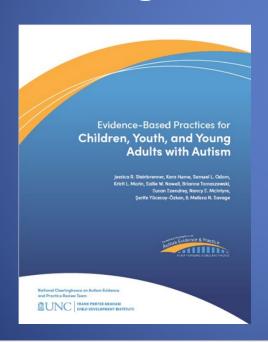




Understanding and Selecting EBPs for Autism





AFIRM Autism Focused Intervention Resources and Modules









What is CAPTAIN?

The <u>California Autism Professional Training And</u>
<u>Information Network (CAPTAIN)</u> is an interagency network developed to support the understanding and use of evidence based practices (EBPs) for individuals with Autism across the state of California.





CAPTAIN Vision

Develop a Statewide Training and Technical Assistance Network with a focus on **Evidence-Based Practices** for individuals with Autism inclusive of stakeholder agencies who will disseminate information at the Local Level





CAPTAIN Goals

Goal 1: Increase knowledge about Autism and EBPs through <u>systematic dissemination</u> of information

Goal 2: Increase implementation and fidelity of EBPs in schools and communities

Goal 3: Increase interagency collaborations to leverage resources and standardize a process for using EBPs













CAPTAIN



@CAPTAIN_EBPS







CAPTAIN_EBPS

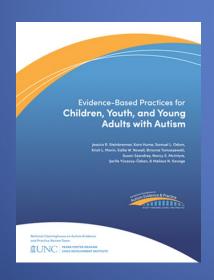


www.captain.ca.gov captain@marinschools.org





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









Levels of Professional Development to Reach Implementation







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

"AUTISM TREATMENT"?









autism treatment







Images



Videos

: More

About 317,000,000 results (0.84 seconds)

What are the treatments for autism?

RESULTS FOR AUTISM TREATMENT ON **AUGUST 22, 2022** 317, 000,000 !!!!!!!!





MYRIAD OF TREATMENTS FOR AUTISM

- Treatments for Autism are more diverse than any other known disability
- Treatment claims range from amelioration to recovery
- Many interventions with no scientific evidence have been recommended for individuals with Autism





Why should we know about these EBPs?





Allows us to make informed decisions when we select treatments

Provides us with the opportunity to support autistic individuals in reaching their full potential





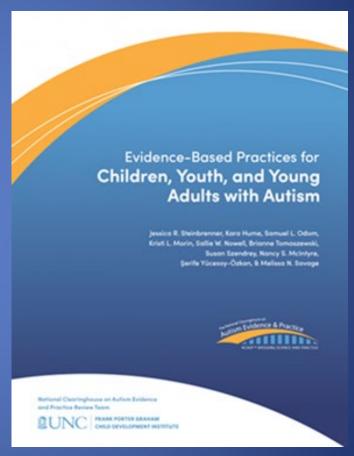


April 2020 Report

National Clearinghouse on Autism Evidence and Practice (NCAEP)

NCAEP updated the previous NPDC report (Wong et al. 2014) and synthesizes intervention research published between 1990 and 2017

"The findings from systematic reviews provide the basis for translation procedures described in the research literature into understandable information that teachers or other practitioners can use."

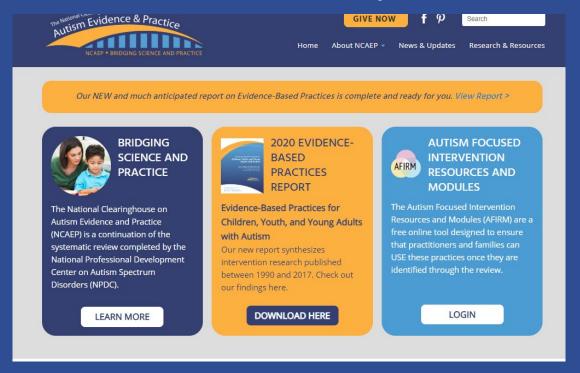




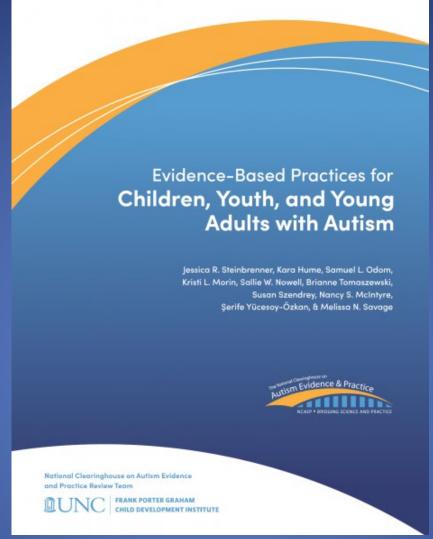


National Clearinghouse on Autism Evidence and Practice

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



https://ncaep.fpg.unc.edu/home www.captain.ca.gov



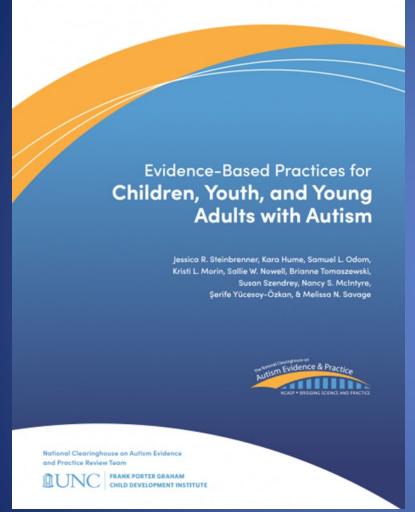
Released APRIL 2020

https://ncaep.fpg.unc.edu/





What's in this report?



Citation: Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yücesoy-Özkan, S., & Savage, M. N. (2020). Evidence-based practices for children, youth, and young adults with Autism. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team.





Definition of EBP (NCAEP)

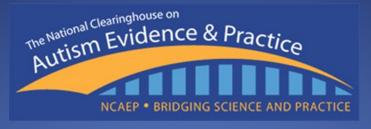


NCAEP definition of an EBP:

"Focused intervention practices that have evidence of efficacy in promoting positive outcomes for learners with Autism."







Criteria for Qualification of an EBP

2+ group design studies

Two high quality group design studies conducted by at least two different researchers or research groups

OR

2+

5+ single case design studies

Five high quality single case design studies conducted by three different investigators or research groups and having a total of at least 20 participants across studies

OR

5+

Combination of evidence

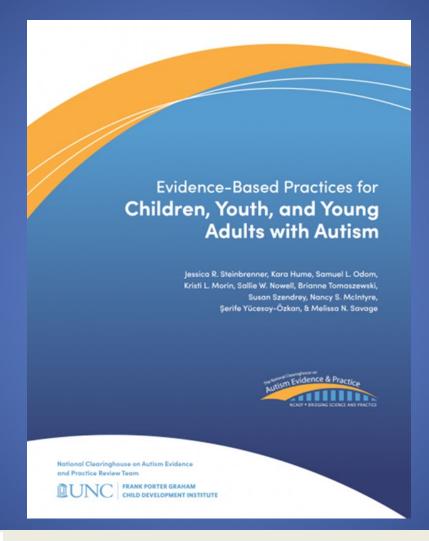
One high quality group design study and at least three high quality single case design studies conducted by at least two different investigators or research groups (across the group and single case design studies)

1+3





What are these 28 EBPs?







28 Evidence Based Practices (2020)

Antecedent-Based Interventions

Augmentative and Alternative

Communication

Behavioral Momentum Intervention

Cognitive Behavioral/Instructional

Strategies

Differential Reinforcement of Alternative,

Incompatible, or Other Behavior

Direct Instruction

Discrete Trial Training

Exercise and Movement

Extinction

Functional Behavioral Assessment

Functional Communication Training

Modeling

Music-Mediated Intervention

Naturalistic Intervention

Parent-Implemented Intervention

Peer-Based Instruction and

intervention

Prompting

Reinforcement

Response Interruption and Redirection

Self-Management

Sensory Integration

Social Narratives

Social Skills Training

Task Analysis

Technology-Aided Intervention and

Instruction

Time Delay

Video Modeling

Visual Supports

6 New Evidence Based Practices Since Last Review

Antecedent-Based Interventions

Augmentative and Alternative

Communication

Behavioral Momentum Intervention

Cognitive Behavioral/Instructional Strategies

Differential Reinforcement of Alternative,

Incompatible, or Other Behavior

Direct Instruction

Discrete Trial Training

Exercise and Movement

Extinction

Functional Behavioral Assessment

Functional Communication Training

Modeling

Music-Mediated Intervention

Naturalistic Intervention

Parent-Implemented Intervention

Peer-Based Instruction and intervention

Prompting

Reinforcement

Response Interruption and Redirection

Self-Management

Ayres Sensory Integration*

Social Narratives

Social Skills Training

Task Analysis

Technology-Aided Intervention and Instruction

Time Delay

Video Modeling

Visual Supports

*"It is important to note that Sensory Integration refers explicitly to the model developed by Jean Ayers (2005) and not to a variety of unsupported interventions that address sensory issues (Barton et al., 2015 Case-Smith et al., 2015; Watling & Hauer, 2015). "Page 41 of NCAEP Report

Newly Identified: Manualized Interventions Meeting Criteria for EBPs (MIMCs)

"Interventions that clearly fit the EBP categorical definitions but had themselves enough evidence to be classified as an EBP."

MIMCs are operationally defined as interventions that:

- are manualized,
- have unique features that create an intervention identity, and
- share common features with other practices grouped within the superordinate EBP classification.





