What Are Evidence Based Practices for Autism and Why Should We Use Them?

Brief Overview for Families and Family Support Providers









What is CAPTAIN?

CAPTAIN is a multiagency network developed to support the understanding and use of Evidence-Based Practices for individuals affected by Autism Spectrum Disorder across 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 ASD 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 is also a
SELPA Content Lead-ASD
in partnership with
Marin County SELPA
which is part of California's Statewide
System of Support













CAPTAIN Partners Across California



UCDAVIS HEALTH

MIND INSTITUTE

Center for Excellence in Developmental Disabilities













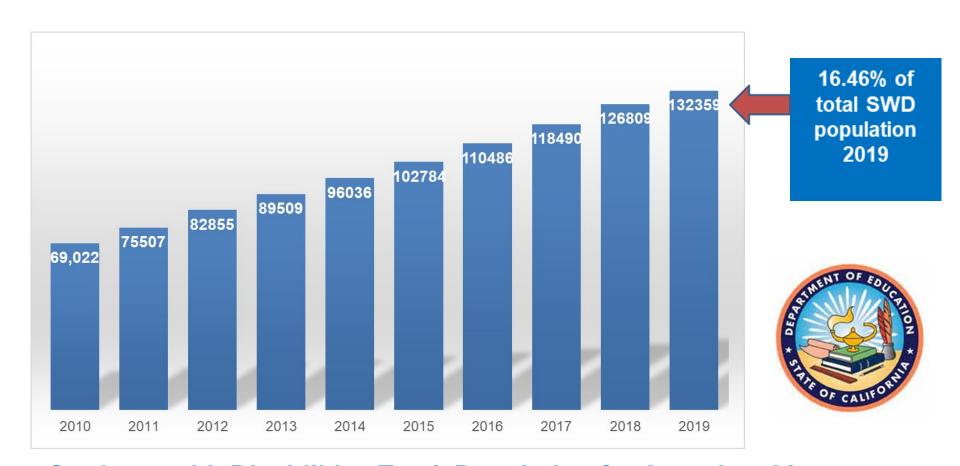
Diagnostic & Centers
Centers

Regional Centers





Steady Increase in Number of California Students with Autism



Students with Disabilities Total Population for Ages 0 to 22: 804,101 * 16.46%

Source: CASEMIS December 2019 CA Dept. Education

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

"AUTISM TREATMENT"?











About 204,000,000 results (0.85 seconds)

Ad //ww.soundsory.com/ ▼ (469) 579-8356

Nome-based listening program | For the brain and the body

For **autism** spectrum disorders, ADHD, sensoy issues, learning difficulties. A new multi-sensory program. 14 day money back. Rhythmical Filter. Bone conduction Headset. Secure Payment. Courses: Home-based program, Auditory stimulation.

Rhythmical Music Headset · Buy now - 10% off

RESULTS: 204,000,000 FOR AUTISM TREATMENT on

May 3, 2020!!!!!

Pricing Plans · Product Tour · Blog Center · Contact Us · Support Center

Ad · www.getanswersnow.com/autism-services ▼

Online Autism Help | Autism Support For Parents

You and your child deserve support during these stressful times. We're here to help.

MANY TREATMENTS FOR ASD

- Treatments for ASD 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 ASD





What Is An Evidence Based Practice (EBP)?

 An intervention or practice for which there is scientifically based research that demonstrates its effectiveness

 Practices that rely on rigorous, systematic and objective procedures to deliver reliable results



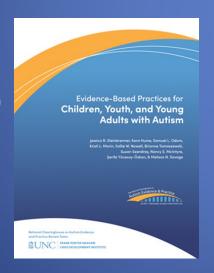






What are Evidence-Based Practices (EBPs) for ASD?

