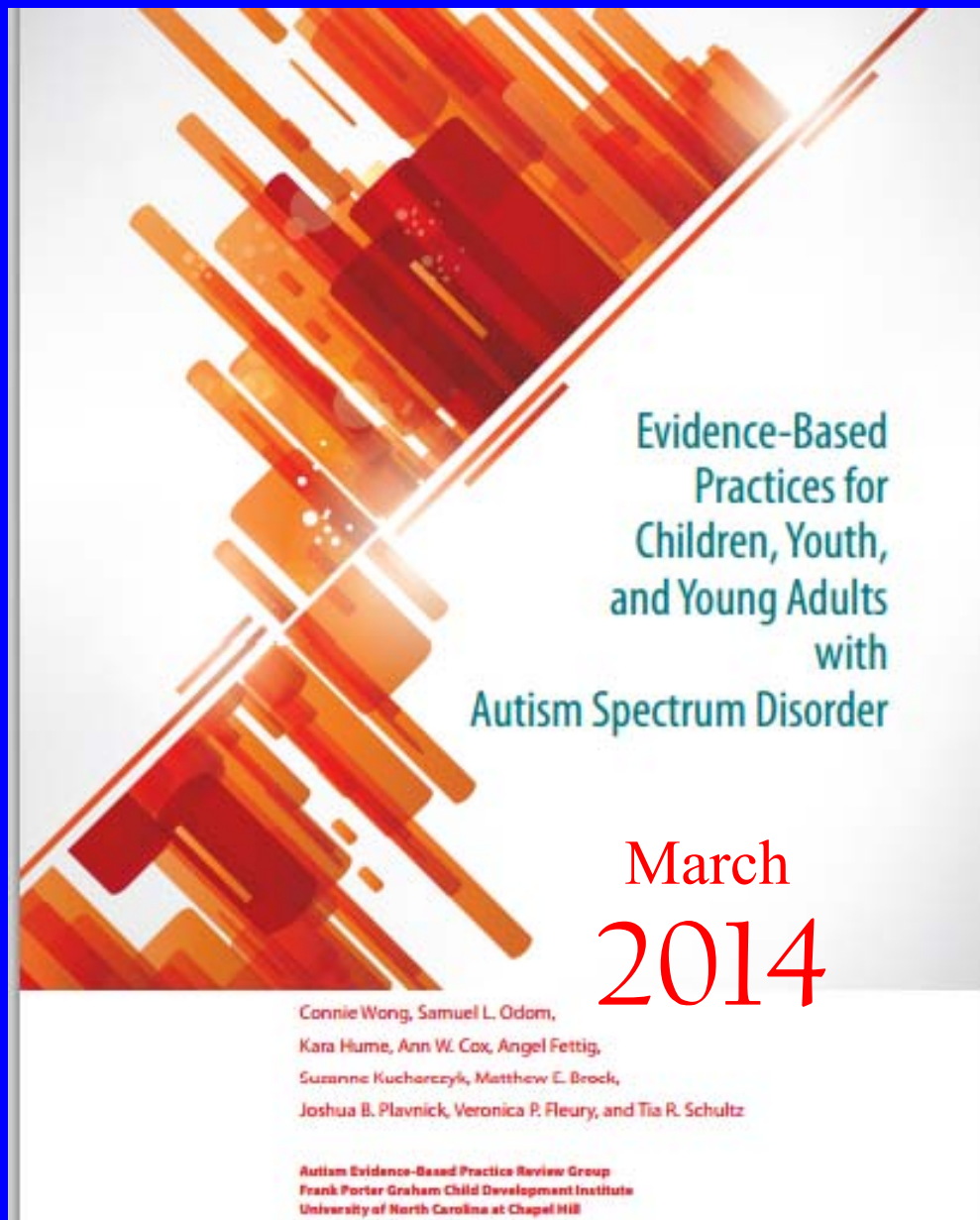
Evidence-Based
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March
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What's in this report?

Definition of EBP (NPDC)

THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON
AUTISM SPECTRUM DISORDERS

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

THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON
AUTISM SPECTRUM DISORDERS

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

23 of 27 EBPs Were Researched In School Based Settings

1. ABI (15 studies)
2. DRO (3 studies)
3. DTT (2 studies)
4. ECE (3 studies)
5. EXT (2 studies)
6. FBA (5 studies)
7. FCT (3 studies)
8. MD (1 study)
9. NI (1 study)
10. PMII (10 studies)
11. PECS (3 studies)

12. PP (9 studies)
13. PRT (4 studies)
14. R+ (8 studies)
15. SM (3 studies)
16. SN (10 studies)
17. SST (5 studies)
18. SPG (2 studies)
19. TA (3 studies)
20. TAII (9 studies)
21. TD (5 studies)
22. VM (9 studies)
23. VS (10 studies)

4 EBPS not yet researched in school settings:
CBI, PII, RIR, SC

What are these 27 EBPs?