Manualized Interventions Meeting Criteria for EBPs (MIMCs)

MIMC	Found in this Evidence Based Practice
PECS	Augmentative and Alternative Communication
JASPER	Naturalistic Intervention
Milieu Teaching	Naturalistic Intervention
Pivotal Response Training	Naturalistic Intervention
Project ImPACT	Parent-Mediated Intervention
Stepping Stones/Triple P	Parent-Mediated Intervention
Social Stories	Social Narratives
PEERS	Social Skills Training
FaceSay	Technology Aided Instruction and Intervention
Mindreading	Technology Aided Instruction and Intervention





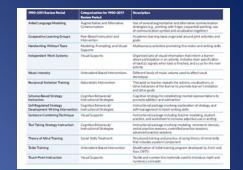
Focused Interventions with Some Evidence from NCAEP Review Period (1990-2011) Now RECATEGORIZED INTO THE 2020 EBP CATEGORIES

FOCUSED INTERVENTION	FOUND IN EVIDENCE BASED PRACTICE
Aided Language Modeling	Augmentative and Alternative Communication
Cooperative Learning Groups	Peer-Based Instruction and Intervention
Handwriting without Tears	Modeling, Prompting and Visual Supports
Independent Work Systems	Visual Supports
Music Intensity	Antecedent Based Intervention
Reciprocal Imitation Training	Naturalistic Intervention
Schema-Based Strategy Instruction	Cognitive Behavioral/Instructional Strategies
Self-Regulated Strategy	Cognitive Behavioral/Instructional Strategies
Development Writing Intervention	
Sentence Combining Technique	Visual Supports
Test Taking Strategy Instruction	Cognitive Behavioral/Instructional Strategies
Theory of Mind Training	Social Skills Training
Toilet Training	Antecedent Based Intervention
Touch-Point Instruction	Visual Supports





Do Not Yet Have Sufficient Evidence to Meet Criteria for an EBP (page 31)



Animal Assisted Intervention

Auditory Integration Training

Collaborative Model for Promoting

Competence and Success

(COMPASS)/Collaborative Coaching

Exposure

Massage/Touch Therapy

Matrix Training

Outdoor Adventure

Perceptual Motor

Person Centered Planning

Punishment

Sensory Diet

Systematic Transition in

Education Programme for

ASD (STEP-ASD)

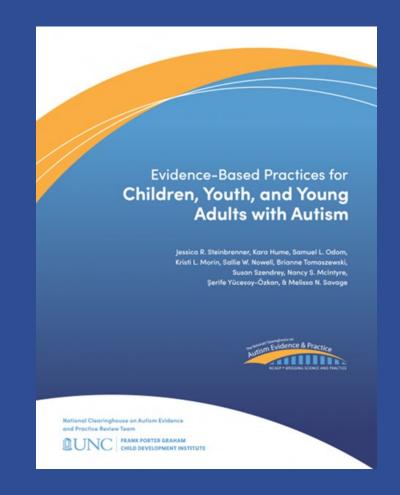




EBPs and DEFINITIONS OF 28 EBPs Table 3.1 Pages 29-30

Table 3.1 Evidence-based practices, definitions, and number of articles across review periods

		Emp	irical Supp	ort
Evidence-Bas ed Practice	Definition	1990- 2011 (n)	2012- 2017 (n)	1990- 2017 (n)
An tend ent-Based Interventions (ABI)	Arrangement of events or circumstance; that precede an activity or demand in order to increase the occurrence of a behavior or lead to the reduction of the challenging /interfering behaviors.	29	20	40
Augmentative and Albernative Communication (AAC)	Interventions using and/or teaching the use of a system of communication that is not verb si/vocal which can be aided (e.g., device, communication book) or unaided (e.g., sign language)	9	35	44
Behavioral Momentum Intervention (BMI)	The organization of behavior expectations in a requence in which low probability or more difficult, exponess are embedded in a series of high probability or less effortful, responses to increase pentitience and the occurrence of the low probability responses.	8	4	ti
Cognitive Behavioral/ Instructional Strategies (CBIS)	Instruction on management or control of cognitive processes that lead to changes in behavioral, so dial, or academic behavior.	7	43	50
Differential Reinforcement of Albernative, Incompatible, or Other Behavior (DR)	A systematic process that increases desirable behavior or the absence of an undestrable behavior by providing positive convequences for diemonstration, the network of the such behavior. These consequences may be provided when the learner is:a) engaging in a specific diesind behavior other than the undestrable behavior (DRA), b) engaging in a behavior that its physically impossible to do while exhibiting the undestrable behavior (DRO), or c) not engaging in the undestrable behavior (DRO).	27	3n	Si
Direct Instruction (DI)	A systematic approach to teaching using a sequenced instructional package with scripted protocols or lessons. It emphasizes teacher and student dialogue through choral and independent student responses and employs systematic and explicit error or medions to promote mastery and generalization.	2	6	•
Discrete Trial Training (DTT)	Instructional approach with massed or repeated trials with each trial consisting of the teacher's instruction/presentation, the child's response, a carefully planned consequence, and a pause prior to presenting the next instruction.	16	22	38
Exercise and Movement (EXM)	Interventions that use physical exection, specific motor skills/ techniques, or mindful movement to target a variety of skills and behaviors.	6	п	17
Extinction (EXT)	The removal of a inforcing consequences of a challenging behavior in order to reduce the future occurrence of that behavior.	13	12	2
Functional Behavioral Assessment (FBA)	A systematic way of determining the underlying function or purpose of a behavior so that an effective intervention plan can be developed.	n	10	21
Functional Communication Training (FCT)	A set of practices that replace a challenging behavior that has a communication function with more appropriate and effective communication behaviors or skills.	12	19	in
Modeling (MD)	Demonstration of a desired target behavior that neal is in use of the behavior by the learner and that leads to the acquisition of the target behavior	10	18	28
Music-Mediated Intervention (MMI)	Intervention that in our porates son gs, melodic in to nation, and/or rhythm to support learning or performance of skill s/b shaviors. It indudes music therapy, as well as other interventions that incorporate music to address target skills.	3	4	7
Naturalistic Intervention (NI)	A collection of techniques and strategies that are embedded in typical activities and/or routines in which the learner partidipates to naturally promote, support, and encourage target skill s/b ehadors.	26	40	75



Here's a Closer Look DEFINITIONS OF 28 EBPs

		Emp	oirical Supp	ort
Evidence-Based Practice	Definition	1990- 2011 (n)	2012- 2017 (n)	1990- 2017 (n)
Antecedent-Based Interventions (ABI)	Arrangement of events or circumstances that precede an activity or demand in order to increase the occurrence of a behavior or lead to the reduction of the challenging/interfering behaviors.	29	20	49
Augmentative and Alternative Communication (AAC)	Interventions using and/or teaching the use of a system of communication that is not verbal/vocal which can be aided (e.g., device, communication book) or unaided (e.g., sign language)	9	35	44
Behavioral Momentum Intervention (BMI)	The organization of behavior expectations in a sequence in which low probability, or more difficult, responses are embedded in a series of high probability, or less effortful, responses to increase persistence and the occurrence of the low probability responses.	8	4	12
Cognitive Behavioral/ Instructional Strategies (CBIS)	Instruction on management or control of cognitive processes that lead to changes in behavioral, social, or academic behavior.	7	43	50
Differential Reinforcement of	A systematic process that increases desirable behavior or the absence	27	31	58



EBP Definitions Chart also on CAPTAIN website in English and Spanish

	Evidence-Based Practices for Children, Youth, and Young Adults with Autism National Clearinghouse on Autism Evidence and Practice Review 2020							
	Evidence-Based Practices	DEFINITION						
ABI	Antecedent-Based Interventions	Arrangement of events or circumstances that precede an activity or demand in order to increase the occurrence of a behavior or lead to the reduction of the challenging/interfering behaviors.						
AAC	Augmentative and Alternative Communication	Interventions using and/or teaching the use of a system of communication that is not verbal/vocal which can be aided (e.g., device, communication book) or unaided (e.g., sign language)						
ASI	Ayres Sensory Integration	Interventions that target a person's ability to integrate sensory information (visual, auditory, tactile, proprioceptive, and vestibular) from their body and environment in order to respond using organized and adaptive behavior.						
BMI	Behavioral Momentum Intervention	The organization of behavior expectations in a sequence in which low probability, or more difficult, responses are embedded in a series of high probability, or less effortful, responses to increase persistence and the occurrence of the low probability responses.						
CBIS	Cognitive Behavioral/ Instructional Strategies	Instruction on management or control of cognitive processes that lead to changes in behavioral, social, or academic behavior.						
DR	Differential Reinforcement of Alternative, Incompatible, or Other Behavior	A systematic process that increases desirable behavior or the absence of an undesirable behavior by providing positive consequences for demonstration/non-demonstration of such behavior. These consequences may be provided when the learner is: a) engaging in a specific desired behavior other than the undesirable behavior (DRA), b) engaging in a behavior that is physically impossible to do while exhibiting the undesirable behavior (DRI), or c) not engaging in the undesirable behavior (DRO).						
DI	Direct Instruction	A systematic approach to teaching using a sequenced instructional package with scripted protocols or lessons. It emphasizes teacher and student dialogue through choral and independent student responses and employs systematic and explicit error corrections to promote mastery and generalization.						
DTT	Discrete Trial Training	Instructional approach with massed or repeated trials with each trial consisting of the teacher's instruction/presentation, the child's response, a carefully planned consequence, and a pause prior to presenting the next instruction.						
EXM	Exercise and Movement	Interventions that use physical exertion, specific motor skills/techniques, or mindful movement to target a variety of skills and behaviors.						
EXT	Extinction	The removal of reinforcing consequences of a challenging behavior in order to reduce the future occurrence of that behavior.						
FBA	Functional Behavioral Assessment	A systematic way of determining the underlying function or purpose of a behavior so that an effective intervention plan can be developed.						
FCT	Functional Communication Training	A set of practices that replace a challenging behavior that has a communication function with more appropriate and effective communication behaviors or skills.						