Released April 2020





Released April 2015









- Based on research conducted from 2007 to February 2012
- 351 articles (ages 0-22)
- 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 following interventions have been identified as falling into the Established level of evidence:

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

14 ESTABLISHED
INTERVENTIONS
(for individuals under age 22)



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

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

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

- Augmentative and Alternative Communication Devices
- Developmental Relationship-based Treatment
- Exercise
- Exposure Package
- Functional Communication Training
- Imitation-based Intervention
- Initiation Training (for individuals under age 22)
- 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





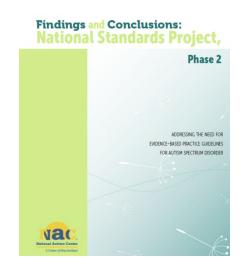


Unestablished Interventions are those for which there is little or no evidence in the scientific literature that allows us to draw firm conclusions about their effectiveness with individuals with ASD. There is no reason to assume these interventions are effective. Further, there is no way to rule out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

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

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

13 UNESTABLISHED INTERVENTIONS (for individuals under age 22)



Research Findings for Adults (22+ Years)

Established Interventions for Adults

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

Only 1 Established for individuals 22+

Only 1 Emerging Practice for individuals 22+

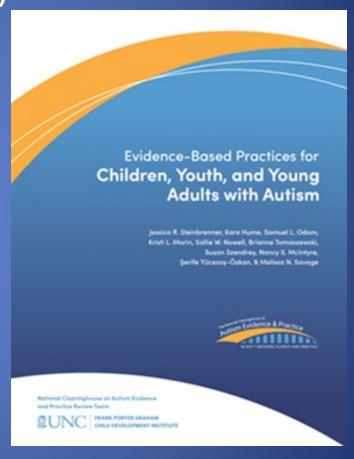




April 2020 Report

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







Definition of EBP (NCAEP)

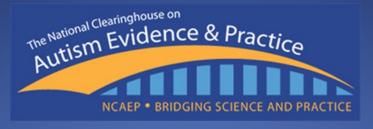


NCAEP definition of an EBP:

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







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





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

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:

- a) are manualized,
- b) have unique features that create an intervention identity, and
- c) 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 |





Do Not Yet Have Sufficient Evidence or Have *Conflicting Evidence

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)





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

| | | Augmentative and Alternative Communication (AAC) | | | | | | | | | | | | | |
|-----------------|---|---|-----------|-------------------------|-----------------|--------|-------------------|--|--|--|--|--|--|--|--|
| 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/vocal including alded and unalded communication systems. Unabstrain or teach not use any materials or teach noisy (e.g., a) all anguage and gettures). Aided communication systems in dude love tech systems (e.g., suchanging objects/pictures or pointing to letters) and extend to high tech up each generating devices (SoDs) and applications that also with a reduces (i.e., phones, tab lets) to serve as SODs, which does not branching AAC use are also included in this category (e.g., Aid all anguage Modeling) which may include other EBPs such as prompting nindirecement, valual up ports, and pear-mail and interventions. Manual and interventions Meeting Criteria: Picture Echange Communication System® (PECSP; Bondy and Iro #, 1985). | | | | | | | | | | | | | |
| Definition of I | | | | | | | | | | | | | | | |
| | | | | Age to | ulier | | | | | | | | | | |
| Outcome Ami | | 0-2 | Emily des | (41) Demostry School | USA Markabad | HgSded | 1022 Name Adds | | | | | | | | |
| | Communication | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| \Rightarrow | Social | 1 | 1 | 1 | | 1 | | | | | | | | | |
| | Joint attention | ✓ | 1 | 1 | | | | | | | | | | | |
| | Play | 1 | 1 | 1 | | | | | | | | | | | |
| | Cognitive | | | | | | | | | | | | | | |
| | School readiness | | | | | | | | | | | | | | |
| | Academic/ Pre-academic | | 1 | 1 | | | | | | | | | | | |
| | Adaptive/ self-help | | | | | | | | | | | | | | |
| [] | Challenging/ Interfering behavior | | 1 | 1 | | | | | | | | | | | |
| w .= | Vocational | | | | | | | | | | | | | | |
| | Motor | | | | | 1 | | | | | | | | | |
| (E) | Mental health | | | | | | | | | | | | | | |
| C. 1.3 | Self- determination | | | | | | | | | | | | | | |