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

Evidence-Based
Practices for
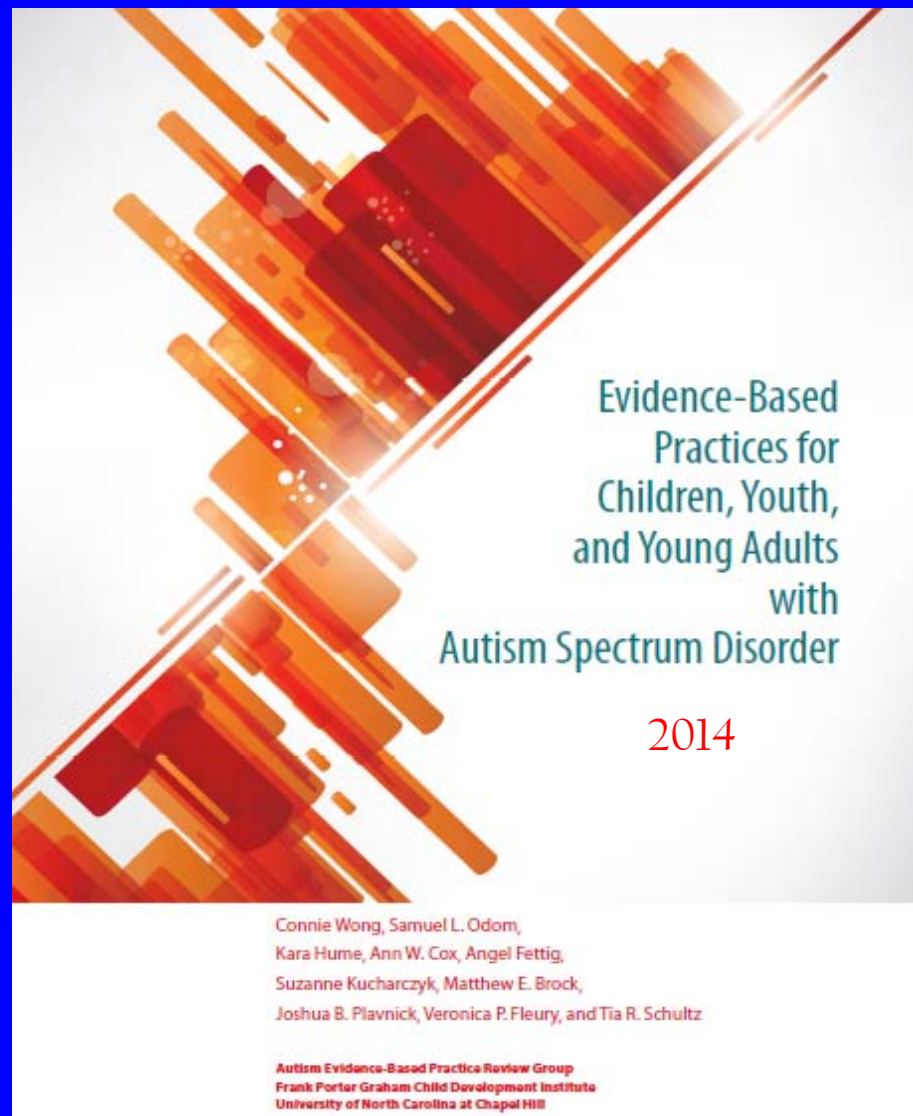Children, Youth,
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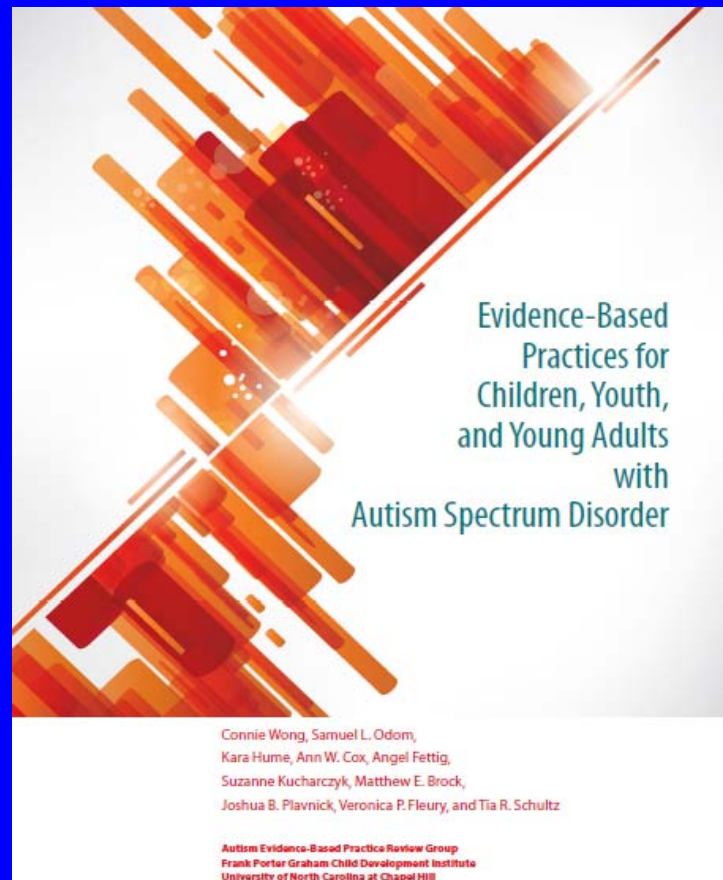
27 Evidence – Based Practices (2014)

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

DEFINITIONS OF 27 EBPs

Table 7. Working Definitions for EBPs

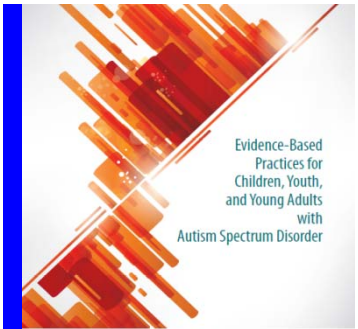| Evidence-Based Practice	Definition	Empirical Support Group (n)	Single Case (n)
Antecedent-based intervention (ABI)	Arrangement of events or circumstances that precede the occurrence of an interfering behavior and designed to lead to the reduction of the behavior.	0	32
Cognitive behavioral intervention (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
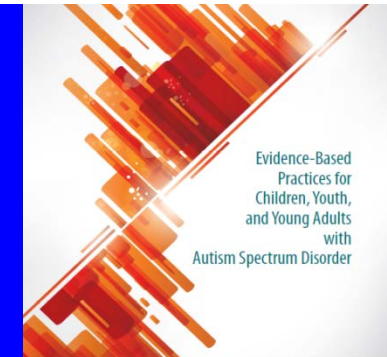
Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder

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DEFINITIONS OF 27 EBPs

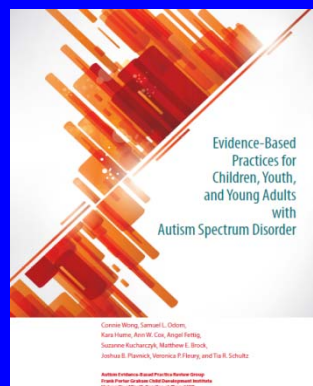| Evidence-Based Practice	Definition	Empirical Support	
		Group (n)	Single Case (n)
Picture Exchange Communication System (PECS)	Learners are initially taught to give a picture of a desired item to a communicative partner in exchange for the desired item. PECS consists of six phases which are: (1) "how" 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

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| Evidence-Based Practice | DEFINITIONS OF 27 EBPs | Empirical Support | |
		Group (n)	Single Case (n)
	Definition		
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

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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**

Evidence Based Practice and Abbreviated Definition

Evidence by Developmental Domain and Age (years)

Color legend: G = green, Y = yellow, B = blue, blank = none

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

Evidence Based Practice and Abbreviated Definition

Evidence Based Practice and Abbreviated Definition	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	0-5	6-14	15-22
Pivotal Response Training (PRT): *Pivotal learning variables guide intervention implemented in settings that build on learner interests and initiative*	G	Y		G	Y								G	Y																						
Prompting (PP): *Verbal, gestural, or physical assistance that supports skill acquisition*	G	Y		G		Y	B	G	Y								G	B	G		B	G		B				G		B			B			
Reinforcement (R+): *A response occurring after a behavior resulting in an increased likelihood of future reoccurrence of the behavior*	G	B	Y	G	B	G	G		B	G		B		Y			Y							B			Y									
Response Interruption/Redirection (RIR): *Use of prompts or distracters during an interfering behavior that diverts attention and reduces the behavior*	G																								G	Y										
Scripting (SC): *A verbal or written model of a skill or situation that is practiced before use in context*	G	B	G	G	B								G																		Y	G				
Self Management (SM): *Instruction on discrimination between appropriate and inappropriate behaviors and accurate self-monitoring and rewarding of behaviors*		Y						B						Y						B												B				
Social Narratives (SN): *Descriptions of social situations with examples of appropriate responding*	G	Y						Y												G			Y													
Social Skills Training (SST): *Direct instruction on social skills with rehearsal and feedback to increase positive peer interaction.*	G	B	G		G								G	B																						
Structured Play Group (SPG): *Adult lead small group activities that include typically developing peers and use prompting to support performance*															Y		Y																			
Task Analysis (TA): *The process of breaking a skill into small steps that are systematically chained together*		Y	G						Y																	Y			Y							
Technology-Aided Instruction and Intervention (TAII): *Intervention using technology as a critical feature*	G	B	G	G	B		Y	G	B	G	B					G	Y		G	B		G	B		G	B		G	B		Y	B				
Time Delay (TD): *Delaying a prompt during a practice opportunity in order to fade the use of prompts*	G	Y				B	G	Y						Y			G						G													
Video Modeling (VM): *A video recording of a targeted skill that is viewed to assist in learning*	G	Y	B						G			B	G																B		Y	G				
Visual Support (VS): *Visual display that supports independent skill use.*	G	Y	B	G	Y		G	Y					G			G			G									Y			Y					

National Clearinghouse on Autism Evidence and Practice

- National Clearinghouse on Autism Evidence and Practice (NCAEP) was formed with the purpose of providing a continuation of the NPDC critical reviews