INTERVENTION FACT SHEETS **AVAILABLE IN THE REPORT** FOR EACH OF THE 28 EBPs

Name of ESP Augmentative and Alternative Communication (AAC) Augmentative and Alternative Communication (AAC) interventions use and/or teach the use of a system of communication that is not verbal. Accal including aided and unaided communication systems. Unaided communication systems do not use any materials or technology (e.g., sign language and gestures). Alded communication systems in dude low tech systems (e.g., exchanging objects/ Definition of ESP pictures or pointing to letters) and extend to high tech speech generating devices (SGDs) and applications that allowother devices (i.e., phones, tablets) to serve as SGDs. Methods of teaching AAC use are also included in this category (e.g., Aided Language Modeling) which may include other EBPs such as prompting, reinforcement, visual supports, and peer-mediated interventions. Manual and Interventions Meeting Criteria: Picture Exchange Communication System® (PECS®) Bondy and Front, 1985). **Outcome Areas** Communication Social loint attention School readiness Academic/ Pre-academic self-help Challenging/ Interfering ach avior Vecational Motor Mental health 1. Agius, M. M., & Vance, M. (2016). A comparison of PECS and Pad to teach requesting to pre-schoolers with autistic spectrum disorders. Augmentative and Alternative Communication, 32(1), 58-68. https://doi.org/10.3109/0743.4618.2.015.710836.3 2. All, E., MacFarland, S. Z., & Umbreit, J. (2011). Effectiveness of combining tangle is symbols with the Pidure Exchange Communication System. to teach requesting skills to children with multiple disabilities including visual impairment. Education and Training in Autism and Developmental

3. Almirall, D., Dištefano, C., Chang, Y.-C., Shire, S., Kaiser, A., Lu, X., Nahum-Shani, I., Landa, R., Mathy, R. & Kasari, C. (2016). Longitudi nal effects. of adaptive interventions with a speech-generating device in minimally verbal child on with ASD. Journal of Clinical Child & Adolescent Psychology,

4. Al zraver, N.M., Banda, D. R., & Koul, R. (2017). Teaching children with autism spectrum disorder and other developmental disabilities to perform multi-step requesting using an Pad. Augmentative and Alternative Communication, 33(2.), 65-76. https://doi.org/10.1080/07434618.2.017.1306881

- Definition of the intervention
- Age Range
- Outcome Areas
- References (specific articles that provide the evidence for the efficacy of the practice)

Disphilities, 46(3), 425-435.

45(4), 442-456. https://doi.org/101080/15374496.2016.TI38407

28 EBPs Matrix Available on the CAPTAIN Website

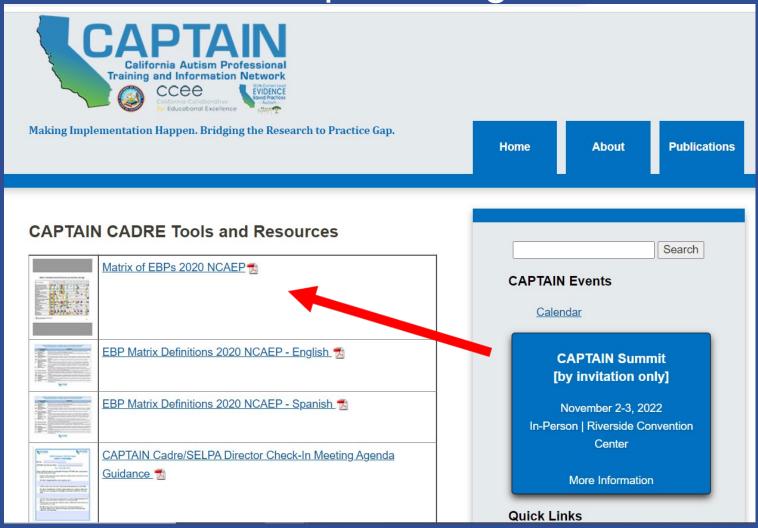


Table 3.7 Matrix of evidence-based practices, outcomes, and age categories

Evidence-Based		ader	nic/ lemic		dapti elf-he		In	alleng terfe		C	ognit	ive		mmu		al	Joint			Menta			Moto	r		Play			Schoo		det	Self- ermina	ition		Socia	4	Vo	catio	nal
Practices See Table 3.1 to link abbreviations to EBPs	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years
ABI																																							
AAC																																							
ВМІ																																							
CBIS																																							
DR																																							
DI																																							
DTT																																							
EXM																																							
EXT																																							
FBA																																							
FCT																																							
MD																																							
MMI																																							
NI																																							
PII																																							
PBII																																							
PP																																							
R																																							
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SM																																							
SI																																							
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TA																																							
TAII																																							
TD																																							
VM																																							
VS																																							





NCAEP EBP DATABASE



GIVE NOW



Search

About NCAEP -

News & Updates

Research & Resources

EBP Database

EBP DATABASE

The EBP database is designed to help you in the EBP selection process. First, select the relevant age range and choose the domain you are targeting. Next, click "Apply". The information will be presented in two ways.

On the right side of the screen you will see all of the included articles that target your selected age range and domain, along with the associated EBPs.

On the left side of the screen you will see the menu of EBPs that have proven effective in addressing the selected outcome for the targeted age range. You will also see the number of articles associated with each EBP in parentheses after the EBP. You can click the EBP to see the articles that contribute to the evidence base for each practice.

Age		Domains			
- Any -	~	- Any -	~	APPLY	CLEAR

https://ncaep.fpg.unc.edu/ebp-database







You try the EBP Database!



EBP DATABASE

The EBP database is designed to help you in the EBP selection process. First, select the relevant age range and choose the domain you are targeting. Next, click "Apply". The information will be presented in two ways.

On the right side of the screen you will see all of the included articles that target your selected age range and domain, along with the associated EBPs.

On the left side of the screen you will see the menu of EBPs that have proven effective in addressing the selected outcome for the targeted age range. You will also see the number of articles associated with each EBP in parentheses after the EBP. You can click the EBP to see the articles that contribute to the evidence base for each practice.

Age	Domains									
6-11.9 years	Communication CLEAR									
EBP	Displaying 1 - 40 of 181									
LUI	A Social Stories™ intervention package for students with autism in inclusive classroom settings									
Antecedent-based	Age(s): 36-71.9 months (3-5.9 years), 6-11.9 years									
interventions (3)	Domain(s): Challenging/interfering behavior, Communication, Social									
Augmentative and alternative communication (24)	EBP(s): Social narratives, Social Stories™									
Cognitive behavioral	A comparison of existing and novel communication responses used during functional communication training									
instructional strategies (5)	Age(s): 6-11.9 years, 12-14.9 years									
Differential reinforcement	Domain(s): Challenging/interfering behavior, Communication									
(9)	EBP(s): Functional communication training									
Direct Instruction (2)										
Discrete trial training (11)	A comparison of the effects of organismic and setting variables on the social interaction behavior of children									

https://ncaep.fpg.unc.edu/ebp-database





The AFIRM "IEP to EBP Tool" How to Select an Evidence-Based Practice



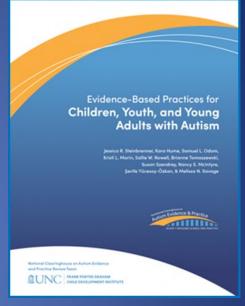
https://afirm.fpg.unc.edu/selecting-ebp





THE NEED FOR IMPLEMENTATION SCIENCE PAGE 50

"Some practitioners will be able to take the translated information about EBPs and directly apply it in their classrooms, but Implementation Science informs us that additional steps are needed for most practitioners.



Professional development, such as coaching, and organizational support are all factors that may be necessary for closing the last link of the research to practice gap."













GOAL:

Rather than tantrumming or grabbing items that she needs/wants, Lucia (age 5, nonverbal) will request items and assistance from others on 8:10 daily opportunities as measured by teacher collected frequency data.

- 1. What is the goal targeting?
- 2. What EBPs are options? (refer to the EBP matrix and/or EBP Database)







What EBPs did you select?







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"



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 by AFIRM
- 2. Refer to EBP Fact Sheets by NCAEP
- 3. Use reliable self-learning modules on EBPs-AFIRM
- 4. Attend training on the EBPs by CAPTAIN Cadre
- 5. Access coaching on the EBP until fidelity is attained



FREE 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 Autism from birth to 22 years of age



There's a learning module for most of the **28 EBPs!**

BCBA (Approved BACB Type 2 CEUs) SLP (Approved by ASHA for maintaining CCC

FIRM Modules are designed to help you learn the step-by-step process of planning for, using, and monitoring an EBP with learners with ASD from birth to 22 years of age. Supplemental materials and handouts are available for download.

Visit the Learn with AFIRM section to find out more.

Available FBP Modules

AFIRM Modules



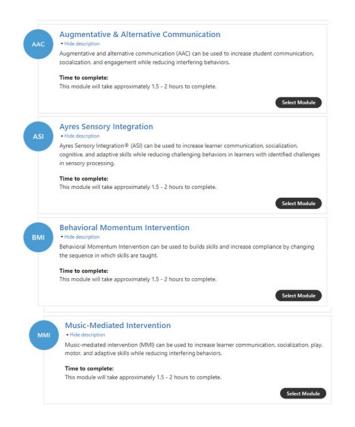
Autism Focused Intervention Resources and Modules

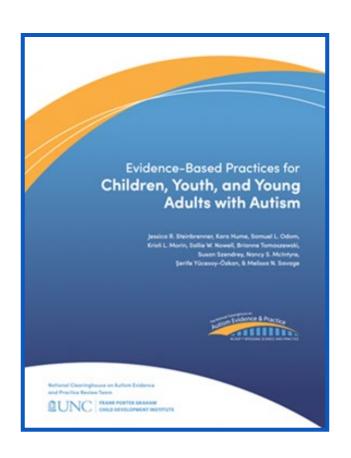
www.captain.ca.gov http://afirm.fpg.unc.edu/afirm-modules

Did you know?

The SELPA Content Lead-Autism funded the development of these four newest EBPs modules.

We thank the AFIRM researchers and developers for their amazing work!







Autism Focused Intervention Resources & 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 (Approved by ASHA for maintaining CCC)

Certificate Track

- Case examples demonstrating the of the EBP
- Multimedia presentation
- Pre-test required
- Post-assessment required
- Evaluation required



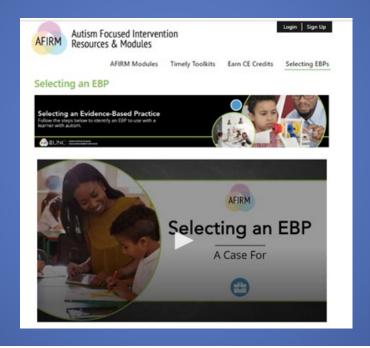
Non-Certificate Track

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

This AFIRM module targets how to select an appropriate EBP to use with a learner based on the target goal, outcome, and additional considerations.