- Agius, M. M., & Vance, M. (2016). A comparison of PECS and Pad to teach requesting to pire-achoolers with autistic spectrum disorders. Augmentative and Alternative Communication, 32(1), 58-48. https://doi.org/10.3109/0743.4618.2.05.310836.3
- 2. All E. MacFarland, S. Z. & Umbreit, J. (2011). Effectiveness of goods inling tangel is symbols with the Pidure Exchange Communication System. to teach nequesting skills to children with multiple disabilities including visual impairment. Education and Training in Autism and Developmental Disphilities, 46(3), 425-435.
- 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 rail effects of adaptive interventions with a speech-generating device in minimally verbal drild en with ASD. Journal of Clinical Child & Adolescent Psychology, 45(4), 442-456. https://doi.org/101080/15374496.2016.TI38407
- 4. Alzrayer, 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/10.1080/07434618.2.017.3306881

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

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

| Evidence-Based | | ader | nic/ lemic | | fapti elf-he | | In | alleng terfe | ging/ ring ior | c | ognit | ive | | mmu | | af | Joint | | | Ment: | | | Moto | ur | | Play | | | Schoo | | det | Self- determination | | | Social | | | cation | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BMI | | | | | | | | | | | | | | | Г | | | | | | | | | | | | | | | | | | | | | | | | |
| CBIS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DTT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EXM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EXT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FBA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FCT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MD | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MMI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| VS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |





EBP Definitions Chart on CAPTAIN website

| | Evidence-Based | DEFINITION |
|------|--|--|
| | Practices | |
| 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) |
| 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. |
| MD | Modeling | Demonstration of a desired target behavior that results in use of the behavior by the learner and that leads to the acquisition of the target behavior. |













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)







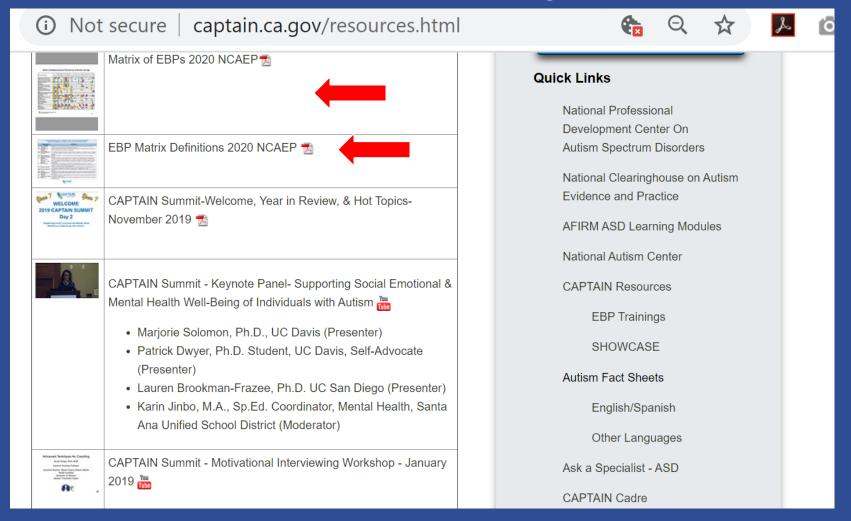
Table 3.7 Matrix of evidence-based practices, outcomes, and age categories