- NCAEP will review research studies published in the last five years (2012-2017) which examine the impact of behavioral, educational, clinical and developmental practices and service models used with individuals on the ASD from birth through age 21
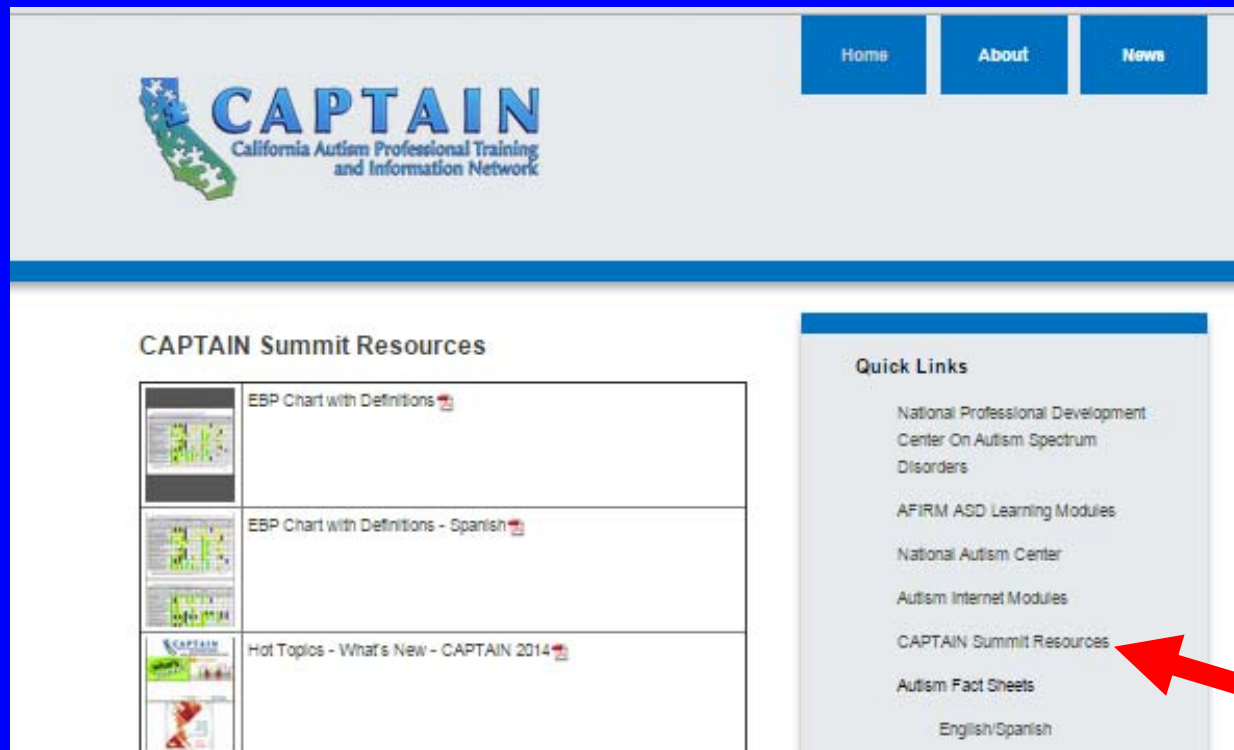
Hopes to publish a report in 2018

National Clearinghouse on Autism Evidence and Practice

Will Review Research 2012-2017

The National Clearinghouse on
Autism Evidence & Practice

NCAEP • BRIDGING PRACTICE AND SCIENCE

Give Now   Search

Home   About NCAEP ▾   Research and Resources   Our Team

BRIDGING PRACTICE AND SCIENCE

The National Clearinghouse on Autism Evidence and Practice (NCAEP) is conducting a systematic review of the current intervention literature targeting individuals on the autism spectrum. NCAEP is a continuation of the evidence review that was completed by the National Professional Development Center on Autism Spectrum Disorders (NPDC) which included research published through 2011. We will review research studies published in the last five years (2012-2017) which examine the impact of behavioral, educational, clinical and developmental practices and service models used with individuals on the autism spectrum from birth through age 21.

Learn More

http://ncaep.fpg.unc.edu/
www.captain.ca.gov

27 EBPs Matrix
Available on the CAPTAIN Website
English and Spanish and German!
www.captain.ca.gov

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

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

THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON
AUTISM SPECTRUM DISORDERS

FREE High Quality Training:
<u>A</u>utism <u>F</u>ocused <u>I</u>ntervention <u>R</u>esources and <u>M</u>odules (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

FREE

There's a Learning Module for each of the 27 EBPs

AFIRM — Autism Focused Intervention Resources and Modules

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: Professional Development Certificate

BCBA (Approved BACB Type 2 CEUs)
SLP (ASHA CCCs)

The National Professional Development Center on ASD
Awards this
Certificate of Completion to
Jane Smith
For completing the AFIRM Module
Time Delay
January 8, 2016
Time to complete: 2 hours