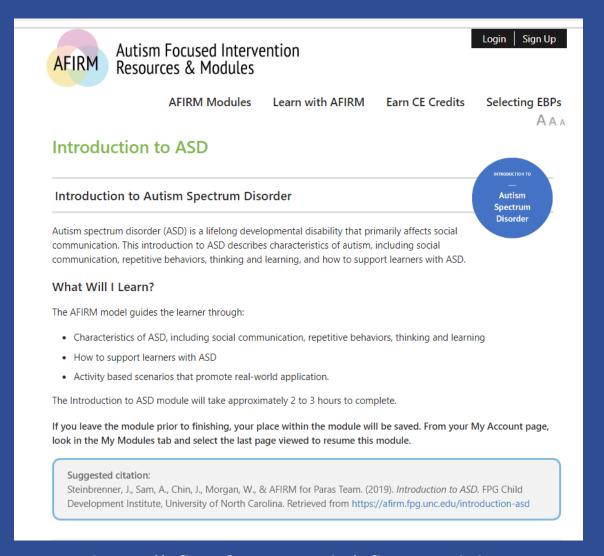


https://afirm.fpg.unc.edu/selecting-ebp





Helpful AFIRM Learning Module Introduction to Autism



ONLINE AFIRM LEARNING MODULES JUST FOR PARAEDUCATORS, TOO!



Autism Focused Intervention Resources & Modules



AFIRM for Paraprofessionals: Simulated E-Learning

Reinforcement: Introduction & Practice

-Hide description

nine description
 Reinforcement is used to increase the chances a learner with autism spectrum disorders (ASD) will use a

Time to complete:

This module will take approximately 1.5 - 2 hours to complete.

Select Module

Prompting: Introduction & Practice

Prompting is used to help the learner with autism spectrum disorders (ASD) successfully use a target skill or behavior.

Time to complete:

This module will take approximately 1.5 - 2 hours to complete.

Salact Modula

Supporting Peer Interactions: Introduction & Practice

- Hide description

Supporting peer interactions is a critical component of the learner's ability to engage socially with peers.

Time to complete:

This module will take approximately 1.5 - 2 hours to complete.

Select Module

NINCOLCION & PMCTICE Time Delay: Introduction & Practice

Hide description

Time delay is used to systematically fade the use of prompting for a target skill or behavior.

Time to complete:

This module will take approximately 1.5 - 2 hours to complete.

Select Module

wroner-row a reactor Visual Core

Visual Cues: Introduction & Practice

Hide descriptio

Visual cues are concrete objects used to increase the learner with ASD's ability to complete a target skill or behavior.

Time to complete:

This module will take approximately 1.5 - 2 hours to complete.

Select Module

https://afirm.fpg.unc.edu/afirm-modules



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AFIRM Modules

Learn with AFIRM

Earn CE Credits

Selecting EBPs

Resources

AFIRM Resources

Select a key word to search for AFIRM resources or filter AFIRM resources by catalog PLEMENTATION

Keyword Search

Apply

MPLEMENTATION RESOURCES

Browse by Module

Antecedent-based Intervention

Cognitive Behavior Intervention

Differential Reinforcement

Discrete Trial Training

Exercise

Extinction

Functional Behavior Assessment

Functional Communication Training

Modeling

Naturalistic Intervention

Parent Implemented Interventions

Peer-Mediated Instruction and Intervention

Picture Exchange Communication System

Pivotal Response Training

Prompting

Response interruption and Redirection

Reinforcement

Scriptina

Self-management

Social Narratives

Social Skills Training

Structured Play Groups

Task Analysis

Technology-aided Instruction and Intervention

Time Delay

Video Modelina

Visual Supports

Browse by Module Lesson

Lesson 1 - Basics

Lesson 2 - Planning for the Practice

Lesson 3 - Using the Practice

Lesson 4 - Monitorina Progress

Additional Materials

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
Checklists

AFIRM Videos EBP Videos

Browse Videos

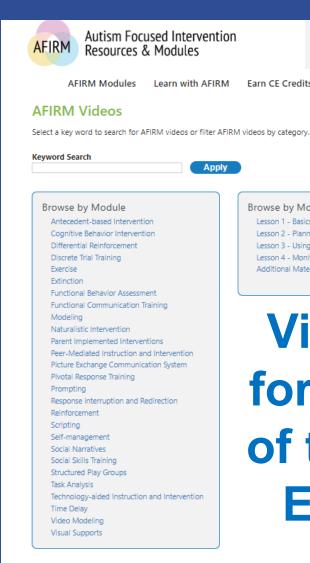
AFIRM VIDEOS of Evidence-Based Practices

Resources

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Selecting EBPs

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Browse by Module Lesson

Lesson 1 - Basics

Earn CE Credits

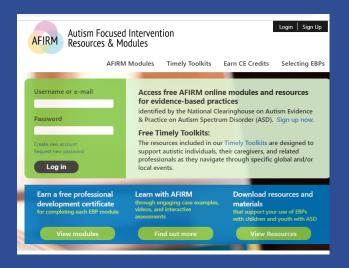
Lesson 2 - Planning for the Practice

Lesson 3 - Using the Practice

Lesson 4 - Monitoring Progress

Additional Materials

Videos for most of the 28 **EBPs**



Login to AFIRM to access free resources such as EBP Briefs, Videos, etc.

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---

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				Γ
Observer's Initials				T
Step 1: Planning				
1,1 Identify visual supports needed to acquire or maintain target skills				Γ
1.2 Develop/prepare visual support for learner based on individualized assessments				
1.3 Organize all needed materials				Г
Step 2: Using				
2.1 Teach learner how to use visual support				Γ
- Boundaries:				_
☐ Introduce boundary to learner				
☐ Use modeling to teach learner to stay within boundary				L
 Use reinforcement to encourage learner to stay within boundary 				L
 Use corrective feedback when learner does not stay within boundary 				
- Cues:				Т
Show learner visual cue				┞
Stand behind learner when prompting use of visual cue Use consists relevant words (forms while too ships visual cue)				╀
□ Use concise, relevant words/terms while teaching visual cue □ Assist learner in participating in activity/event with visual cue				Ͱ
- Schedules				_
Stand behind learner when prompting use of visual schedule				Г
Place schedule information in learner's hand				Т
☐ Use concise, relevant words/terms				Г
☐ Assist learner in getting to designated activity/location, and prompt				Г
☐ Ensure learner remains in scheduled location until prompted to use				Г
□ Repeat steps until learner is able to complete the sequence				Г
independently across activities/locations				
2.3 Use visual supports consistently and across settings				
Step 3: Monitoring				
3.1 Collect data on target behaviors and use of visual supports (independence during use and progress through forms/types of supports)				Г

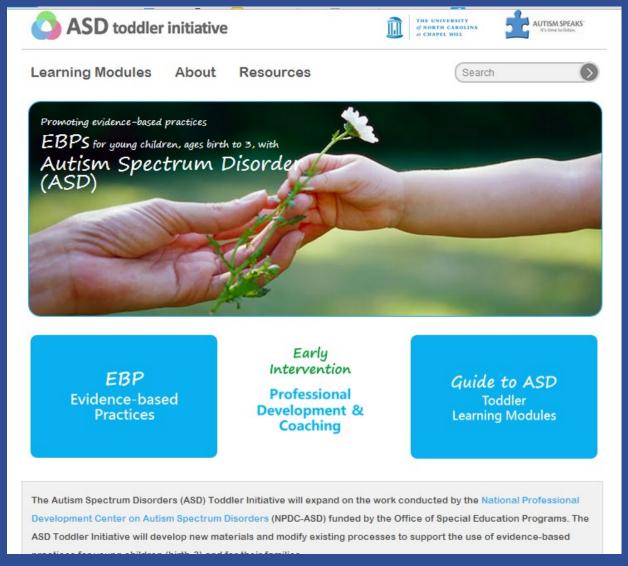
3.2 Determine next steps based on learner progress

AFIRM Autism Focused Intervention Resources and Modules





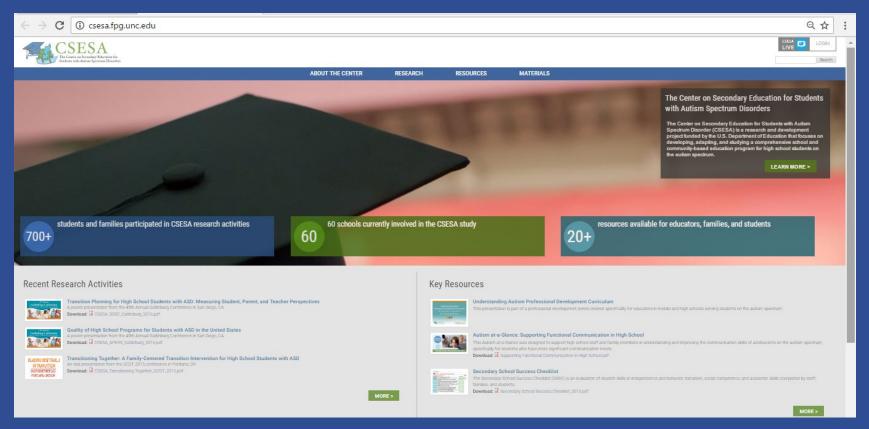
SELF LEARNING MODULES FOR TODDLERS! ASD Toddler Initiative – Ages Birth to 3



http://asdtoddler.fpg.unc.edu

Evidence-Based Resources for Older Individuals with Autism





Presentation 1:

Characteristics and Practices for Challenging Behavior

Example of Resources



*NOTE: If you have having difficulty with the video links embedded as part of the presentation, link to the video 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 video (slide 17).

Presentation 2:

Strategies for Classroom Success and Effective Use of Teacher Supports





ABOUT THE CENTER

FAMILIES

PROFESSIONALS

RESEARCHERS

Autism at-a-Glance series

Example of Resources

Autism at-a-Glance: Supporting Success and Safety in Relationships

This Autism at-a-Glance was designed to support high school staff, family members, and individuals on the autism spectrum in understanding and supporting success and safety in dating relationships.

Download: Supporting Success and Safety in Relationships.pdf

Autism at-a-Glance: Exercise for Adolescents with ASD

This Autism at-a-Glance was designed to support high school staff and family members in understanding the benefits of exercise for adolescents on the autism spectrum, as well as provide tips and resources to help create successful exercise routines.

Download: Aspect Exercise for Adolescents with ASD.pdf

Autism at-a-Glance: Depression in Adolescents with ASD

This Autism at-a-Glance was designed to support high school staff and family members in understanding and recognizing symptoms of depression, and

Autism at-a-Glance: Supporting Communication in High School

This issue of Autism at-a-Glance focuses on understanding and improving the communication skills of adolescents on the autism spectrum and specifically targets the needs of students who are able to communicate conversationally.