| Evidence-Based | | ader | nic/ femic | Ac Se | dapti elf-he | ve/ | In | allen | ging/ ering vior | c | ognit | ive | | omm catio | | a | Joint | | | Menta healti | | | Moto | ur. | | Play | | | Schoo | | Self- determination | | | | Socia | ı | Vocationa | | |
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| ABI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| SM | | | | | | | Г | | | | П | П | | | | П | | | | | | | | | | | П | | | | | | | | | | | | |
| SI | | | | | | | | | | | | | | П | | | | | | | | | | | | | | | | | | | | | | | | | |
| SN | | | | | | | | | | | | | Г | Г | | | | | | | | | | | | | | | | | | | | | | | | | |
| SST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Т |
| TA | | | | | | Г | | П | | | П | | | П | г | | | | | | | | | | | | Г | | П | | | | | П | | | | | |
| TAII | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VM | | | | | | | | | | Г | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |





EBPs Matrix and Definitions (English and Spanish) Available on the CAPTAIN Website www.captain.ca.gov



HOW DO THESE TWO REVIEWS COMPARE? *NCAEP (2020) AND NSP (2015)*

"There continues to be a substantial overlap in EBPs identified by these two independent reviews."

-Page 48 of the NCAEP Report





Significant Overlap Between NCAEP and NSP

| | | | | | No. 10 | 1 | Esta | blish | ed Int | erve | ntior | s Ident | ified by NSP | |
|--|------------------------------|--|----------|-------------------------------------|-----------------|-----------------------|--------------------------------|-----------|-----------|-----------------|-----------------------|-----------------------------|---|--|
| Evidence-Based Practices Identified (NCAEP) | Behaviorial Interventions | Cognitive Behavioral Intervention Package | Modeling | Naturalistic Teaching Strategies | Parent Training | Peer Training Package | Pivotal Response Treatment® | Schedules | Scripting | Self-management | Social Skills Package | Story-based Intervention | (Production) | Comprehensive Behaviorial Treatment for Young Children |
| Antecedent-Based Intervention (ABI) | 1 | | | | | | | | | | | | Language training did | The NCAEP did not |
| Cognitive Behavioral Instructional Strategies (CBIS) | | 1 | | | | | | | | | | | not emerge as a focused | review comprehensive |
| Differential Reinforcement (DR) | 1 | | | | | | | | | | | | intervention by the NCAEP. Components | treatment models. Components of the |
| Discrete Trial Training (DTT) | 1 | | | | | | | | | | | | of Language Training | Comprehensive |
| Extinction (EXT) | 1 | | | | | | | | | | | | (Production) overlap with NCAEP identified | Behavioral Treatment of Young Children may |
| Modeling (MD) | 1 | | 1 | | | | | | | | | | practices that may | overlap with many |
| Naturalistic Interventions (NI) | | | | 1 | | | 1 | | | | | | support language production, such as | NCAEP identified practices, such as |
| Parent-Implemented Interventions (PII) | | | | - | 1 | | _ | | | | | | modeling, prompting. | discrete trial training. |
| Peer-Based Instruction & Intervention (PBII) | | | | | | 1 | | | | | | | reinforcement, visual supports, and music- | modeling, prompting, time delay, and |
| Prompting (PP) | 1 | | | | | | | | 1 | | | | mediated interventions. | behavior momentum |
| Reinforcement (R) | 1 | | | | | | | | | | | | | intervention. |
| Response Interruption & Redirection (RIR) | 1 | | | | | | | | | | | | | |
| Self-Management (SM) | | | | | | | | | | 1 | | | | |
| Social Narratives (SN) | | | | | | | | | | | | 1 | | |
| Social Skills Training (SST) | | | | | | | | | | | 1 | | | |
| Task Analysis (TA) | 1 | | | | | | | | | | | | | |
| Time Delay (TD) | 1 | | | | | | | | | | | | | |
| Video Modeling (VM) | 1 | | 1 | | | | | | | | | | | |
| Visual Supports (VS) | 1 | | | | | | | 1 | 1 | | | | | |
| Augmentative & Alternative Communication (AAC) | Identi | fied as | an en | nerging | inter | ventio | n by th | e NSI | P | | | | | |
| Exercise & Movement (EXM) | Identi | fied as | an en | nerging | inter | ventio | n by th | e NSI | P. | | | | | |
| Functional Communication Training (FCT) | Identi | fied as | an en | nerging | inter | ventio | n by th | e NSI | Ρ. | | | | | |
| Music-Mediated Interventions (MMI) | Identi | fied as | an en | nerging | inter | ventio | n by th | e NSI | P. | | | | | |
| Technology-aided Instruction & Intervention (TAII) | Identi | fied as | an en | nerging | inter | ventio | n by th | e NS | P | | | | | |
| Behavior Momentum Intervention (BMI) | The N | SP did | not co | onsider | this a | saca | tergor | fori | nterv | entio | n. | | | |
| Direct Instruction (DI) | The N | SP did | not co | onsider | this a | saca | tergor | fori | nterv | entio | n. | | | |
| Functional Behavior Assessment (FBA) | The N | SP did | not co | onsider | this a | saca | tergor | fori | nterv | entio | n. | | | |
| Sensory Integration® (SI) | The N | SP did | not co | onsider | this a | saca | tergor | fori | nterv | entio | n. | | | |