Samuel L. Odom, Ph.D.
Director, FPG Child Development Institute

Ann W. Cox, Ph.D.
Director, NPDC and AFIRM Module Projects

Certificate Track

- Case examples demonstrating the use of the EBP

- Multimedia presentation

- Pre-test required

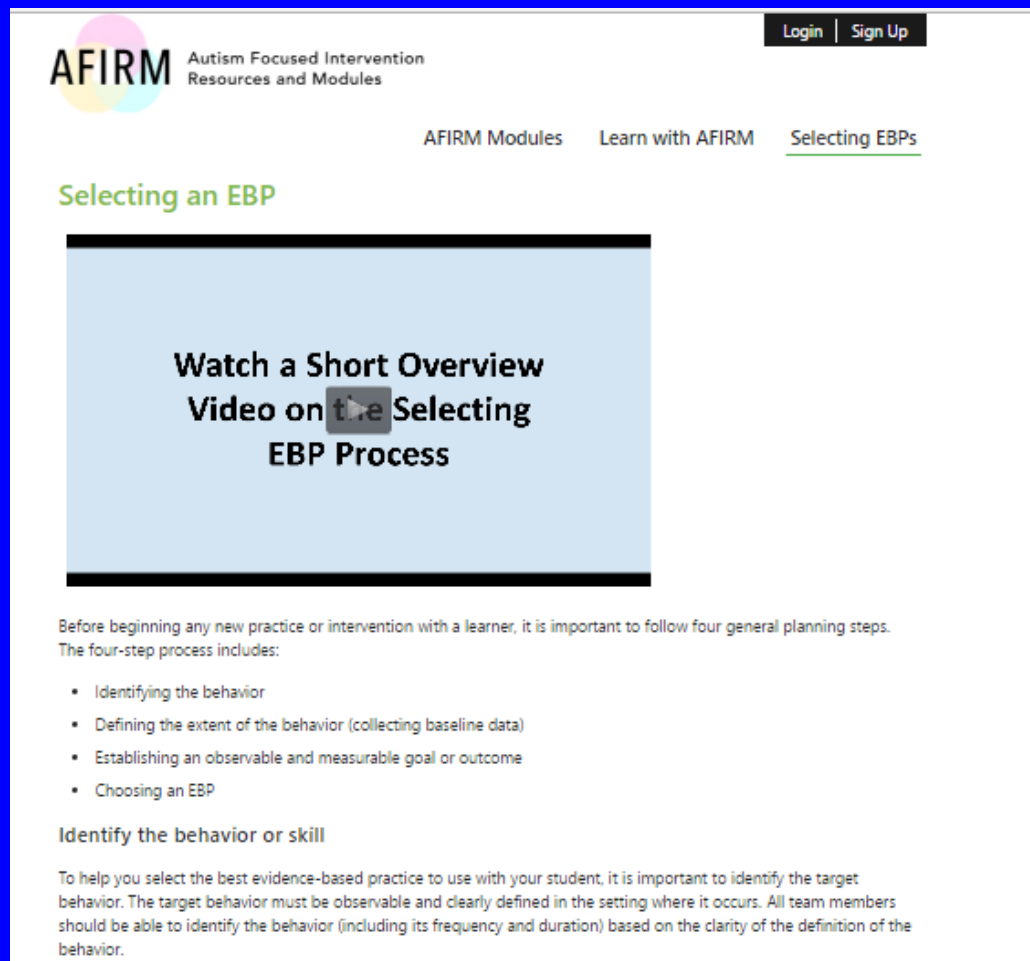- Post-assessment required

- Evaluation required

Non-Certificate Track

Case examples demonstrating the use of the EBP

- Multimedia presentation

- Pre-test required

- Post-assessment optional

- Evaluation optional

Helpful AFIRM Learning Module!
How to Select an EBP
http://afirm.fpg.unc.edu/selecting-ebp

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

Implementation Checklist Ensures Fidelity

- Used to assist with planning for EBP use

- Helps implementers self reflect on fidelity of use

- Helps coaches give objective feedback

- Helps to prevent drift

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

	Observation	1	2	3	4
	Date				
	Observer's Initials				

Step 1: Planning

		1	2	3	4
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				

Step 2: Using

		1	2	3	4
2.1	Teach learner how to use visual support				
	Boundaries:				
☐	Introduce boundary to learner				
☐	Use modeling to teach learner to stay within boundary				
☐	Use reinforcement to encourage learner to stay within boundary				
☐	Use corrective feedback when learner does not stay within boundary				
	Cues:				
☐	Show learner visual cue				
☐	Stand behind learner when prompting use of visual cue				
☐	Use concise, relevant words/terms while teaching visual cue				
☐	Assist learner in participating in activity/event with visual cue				
	Schedules				
☐	Stand behind learner when prompting use of visual schedule				
☐	Place schedule information in learner's hand				
☐	Use concise, relevant words/terms				
☐	Assist learner in getting to designated activity/location, and prompt				
☐	Ensure learner remains in scheduled location until prompted to use				
☐	Repeat steps until learner is able to complete the sequence independently across activities/locations				
2.3	Use visual supports consistently and across settings				

Step 3: Monitoring

		1	2	3	4
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				

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.

AFIRM Autism Focused Intervention Resources and Modules

SELF LEARNING MODULES FOR TODDLERS!
NPDC-ASD Early Start Website
http://asdtoddler.fpg.unc.edu

Resources for Older Individuals with ASD

www.captain.ca.gov
http://csesa.fpg.unc.edu

Presentation 1:

Characteristics and Practices for Challenging Behavior

*NOTE: If you have having difficulty with the video links embedded as part of the presentation, link to the v
on this page: http://csesa.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 vide
(slide 17).

Presentation 2:

Strategies for Classroom Success and Effective Use of Teacher Supports

CAPTAIN
California Autism Professional Training and Information Network

Home | About | News

www.captain.ca.gov

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)
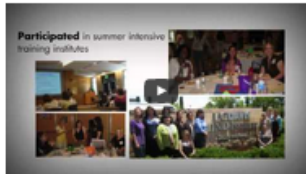
Quick Links

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)	National Autism Center (NAC)
1. 27 Evidence Based Practices 2. AFIRM 3. CSESA 4. EBPs for Young Children **Released March 2014**	1. National Standards Project Report-Phase 2 NSP2 **Released April 2015**
http://autismpdc.fpg.unc.edu http://afirm.fpg.unc.edu http://csesa.fpg.unc.edu http://asdtoddler.fpg.unc.edu www.captain.ca.gov	www.nationalautismcenter.org www.captain.ca.gov

CAPTAIN
California Autism Professional Training
and Information Network

Released April 2, 2015

National Standards Project, Phase 2

Now Available! Click Here

Findings and Conclusions: National Standards Project

Phase

- 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

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)

National Autism Center

Overall Findings for Individuals Under Age 22

- **14   Established Interventions**

- 18 Emerging Interventions

- 13 Unestablished Interventions

Findings and Conclusions:
National Standards Project,
Phase 2
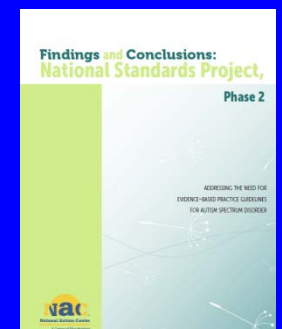
The following interventions have been identified as falling into the Established level of evidence:

◖ 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)
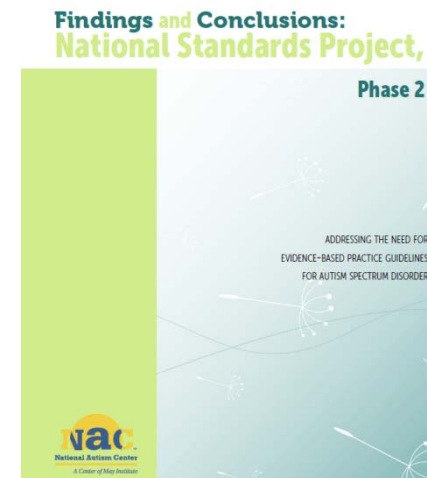
Findings and Conclusions:
National Standards Project,
Phase 2

ADDRESSING THE NEED FOR
EVIDENCE-BASED PRACTICE GUIDELINES
FOR AUTISM SPECTRUM DISORDER

nac
National Autism Center
A Center of May Institute

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)**
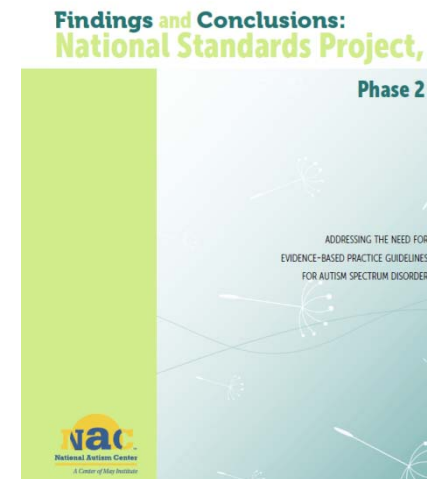
**Findings and Conclusions:
National Standards Project,**

Phase 2

ADDRESSING THE NEED FOR
EVIDENCE-BASED PRACTICE GUIDELINES
FOR AUTISM SPECTRUM DISORDER

nac
National Autism Center
A Center of May Institute

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)

Findings and Conclusions: National Standards Project, Phase 2

ADDRESSING THE NEED FOR EVIDENCE-BASED PRACTICE GUIDELINES FOR AUTISM SPECTRUM DISORDER

nac National Autism Center
A Center of May Institute

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
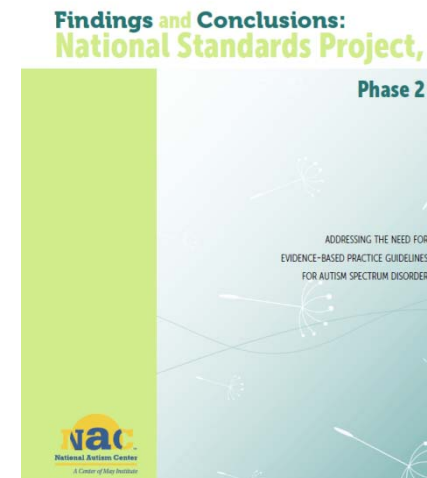
Unestablished Interventions for Adults

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

Findings and Conclusions:
National Standards Project,
Phase 2

ADDRESSING THE NEED FOR
EVIDENCE-BASED PRACTICE GUIDELINES
FOR AUTISM SPECTRUM DISORDER
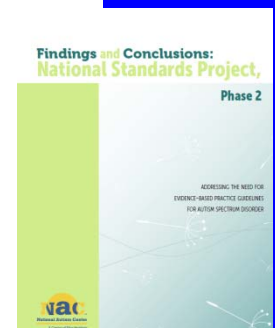
NSP2
Example of EBP

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

C.A.P.T.A.I.N.
California Autism Professional Training
and Information Network

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**	1. **National Standards Project Report-Phase 2 NSP2** **Released April 2015**
http://autismpdc.fpg.unc.edu http://afirm.fpg.unc.edu http://csesa.fpg.unc.edu http://asdtoddler.fpg.unc.edu www.captain.ca.gov	www.nationalautismcenter.org www.captain.ca.gov

CAPTAIN
California Autism Professional Training
and Information Network

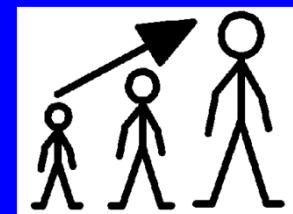# Why Are these EBP resources so important?
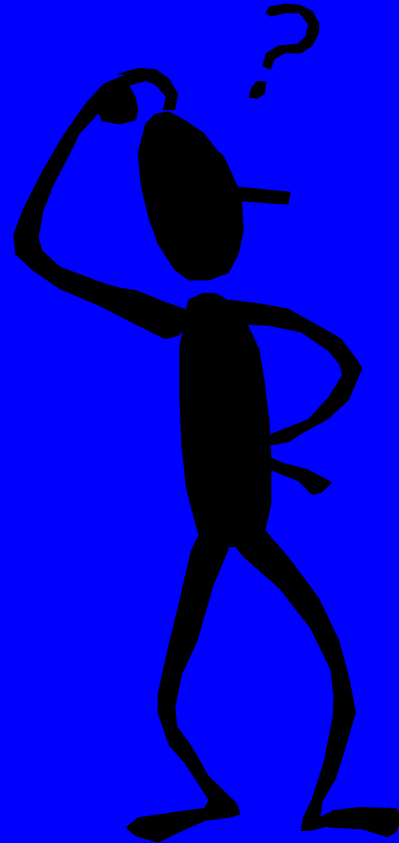
Knowing of these EBPs:

– 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)
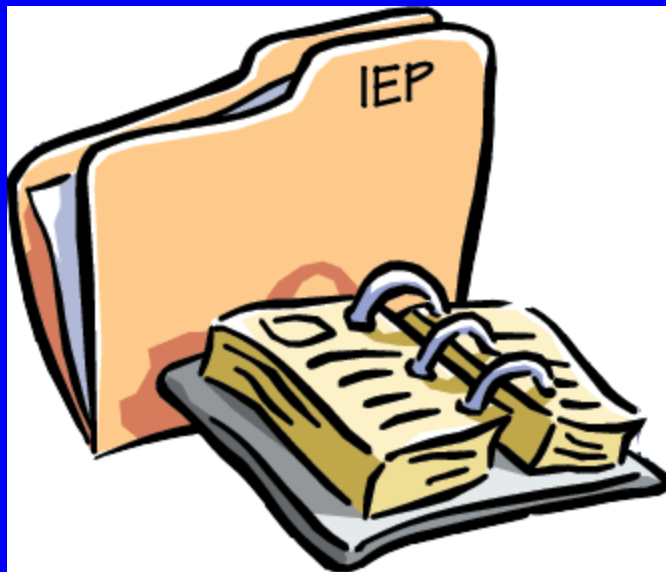
IDEA 2004 * Sec. 300.320
Definition of Individualized Education Program……

,,,,,(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.

Implementing EBPs goes right along with CA 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 CA 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 CA 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. "

Even ASHA!
(American Speech Language Hearing Association)

AMERICAN
SPEECH-LANGUAGE-
HEARING
ASSOCIATION

CAREERS | CERTIFICATION | PUBLICATIONS | EVENTS | ADVOCACY | CONTINUING EDUCA

Position Statement

Evidence-Based Practice in Communication Disorders

Joint Coordinating Committee on Evidence-Based Practice

About this Document

This position statement was developed by the American Speech-Language-Hearing Association (ASHA) Joint Coordinating Committee on Evidence-Based Practice. Members of the committee included Randall R. Robey (chair); Kenn Apel; Christine A. Dollaghan; Wendy Ellmo; Nancy E. Hall; Thomas M. Helfer; Mary Pat Moeller; Travis T. Threats; Celia R. Hooper, 2003–2005 vice president for professional practices in speech-language pathology; Raymond D. Kent, 2004–2006 vice president for research and technology; Janet Brown (ex officio); and Brenda L. Lonsbury-Martin (ASHA staff consultant).

This position statement is an official policy document of the American Speech-Language-Hearing Association (ASHA).

It is the position of the American Speech-Language-Hearing Association that audiologists and speech-language pathologists incorporate the principles of evidence-based practice in clinical decision making to provide high quality clinical care. The term *evidence-based practice* refers to an approach in which current, high-quality research evidence is integrated with practitioner expertise and client preferences and values into the process of making clinical decisions.

How Does CAPTAIN Align with All of These Initiatives?
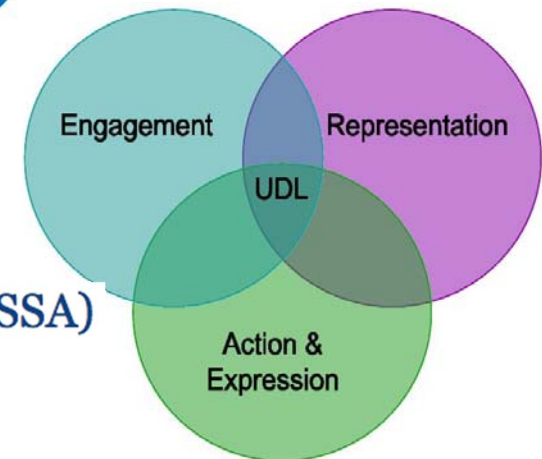
Aligning CAPTAIN with MTSS

California's Multi-Tiered System of Support is an integrated, comprehensive framework that aligns academic, behavioral, and social-emotional learning in a fully integrated system of support for the benefit of all students.
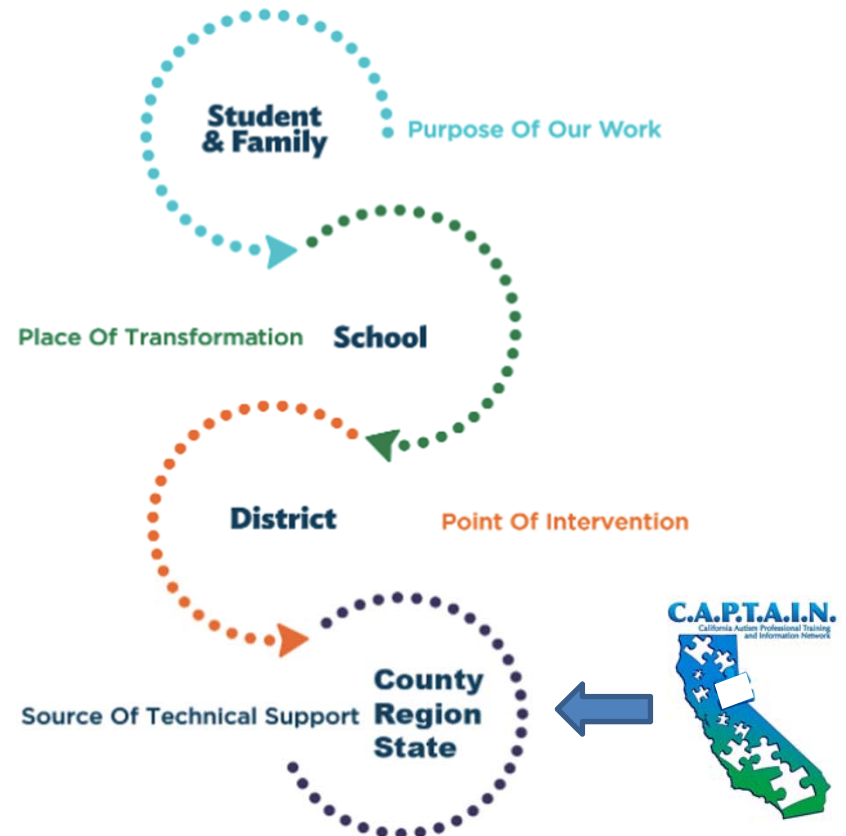
Implementing EBPs Aligns With CCSS Instruction and UDL