Download: Supporting Communication in High School.pdf

Autism at-a-Glance: Supporting Functional Communication in High School

This Autism at-a-Glance was designed to support high school staff and family members in understanding and improving the communication skills of adolescents on the autism spectrum, specifically for students who have more significant communication needs.

Download: Supporting Functional Communication in High School.pdf

Autism at-a-Glance: Getting a Driver's License

This Autism at-a-Glance was designed to support parents and other family members in supporting adolescents on the autism spectrum as they learn to drive and eventually take a driver's test for their license.

Download: d Getting a Driver License.pdf



Use these Quick Links on the CAPTAIN website to access these

FREE EBP

resources!

CAPTANK is a multiagency network developed to support the understanding and use of Eintence Stated Practices for individuals affected by Autom Spectrum Disorder across the state.

CAPTAIN is dedicated to the following

 Providing individual access to framings and resources. In Evidence Source Practices (ESPH) that are culturally sensitive. Surely sentened, and effects and competency based.

 Establishing apports that are locally based with harner of trainers at the local bred.

Common Core State Standards and developing College and Corear Readmens.

Providing onjuring training, support, and technical assistance to implementation.

Singuring the development of local multiuplexity containments to easy considered use of CEPs.

and apport to CAPTARE Cable inentiers.

Prividing web based access to materials and resources that are vetted and also web convert ESPs.

 Providing information and outwarth to other interested states habitors and provider groups after could be with from learning incre about ESPs (E.g., Professional Organizations, Higher Estudions, Self Advantas, Albed Health Providers)









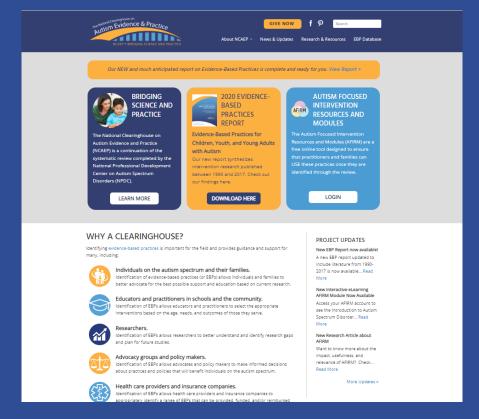








CAPTAIN RECOMMENDS



https://ncaep.fpg.unc.edu/



www.captain.ca.gov



Why is this EBP resource 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 Autism in reaching their full potential





Why use evidence-based practices/interventions in special education?



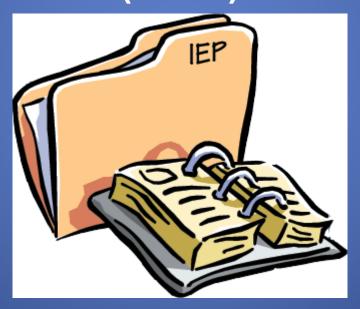
In the U.S., federal law and state education codes requires use of evidence-based practice in general and special education (IDEA, ESSA, CA Ed Code, etc.)

Clinical practice is governed by ethics and insurance



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 wellimplemented 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. "

Assembly Bill No. 1172

CHAPTER 454

NPS and NPA now required to have training in use of EBPs

An act to amend Sections 51225.2, 56365, 56366.1, 56366.4, and 56366.10 of the Education Court elating to special education.

- (4) (A) (i) Commencing with the 2020–21 school year, documentation that the nonpublic, nonsectarian school or agency will train state and will have contact or interaction with pupils during the schoolday in the use of evidence-based practices and interventions specific to the unique behavioral needs of the nonpublic, nonsectarian school or agency's pupil population. The training shall be provided within 30 days of employment to new staff who have any contact or interaction with pupils during the schoolday, and annually to all staff who have any contact or interaction with pupils during the schoolday.
- (ii) For a nonpublic, nonsectarian school or agency that was in existence as of the January 1 immediately preceding a school year, documentation that the nonpublic, nonsectarian school or agency's staff members who will have contact or interaction with pupils during the schoolday have received training that complies with the requirements of subparagraphs (B) and (C).

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB1172

Even ASHA!

(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 ociation 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.

What is the most important reason to use EBPs?



Because they work!!!! ©

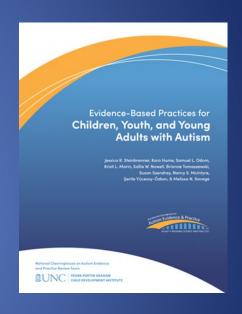




How do we get EBPs implemented by everyone?

"Some practitioners will be able to take the translated information about EBPs and directly apply it in their classrooms, but Implementation Science informs us that additional steps are needed for most practitioners.

Professional development, such as coaching, and organizational support are all factors that may be necessary for closing the last link of the research to practice gap."



Page 50





California education has a lot going on and.... CAPTAIN aligns with these initiatives!





California
Practitioners'
Guide for
Educating English
Learners with
Disabilities

California Department of Education
Sacramento 2019









CA Statewide System of Support

Every Student Succeeds Act

From City of the Control of the Contro

Engagement Representation

UDL

Action & Expression

UDL Principles

Every Student Succeeds Act (ESSA)

INTEGRATING EBPs WITH INITIATIVES IS NOT ONE MORE THING!

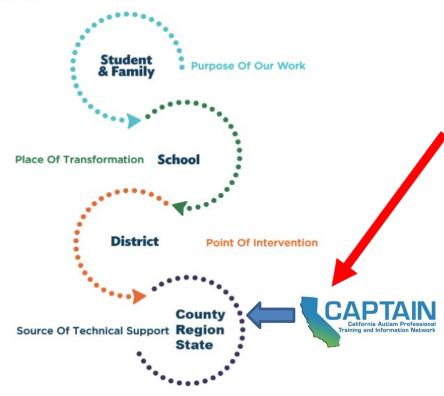


CAPTAIN Aligns with MTSS

California's Multi-Tiered System of Support (CA MTSS) is a comprehensive framework that aligns academic, behavioral, social and emotional learning, and mental health supports in a fully integrated system of support for the benefit of all students.

System of Engagement





EBPs Align with MTSS

INFOGRAPHIC ON CAPTAIN WEBSITE

www.captain.ca.gov



Autism & Multi-Tiered System of Support (MTSS)

California's Multi-Tiered System of Support is a framework that aligns academic, behavioral, social and emotional learning, and mental health supports in a fully integrated system of support for all students.

ALL MEANS ALL STUDENTS WITH AUTISM



Whole Child Domain

Inclusive Academic Instruction Features Inclusive Behavior Instruction Features Inclusive Transformative Social-Emotional Instruction and Mental Health Support Features

Essential Domains and Features to Support the Whole Child



To Learn More About EBPs For Autism: www.captain.ca.gov

To Learn More About CA MTSS: https://ocde.us/MTSS/Pages/CA-MTSS.aspx or https://www.cde.ca.gov/ci/cr/ri/

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

EBPs Align with UDL

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

Why?



- There are 125,308 students with Autism in CA Public Schools and that number is steadily growing (CDE, 2021)
- Overall prevalence of Autism in US is 1 in 44 (CDC, 2021)
- Among children identified with Autism, about two-thirds have IQs within the average range (CDC 2021)
- 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:

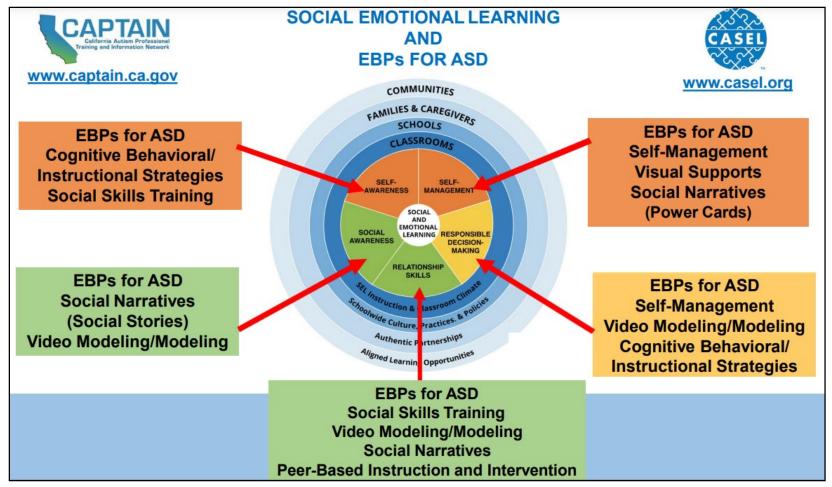
Flexibility in Reinforcement Expression Visual Support · Antecedent-Based Interventions Technology- Visual Support Aided Instruction Self-Management Technology-Aided Video Modeling Instruction Flexibility in Engagement AAC/PECS Flexibility in

To learn more about the EBPs for Autism visit: https://www.captain.ca.gov
or participate in the free online learning modules at: https://afirm.fpg.unc.edu
Find resources and learn more about UDL through CAST: https://www.cast.org



Presentation

EBPs Align with Social Emotional Learning (SEL)



INFOGRAPHIC ON CAPTAIN WEBSITE www.captain.ca.gov

EBPs Align with PBIS

(Evidence Based Practices for Behavior)

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www.captain.ca.gov



EBPs for Behavior*

EBPs for Autism*

EDI 3 IOI DONAVIOI	EDI 3 IOI Addisin
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-Based Instruction and Intervention Antecedent Based Interventions (e.g., Special Interests)

www.captain.ca.gov

*Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based practices in classroom management: Considerations for research to practice. Education and Treatment of Children, 31, 381–386. *Wong, C., Odom, S. L., Hume, K. A., Cox, C. W., Fettig, A., Kurcharczyk, S. et al. (2015). Evidence-based practices for children, youth, and young adults with autism spectrum disorder: A comprehensive review. Journal of Autism and Developmental Disorders.