CAPTAIN Recommends

- Use 28 EBPs from NCAEP
- Use 14 Established Interventions for Ages 0-22 from NAC
- Use 1 Established Intervention for Ages 22+ from NAC





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



afirm.fpg.unc.edu/afirm-modules



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AFIRM Modules

Learn with AFIRM

Selecting EBPs

Resources

Prompting

Use prompting to reduce incorrect responding as learners with ASD acquire new skills.

Learn more about Prompting



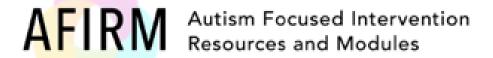
AFIRM Modules

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.

. 0 .

Visit the Learn with AFIRM section to find out more.

Available EBP Modules



What you'll learn with AFIRM Modules:

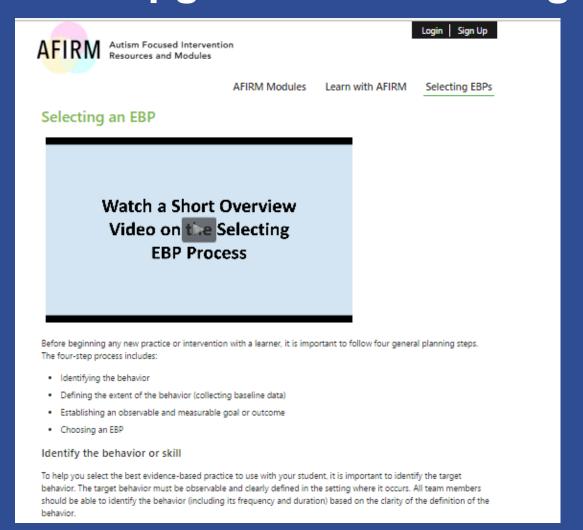


- Key components of an EBP
- Behaviors and skills that can be addressed

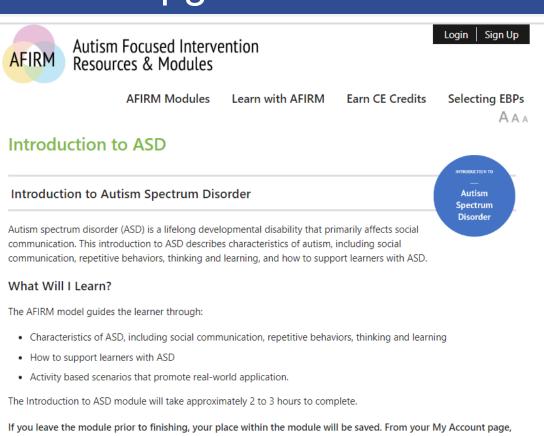
- A step-by-step process for applying the practice
- Specific resources that you can download and customize for your own use



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



Helpful AFIRM Learning Module Introduction to ASD https://afirm.fpg.unc.edu/node/2524



Suggested citation:

Steinbrenner, J., Sam, A., Chin, J., Morgan, W., & AFIRM for Paras Team. (2019). *Introduction to ASD*. FPG Child Development Institute, University of North Carolina. Retrieved from https://afirm.fpg.unc.edu/introduction-asd

look in the My Modules tab and select the last page viewed to resume this module.