NATIONAL CENTER ON UNIVERSAL DESIGN *for* LEARNING

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**

Aligning with UDL

INFOGRAPHIC ON CAPTAIN WEBSITE

www.captain.ca.gov

Using Universal Design for Learning (UDL) Guidelines & Evidence Based Practices for Autism

CAPTAIN
California Autism Professional Training and Information Network

Why?

- There are 104,573 students with ASD in CA Public Schools and that number is steadily growing (CDE, 2017)
- More than half of students with ASD have cognition in the average range (CDC, 2016)
- Students with ASD can be supported in accessing the General Education Curriculum and the CA State Standards with the use of Universal Design for Learning (UDL) and Evidence Based Practices (EBPs) for Autism

EBPs for ASD in the UDL Guidelines:

Flexibility in Engagement
- Reinforcement
- Antecedent Based Intervention
- Self Management

Flexibility in Expression
- Visual Support
- Technology-Aided Instruction
- PECS/AAC

Flexibility in Presentation
- Visual Support
- Technology-Aided Instruction
- Video Modeling
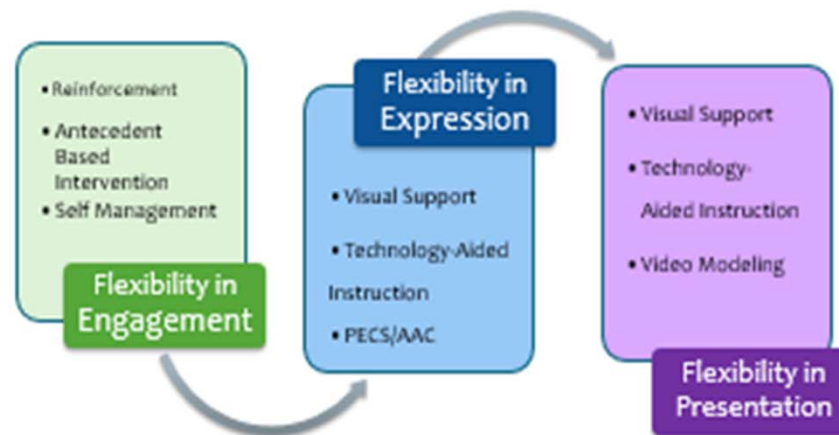
To learn more about the EBPs for Autism visit: www.captain.ca.gov or participate in the free online learning modules at: http://afirm.fpg.unc.edu
Find resources and learn more about UDL through CAST: http://www.cast.org

Kirsten Yeates
Leslie Comstock
Ann England
Patty Schetter

Aligning with PBIS

(Evidence Based Practices for Behavior)

INFOGRAPHIC ON CAPTAIN WEBSITE

www.captain.ca.gov

EBPs for Behavior*	EBPs for ASD*
Effectively design the physical environment of the classroom; maximize structure in classroom.	✓ Antecedent Based Interventions ✓ Visual Supports
Develop and teach predictable classroom routines Post, teach, review, monitor, and reinforce a small number of positively stated expectations.	✓ Visual Supports ✓ Task Analysis ✓ Reinforcement
Use active supervision and proximity. Prompt or remind students of expected behavior	✓ Antecedent Based Interventions ✓ Prompting
Establish a continuum of strategies to acknowledge appropriate behavior.	✓ Reinforcement
Make the problem behavior irrelevant with anticipation and reminders.	✓ Antecedent Based Interventions ✓ Self-Management ✓ Exercise ✓ Cognitive Behavior Intervention
Establish a continuum of strategies to respond to inappropriate behavior.	✓ Differential Reinforcement of Alternative, Incompatible or Other Behavior ✓ Response Interruption/Redirection ✓ Extinction
Help student learn appropriate behaviors	✓ Social Skills Training ✓ Structured Play Group ✓ Functional Communication Training ✓ Discrete Trial Training ✓ Modeling ✓ PECS ✓ Pivotal Response Training ✓ Scripting ✓ Social Narratives ✓ Video Modeling ✓ Parent-Implemented Intervention
Determine the function of the behavior to select a FERB (Functional Equivalent Replacement Behavior)	✓ Functional Behavior Assessment ✓ Functional Communication Training
Expectations and behavioral skills are taught and recognized in the natural context	✓ Naturalistic Instruction ✓ Pivotal Response Training
Provide a range of evidence based practices that promote active engagement in the classroom	✓ Technology-Aided Instruction and Intervention ✓ Peer-Mediated Instruction and Intervention ✓ Antecedent Based Interventions (e.g., Special Interests)
www.captain.ca.gov	England/Schetter

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

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

CAPTAIN Website Hosted by DCN!

Links to ASD Resources

CAPTAIN Social Media Links

www.captain.ca.gov

autismebp@gmail.com

STAY CONNECTED and UP-TO-DATE!

www.captain.ca.gov

Free ASD Course!
www.captain.ca.gov

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

"*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?

END

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

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