INFOGRAPHIC ON CAPTAIN WEBSITE

EBPs Align with PBIS Prevent-Teach-Reinforce

PTR Prevent Interventions and Definitions	Autism EBPs that Align
Provide Choice: Providing student choices between two or more options (within or between activities).	Antecedent-Based Intervention (Choice)
Transition Supports: Transition Supports assist the student to change activities, settings, or routines and can be verbal, visual or auditory	Antecedent-Based Intervention (Change Schedules or Routines); Visual Supports/Schedules/Work Systems; Music-Mediated Intervention
Environmental Supports: Clear and detailed cues that provide the student with the understanding of his or her environment.	Visual Supports/Schedules/Work Systems, Video Modeling, Social Narratives
Change to Task Demand/Curriculum: Changes in instructional task components such as content, method of presentation, or student outcome	Antecedent-Based Intervention (Alter how instruction is given, using learner preferences); Technology-Aided Intervention and Instruction; Naturalistic Intervention vs Direct Instruction
Noncontingent Attention and Proximity: Strategy designed to build positive relationships and social attention independent of an interfering behavior taking place.	Differential Reinforcement; Reinforcement
Whole Class Management Systems: Refers to the procedures, strategies and instructional methods a teacher uses to enhance appropriate student behavior and engagement in learning activities.	PBIS Tier 1
Increasing Opportunities to Respond: Using direct instructional delivery that provides a high level of student-adult interaction via the use of teacher questioning, student responding and teacher feedback.	Behavioral Momentum Intervention; Direct Instruction; Discrete Trial Training
Setting Event Neutralization/Modification: Responding to fluctuating environmental distal antecedent events that are further away from the time of the interfering behavior by anticipating them and altering the schedule or routine.	Antecedent-Based Intervention (Altering the schedule or routine, changing/altering the sensory environment)
Peer Collaboration and Support/Peer Modeling : Intervention is when same aged peers model appropriate responses or prompts/support to peer to engage in the task/activity appropriately.	Peer-Based Instruction and Intervention
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EBPs Align with CEC HLPs



INFOGRAPHIC ON CAPTAIN WEBSITE

HIGH LEVERAGE PRACTICES (HLP)	EVIDENCE BASED PRACTICES (EBP)-ASD
	THAT SUPPORT HLP
HLP 3: Collaborate with families to support student learning and	Parent-Implemented Intervention.
secure needed services.	
HLP 7: Establish a consistent, organized, and respectful learning	Visual Support and Structure, Antecedent Based Intervention,
environment.	Reinforcement.
HLP 8: Provide positive and constructive feedback to guide students'	Reinforcement, Differential Reinforcement.
learning and behavior.	
HLP 9: Teach social behaviors.	Social Skills Groups, Social Narratives, Structured Play Groups,
	Self-Management Training, Scripting.
HLP 10: Conduct functional behavioral assessments to develop	Functional Behavior Assessment, Functional Communication
individual student behavior support plans.	Training, Antecedent Based Intervention, Reinforcement, Differential
	Reinforcement.
HLP 11: Identify and prioritize long- and short-term learning goals.	Task Analysis, Goal Attainment Scaling.
HLP 12: Systematically design instruction toward specific learning goal.	Task Analysis, Goal Attainment Scaling.
HLP 13: Adapt curriculum tasks and materials for specific learning goals.	Antecedent Based Intervention, Technology-Aided Instruction and
	Intervention, Visual Support.
HLP 14: Teach cognitive and metacognitive strategies to support	Self-Management, Visual Support, Cognitive Behavioral Intervention.
learning and independence.	
HLP 15: Provide scaffolded supports.	Prompting/Prompt Fading, Time Delay, Visual Support, Antecedent
	Based Intervention.
HLP 16: Use explicit instruction.	Discrete Trial Teaching, Modeling, Video Modeling.
HLP 17: Use flexible grouping.	Peer-Mediated Instruction and Intervention, Antecedent Based
	Intervention.
HLP 18: Use strategies to promote active student engagement.	Pivotal Response Training, Antecedent Based Intervention, Peer-
	Mediated Instruction and Intervention, Self-Management,
	Technology-Aided Instruction and Intervention, Reinforcement.
HLP 19: Use assistive and instructional technologies.	Technology-Aided Instruction and Intervention, Functional
	Communication Training, Picture Exchange Communication System.
HLP 20: Provide intensive instruction.	Discrete Trial Teaching.
HLP 21: Teach students to maintain and generalize new learning across	Naturalistic Intervention, Pivotal Response Training, Differential
time and settings.	Reinforcement.
HLP 22: Provide positive and constructive feedback to guide students'	Reinforcement, Differential Reinforcement.
learning and behavior.	
High Leverage Practices: https://highleveragepractices.org	EBPs for Autism: https://afirm.fpg.unc.edu/afirm-modules

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EBPs Align with Best Practices for Inclusive Education

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SUCCESSFUL INCLUSION FOR STUDENTS WITHAUTISM WHY?

Improved academic, social and vocational outcomes Increased social acceptance

HOW?

Use Evidence Based Practices



VISUAL SUPPORTS



REINFORCEMENT



PEER-BASED
INSTRUCTION
AND
INTERVENTION



MODELING



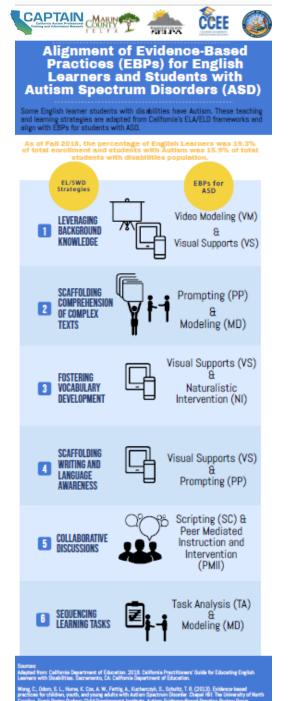
TEAM COLLABORATION

TO LEARN MORE ABOUT SUPPORTING STUDENTS WITH AUTISM WWW.CAPTAIN.CA.GOV

EBPs Align with Best Practices for English Learners with Disabilities

INFOGRAPHIC ON CAPTAIN WEBSITE

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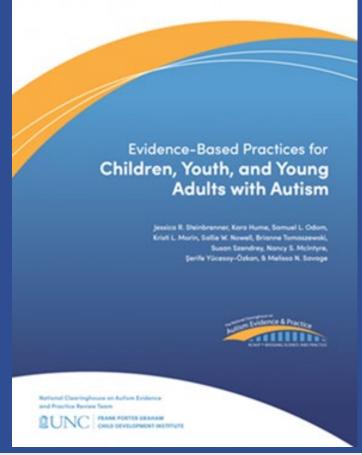


California
Practitioners'
Guide for
Educating English
Learners with
Disabilities



CAPTAIN Recommends

28 EBPs from NCAEP



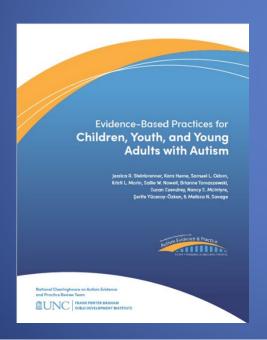








Selecting Evidence-Based Practices for Autism





AFIRM Autism Focused Intervention Resources and Modules





Selecting an Evidence-Based Practice

With a number of potential EBPs to choose from, it is important to follow a process to select the most appropriate practice for your learner.

-01	Selection Checklist	EBP
) 	Learner's Name: Date/Time: Observer(s): Target Goal/Behavior/Skill (short): Directions: Complete this checklist for following steps for selecting an evidence-ba- use with a learner.	sed practice to
SELECT	AN EVIDENCE-BASED PRACTICE:	
1.1	Identify a target skill or behavior based on IEP goal/outcome	
1.1a	•	
1.2	Establish an observable and measurable goal/outcome:	
1.2a	Collect baseline data	
1.2b	Determine context (the 'when' or the antecedent)	
1.2c	Determine the target goal/behavior/skill (the 'what' or the behavior)	
1.2d	Determine how the team will know when the learner has mastered the target goal/behavior/skill (the 'how' or the criterion)	
1.2e	If applicable, complete goal attainment scaling	
1.3	Identify potential EBPs based on research:	
1.3a	Identify domain outcome for the target goal/behavior/skill	
1.3b	Use the NCAEP Domain Matrix to list potential EBPs	
1.4	Choose an evidence-based practice based on completed 1.4	a-d:
1.4a	Determine learner and/or family's preferences, needs,	
1.40	priorities, and/or other characteristics	
1.4b	Determine team and/or teacher characteristics	
1.4c	Look for additional clues in the target goal	
1.4d	Determine other resources	
1.5	Train the team to use the selected evidence-based practice	







Use the Selecting an EBP Checklist

	Selection Checklist	EBP
Z =	Learner's Name: Date/Time:	
V -	Observer(s):	
5=	Target Goal/Behavior/Skill (short):	
	 Directions: Complete this checklist for following steps for selecting an evidence-base use with a learner. 	ied practic
SELECT	AN EVIDENCE-BASED PRACTICE:	
1.1	Identify a target skill or behavior based on IEP	
11	goal/outcome	
1.1a	If applicable, conduct a functional behavior assessment	
1.2	Establish an observable and measurable goal/outcome:	
1.2a	Collect baseline data	
1.2b	Determine context (the 'when' or the antecedent)	
1.2c	Determine the target goal/behavior/skill (the 'what' or the behavior)	
	Determine how the team will know when the learner	
1.2d	has mastered the target goal/behavior/skill (the 'how'	
	or the criterion)	
1.2e	If applicable, complete goal attainment scaling	
1.3	Identify potential EBPs based on research:	
1.3a	Identify domain outcome for the target goal/behavior/skill	
1.3b	Use the NCAEP Domain Matrix to list potential EBPs	
1.4	Choose an evidence-based practice based on completed 1.4	a-d:
1.4a	Determine learner and/or family's preferences, needs,	
1.48	priorities, and/or other characteristics	
1.4b	Determine team and/or teacher characteristics	
1.4c	Look for additional clues in the target goal	
1.4d	Determine other resources	
1.5	Train the team to use the selected evidence-based practice	





Selecting An Evidence-Based Practice

EBP BRIEF



EBP LEARNING MODULE



OVERVIEW & RESOURCE PACKET:
SELECTING AN EVIDENCE-BASED PRACTICE

UNC Frank Porter Graham Child Development Institute Autism Focused Intervention Resources & Modules Sam, A., Waters, V., Dee, R., & AFIRM Team, 2022

DUNC FRANK PORTER GRAHAM CHILD DEVELOPMENT INSTITUTE



https://afirm.fpg.unc.edu/sites/afirm.fpg.unc.edu/files/imce/resources/AFIRM%20Selecting



Autism Focused Intervention Resources & Modules

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AFIRM Modules

Timely Toolkits

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Selecting EBPs

Resources

Selecting an Evidence-Based Practice

Selecting an Evidence-Based Practice

EBP

With a number of potential evidence-based practices to choose from, it is important to follow a process to select the most appropriate practice for your learner. This module describes the process for selecting an evidence-based practice to use with autistic learners.