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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 category.

Keyword Search

Apply

IMPLEMENTATION 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 Modeling

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 quide

Professional standards

Step-by-Step practice guide

Tip sheet for professionals

EBP Brief Packet

Parent Guides

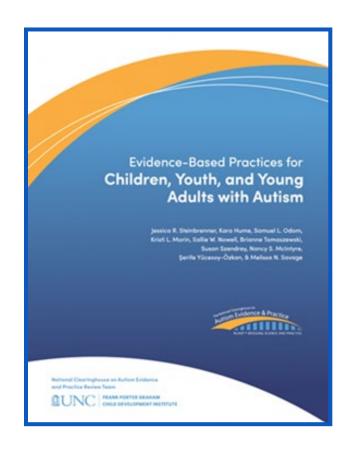
AFIRM Videos

EBP Videos

Browse Videos

NEW AFIRM MODULES COMING

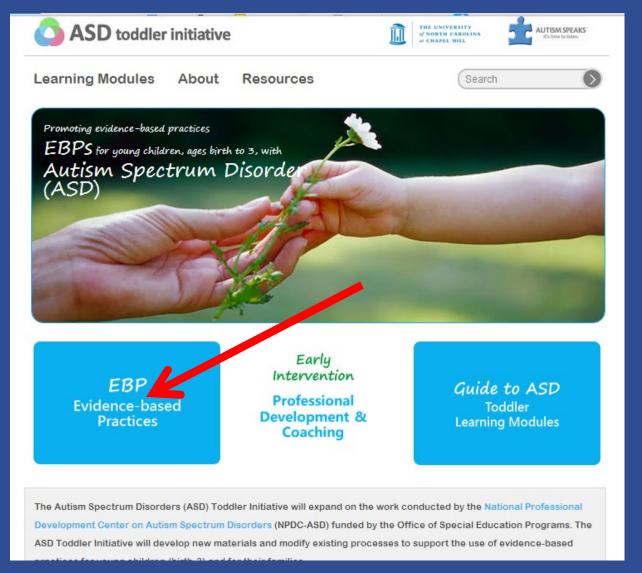
"The next step for the NCAEP will be to use the new information to revise the AFIRM modules to reflect the most current scientific information about focused intervention practices."





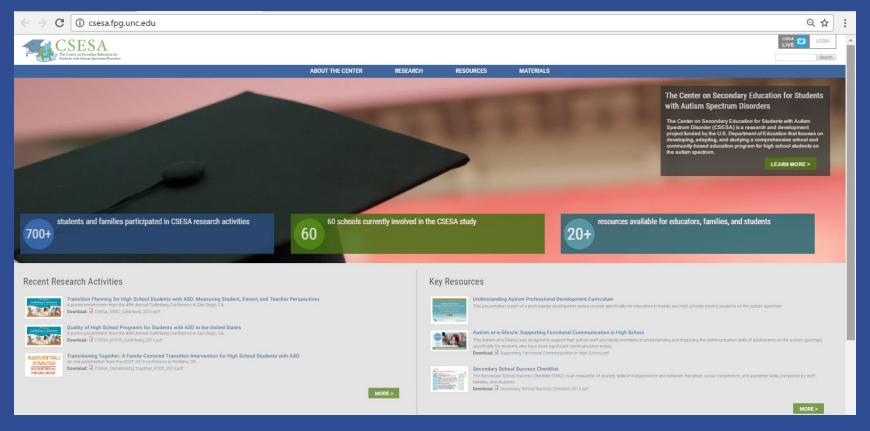
Autism Focused Intervention Resources & Modules