What Will I Learn?

The AFIRM model guides the learner through:

- · The evidence-based practice selection process.
- · Activity based scenarios that promote real-world application.

The Selecting an Evidence-Based Practice module will take approximately 1 to 2 hours to complete.

https://afirm.fpg.unc.edu/afirm-modules



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Selecting an Evidence-Based Practice Overview

Before implementing a new practice. follow these 4 planning steps:

- 1. Identify a target skill or behavior based on IEP goal/outcome
- 2. Establish an observable and measurable goal/outcome
 - Collect baseline data on the behavior
- 3. Identify potential EBPs based on research (NCAEP 2020 Report)
 - Determine the learner and/or family preferences, needs, priorities, and/or other characteristics
 - Determine the teacher and team characteristics
 - Look for additional clues in the target goal/skill/behavior
 - Determine other resources
- 4. Train the team to use the selected evidence-based practice

https://afirm.fpg.unc.edu/selecting-ebp





Selecting an Evidence-Based Practice Planning Step 1.1:

Identify a target skill or behavior based on IEP goal/outcome

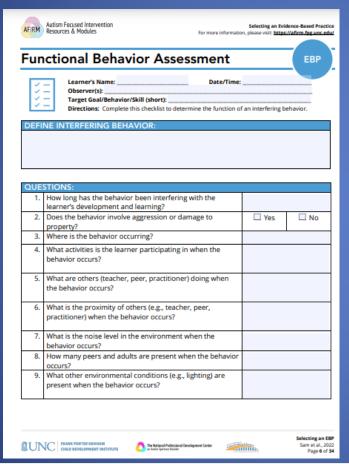
- Identify the specific target skill or behavior for the learner
- Must be observable and clearly defined in the setting where it occurs
- All team members should be able to identify the behavior (including its frequency and duration) based on the clarity of the definition of the behavior
- If the behavior interferes with the learner's ability to learn and/or is a safety concern, either to theirself or others, then conducting a Functional Behavior Assessment (FBA) can be helpful for clearly defining the target behavior





Selecting an Evidence-Based Practice Planning Step 1.1a:

If applicable, conduct a functional behavior assessment



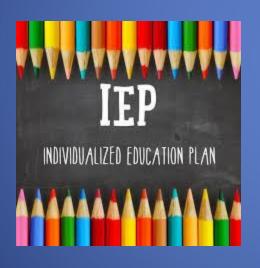
This form is in the Selecting an Evidence-Based Practice Brief





Remember!

Review the IEP or IFSP goal or outcome and the collected baseline data







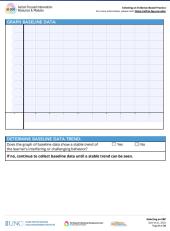


Selecting an Evidence-Based Practice Planning Step 1.2a-e:

Establish an observable and measurable goal/outcome

- 1.2a Collect baseline data (for at least 4 days or until a trend is clear and stable)
- 1.2b Determine context (the 'when' or the antecedent)
- 1.2c Determine the target goal/behavior/skill (the 'what' or the behavior)
- 1.2d Determine how the team will know when the learner has mastered the target goal/behavior/skill (the 'how' or the criterion)
- 1.2e If applicable, complete goal attainment scaling









Selecting an Evidence-Based Practice Planning Step 1.2e: If applicable, complete Goal Attainment Scaling (GAS)

The National Professional Development Center (NPDC) has used a defined goal/ outcome scaling process that incrementally looks at progress toward goal achievement over time.



GOAL ATTAINMENT SCALING

For more information about writing measurable goals and the **Goal Attainment Scaling (GAS)** process, please visit the NPDC on autism.



GAS FORM

Use the **GAS Form** to help you write an observable goal and monitor its progress.





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Selecting an Evidence-Based Practice Planning Step 1.3:

Identify potential EBPs based on research (NCAEP 2020)

28 Evidence Based Practices (2020)

Antecedent-Based Interventions

Augmentative and Alternative

Communication

Behavioral Momentum Intervention

Cognitive Behavioral/Instructional

Strategies

Differential Reinforcement of Alternative,

Incompatible, or Other Behavior

Direct Instruction

Discrete Trial Training

Exercise and Movement

Extinction

Functional Behavioral Assessment

Functional Communication Training

Modeling

Music-Mediated Intervention

Naturalistic Intervention

Parent-Implemented Intervention

Peer-Based Instruction and

intervention

Prompting

Reinforcement

Response Interruption and Redirection

Self-Management

Sensory Integration

Social Narratives

Social Skills Training

Task Analysis

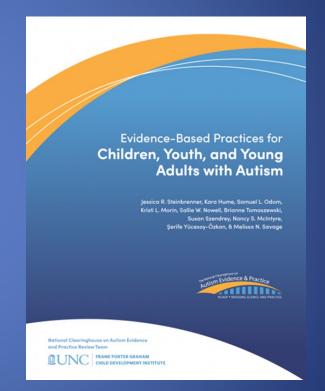
Technology-Aided Intervention and

Instruction

Time Delay

Video Modeling

Visual Supports



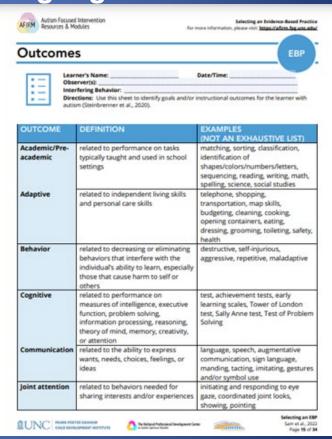




Selecting an Evidence-Based Practice Planning Steps

1.3a Identify domain outcome for the target goal/behavior/skill

Use the Outcomes Table to help you identify goals and/or instructional outcomes to address

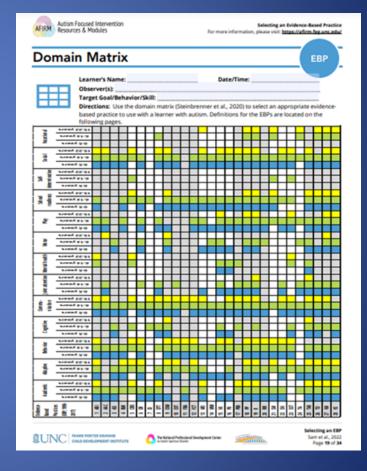






Selecting an Evidence-Based Practice Planning Step 1.3b: Use the NCAEP Domain Matrix to list potential EBPs

- Once an observable and measurable goal or outcome is determined, the next step is to identify a list of potential EBPs by using NCAEP's Domain Matrix
- Consider into what domain the outcome/goal can be categorized







Selecting an Evidence-Based Practice Planning Steps 1.4 a-d:

Choose an evidence-based practice based on completed 1.4 a-d:

The list of applicable EBPs can further be narrowed down by considering these four key areas:

- 1. Determine the learner and/or family preferences, needs, priorities, and/or other characteristics
- 2. Determine the teacher and team characteristics
- 3. Look for additional clues in the target goal/skill/behavior
- 4. Determine other resources available







Considerations/Key Questions

EBP

	_
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	_
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	_

Learner's Name:	Date/Time:
Observer(s):	
Target Goal/Behavior/Skill:	
Directions: Collect information child and	family characteristics, teacher and/or team
characteristics, clues found in the goal, an	d what other resources are available to inform your

selection of an EBP.

LEARNER AND FAMILY PRIORITIES, PRE	EFERENCES, & CHARACTERISTICS
Learner strengths:	Learner challenges:
Has worked before home:	Has not worked before school:
	The first war and a serior of the serior of
Language and the second and the second to the foreign	and an all
Learner/Family's needs and/or priorities for tar	get goal:
Learner/Family's preferences for which EBP(s) to	o use:
TEACHER/TEAM CHARACTERISTICS	
Knowledge level:	Successfully used EBPs:
Past EBP trainings:	EBP trainings needed:
rast EDF trainings.	EBF trainings needed.
CLUES FOUND IN THE TARGET GOAL/S	
Goal domain:	Potential EBPs (Refer to the Domain Matrix):
Additional EBPs mentioned in the goal:	
OTHER RESOURCES	
Current Learner supports:	Available equipment:
T	Address
Team members:	Additional learning experiences:







Sam et al., 2022 Page 18 of 34

Use this form!





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1.4a. Determine the learner and/or family preferences, needs, priorities, and/or other characteristics

Learner/Family Priorities, Preferences, & Characteristics

It is important to consider the learner's and/or family's needs and priorities, preferences, and characteristics when determining which evidence-based practice to use. To select the most appropriate EBP to use, consider the following questions.

LEARNER & FAMILY PRIORITIES, PREFERENCES & CHARACTERISTICS:

- What are the learner's/family's preferences for a particular practice?
- What are the learner's and/or family's priority goals to target?
- What are the strengths of the learner including learning style, temperament, interests and motivators?
- What has and has not worked in the past at home and at school?
- What is particularly challenging for the learner?





1.4b. Determine the teacher and team characteristics

Teacher & Team Characteristics

It is also important to consider characteristics of the teacher and team members who will be using the selected EBP. Consider the following questions.

TEACHER AND/OR TEAM CHARACTERISTICS:

- What is the knowledge and skill level of the teacher and other interveners?
- What EBPs have been used successfully by teachers and team members?
- What trainings on EBPs have the teacher/team had?
- Are additional trainings needed for teacher/team?





Another Resource in How to Determine Teacher/Team Characteristics

Use the CAPTAIN Training and Coaching Confidence Survey on CAPTAIN website

•	CAPI	AIN					
CAPTAIN - Trai	ning & C	Confidence	Survey				
Name:	Positi	ion:			Date:_		
Training Received No Training: Never had a training Introduction/Overview: Have had content training on Hand-on training: Received coaching and hands-on support from a master or menter	Self Evaluation of Confidence Low: Minimal skills or knowledge on topic Medium: Some skills or knowledge on topic High: Confident implementing with a variety of students Master: Feel Local train, coach and support others						
	Trai	Level of Confidence					
	No Training	Intro/ Overview	Hands On	Low	lled	High	Haster
Autism: Characteristics, learning styles and how disability is identified Evidence Based Practices: What Are EBPs,							
Overview of the EBPs for Autism Antecedent-Based Interventions (ABI)		-					
Augmentative and Alternative Communication (AAC)							
Ayres Sensory Integration (ASI®) Behavioral Momentum Intervention (BMI)							
Cognitive Behavioral / Instructional Strategies (CBIS)							
Differential Reinforcement (DRO/DRI/DRA)							
Direct Instruction (DI)							
Discrete Trial Training (DTT) Exercise and Movement (EXM)				┡		_	_
Extinction/Behavioral Extinction (EXT)		-		⊩		-	
FaceSav®		+		┢			
Functional Behavioral Assessment (FBA)					_	_	
Functional Communication Training (FCT)							
JASPER							
Milieu Teaching							
Mindreading							
Modeling (MD)							
Music-Mediated Intervention (MMI)							
Naturalistic Intervention (NI)							
Parent-Implemented Intervention and Parent Training (PII)							
Peer-Based Instruction and Intervention (PBII)					_		
PEERS®			_	I —	-	-	-
Picture Exchange Communication System (PECS®)				l			
Pivotal Response Training (PRT)	_	+	\vdash	⊩	1	-	-
Project ImPACT	-	+	-	⊩—	1	-	-
Prompting and Prompt Fading (PP)		+	-	⊩—	1	_	-
				I ——			
Reinforcement (R+) Response Interruption and Redirection (RIR)				⊩—	1	_	_
				⊩—	1	_	_
Self-Management (SM)		1		II			

ocial Skills Training (SST)				
ocial Stories™				
tepping Stones/Triple P	1	l		
ask Analysis (TA)				
echnology-Aided Intervention and Instruction [AII]				
ime Delay (TD)				
ideo modeling (VM)				
isual Supports (Schedules, Work Systems, hysical Structure of the Environment or Activity Support Independence) (VS)				







1.3c. Look for additional clues in the target goal/skill/behavior

Clues Found in the Target Goal/Skill/Behavior

Consider clues found in the outcome statement.

Remember to refer to the Domain Matrix for a list of applicable evidence-based practices that can be used according to the learner's age range and the domain/outcome of the target goal.

+" DOMAIN MATRIX

CLUES FOUND IN GOAL/SKILL/BEHAVIOR:

- What is the goal trying to accomplish?
- What is the learning domain/outcome of the goal?
- Are there additional evidence-based practices identified in the goal (i.e. prompting, reinforcement, and/or visual supports)?





1.4d. Determine other resources

Other Resources Available

Finally, consider what other resources are available by asking the following questions.

OTHER RESOURCES AVAILABLE:

- What supports are being used effectively with the learner?
- What equipment is needed and available to support implementation of the practice?
- What people and resources can be identified to assist with implementation (related service providers, siblings in the school, peers)?
- What additional learning experiences exist at the school or in the community that would be beneficial in achieving the goal (clubs, sports teams, community-based experiences)?





Selecting an Evidence-Based Practice Planning Step 1.5:

Train the team to use the selected evidence-based practice

Train the Team

Once an EBP or several EBPs have been selected as probable interventions, the team needs to identify who will implement the practice(s) with the learner. One might start by deciding where the behavior or skill is most often demonstrated or needed and target the teachers in that environment. With time and success in the use of the intervention, others with whom the learner engages could be trained to use the intervention effectively so that consistency across settings is maximized.

AFIRM modules are designed to help you learn the step-by-step process of planning for, using, and monitoring an EBP with learners with autism from birth to 22 years of age.

Each AFIRM module focuses on an EBP for learners with autism and includes:

- engaging case examples that demonstrate the behavior or practice in use,
- · multimedia presentation of content with audio and video clips, and
- interactive assessments that provide you with feedback based on your responses.







FREE High Quality Training: <u>Autism Focused Intervention Resources and Modules</u> (AFIRM)

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



There's a
Learning
Module for
most of the
28 EBPs

SLP (Approved by ASHA for maintaining CCC)

AFIRM Modules are designed to help you learn the step-by-step process of planning for, using, and monitoring an EBP with learners with ASD from birth to 22 years of age. Supplemental materials and handouts are available for download.

Visit the Learn with AFIRM section to find out more.

Available FBP Modules



Autism Focused Intervention Resources and Modules

n www.captain.ca.gov http://afirm.fpg.unc.edu/afirm-modules

Selecting an Evidence-Based Practice



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Selecting EBPs

Selecting an EBP



Many interventions exist for autism. The interventions that researchers have shown to be effective are called evidencebased practices (EBPs). With a number of potential EBPs to choose from, it is important to follow a process to select the most appropriate practice for your learner. Before beginning any new practice or intervention with a learner, it is important to follow four general planning steps. The four-step process includes:

- 1. Identifying the behavior
- 2. Establishing an observable and measurable goal or outcome
- 3. Identifying potential EBPs based on research (NCAEP Domain Matrix), and
- Choosing a specific EBP (consider learner and family characteristics, team characteristics, clues on the goal/outcome, and other resources).

To learn more about the process for selecting an evidence-based practice, please see <u>Selecting an Evidence-Based</u> Practice module.

If you are familiar with selecting an evidence-based practice process and just need guidance with choosing an EBP, please use the IEP to EBP Tool (button located below). The IEP to EBP Tool assists with selecting an evidence-based practice (EBP) to use with a learner. The tool guides you through National Clearinghouse on Autism Evidence and Practice (NCAEP) Domain Matrix to identify a list of potential EBPs to use and then to choose one EBP by considering:

- 1. learner/family priorities, preferences and characteristics,
- 2. teacher/team characteristics,
- 3. clues found in the target goal/skill/behavior, and
- 4. other resources available.

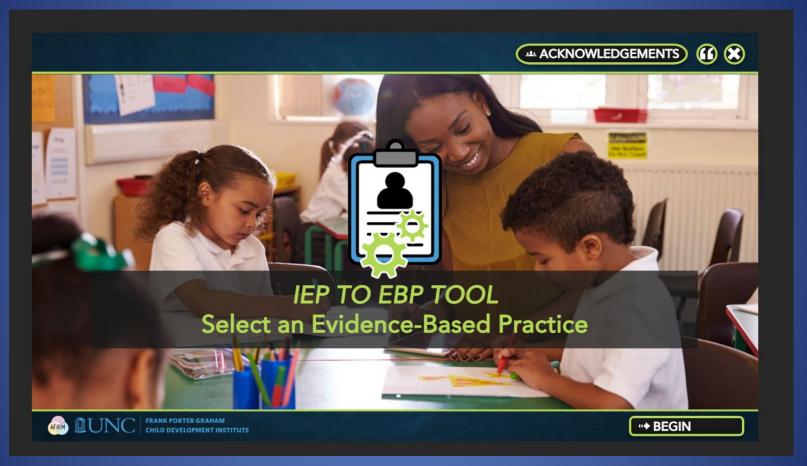
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The AFIRM "IEP to EBP Tool" How to Select an Evidence-Based Practice

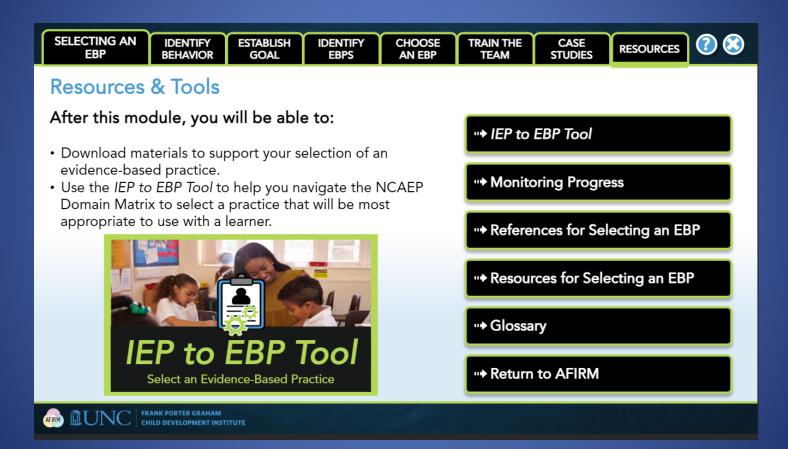


https://afirm.fpg.unc.edu/selecting-ebp





Learn How to Use the IEP to EBP Tool















Additional Resources

EBP

IEP to EBP Tool:

The IEP to EBP Tool is designed to support your selection of an evidence-based practice for a learner with autism.

For more information, please visit: https://afirm.fpg.unc.edu/iep-to-ebp-tool

NCAEP EBP Database:

The EBP database is designed to help you in the EBP selection process.

For more information, please visit: https://ncaep.fpg.unc.edu/ebp-database

AFIRM Modules:

AFIRM Modules are designed to help you learn the step-by-step process of planning for, using, and monitoring an EBP with learners with ASD from birth to 22 years of age. Supplemental materials and handouts are available for download.

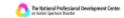
For more information, please visit: https://afirm.fpg.unc.edu/

2020 NCAEP EBP Report:

National Clearinghouse on Autism Evidence & Practice team at the Frank Porter Graham Child Development Institute has completed a report on Evidence Based Practices (EBPs). The report includes literature published from 2012-2017 and the findings are combined with the literature from the previous review (NPDC) from 1990-2011.

Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yucesoy-Ozkan, S., & Savage, M. N. (2020). Evidence-based practices for children, youth, and young adults with autism. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team. https://ncaep.fpg.unc.edu/research-resources







Selecting an EBP Sam et al., 2022 Page 33 of 34



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CAPTAIN Website www.captain.ca.gov

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



Making Implementation Happen.
Bridging the Research to Practice Gap













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www.captain.ca.gov captain@marinschools.org "Children and families cannot benefit from evidence-based practices that they do not experience."

-Dean Fixsen, NIRN, 2006





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