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



Welcome

and Information Network

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
- . Establishing supports that are locally based with trainer of trainers at the local
- . 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
- . 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, Aliled Health Providers)





Quick Links

National Professional Development Center On Autism Spectrum

AFIRM ASD Learning Modules

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

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]

South: November 9-10, 2015







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





Why are these two 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





EBPs are Required.....

| IDEA 2004 | Sec. 300.320 (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 |
|---------------------|--|
| ESSA S.1177-290. | EVIDENCE-BASED (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 strong evidence(ii)(I) demonstrates a rationale based on high quality research findings |
| CA ED | CODE 56345 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 |





EBPs are Required...

| CA Senate Bill 946 | "Behavioral health treatment" means professional services and treatment programs, including applied behavior analysis and evidence-based behavior intervention programs |
|--------------------|--|
| CA Lanterman Act | 4686.2: Only purchase ABA services or intensive behavioral intervention services that reflect evidence-based practices Evidence-based practice" means a decision making process that integrates the best available scientifically rigorous research, clinical expertise, and individual's characteristics. |
| ASHA | Audiologists and speech and language pathologists incorporate the principles of evidence-based practice in clinical decision making to provide high quality clinical care. The term evidence-based practices 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. |
| АЗПА | preferences and values into the process of making clinical decisions. |





What is the most important reason to use EBPs?



Because they work!!!! ©





INFOGRAPHIC FOR FAMILIES

Available in English and Spanish

—— Information on Evidence-Based Practices——

for Families of Children with Autism Spectrum Disorder (ASD) and Other Developmental Disabilities



CAPTAIN (California Autism Professional Training and Information Network) is a multiagency (Schools, Regional Centers, and Family Resource Centers) network developed to support the understanding and use of evidence-based practice for individuals with Autism Spectrum Disorder across the state.

What is Evidence-Based Practice?

- An intervention, service, or other practice for which there is scientifically-based research that demonstrates its
 effectiveness.
- Practices that rely on rigorous, systematic, and objective procedures to deliver reliable interventions and activities.

How Does Understanding Evidence-Based Practice Benefit Families?

- Families are the experts on their own children and their participation in intervention planning is vital. However, identifying effective interventions can be challenging.
- Many people promoting interventions now use the phrase "evidence-based practice"—even when there is no
 scientifically sound research that supports their use. This can make it extremely difficult to know which
 interventions have research showing they are effective, and which do not.
- Providing information, support, and resources help parents recognize evidence-based practices established through the National Autism Centers and the National Professional Development Center on Autism Spectrum Disorder. This knowledge increases their capacity and confidence as partners with their children's service providers.

Where Can I Find Information on Evidence-Based Practice?



https://www.nationalautismcenter.org/ https://www.nationalautismcenter.org/090605-2/

* National Professional Development Center on Autism Spectrum Disorder:

https://autismpdc.fpg.unc.edu/national-professional-development-center-autism-spectrum-disorder https://autismpdc.fpg.unc.edu/evidence-based-oractices

Other Parent and Family Support Links:

- . CAPTAIN website: http://www.captain.ca.gov/
- Learn the Signs, Act Early: https://www.cdc.gov/ncbddd/actearly/index.html/
 https://www.cdc.gov/ncbddd/childdevelopment/screening.html
- Autism Fact Sheets: https://www.uscucedd.org/publications-resources/autism-pubs/autism-fact-sheets
- Autism Focused Intervention Resources & Modules (AFIRM): https://afirm.fpg.unc.edu/afirm-modules
- Autism Distance Education Parent Training (ADEPT) Modules:

http://media.mindinstitute.org/education/ADEPT/Module1Menu.html









Infographic for Family Support Providers

----Information for Family Support Personnel -----

Identifying, Understanding, and Accessing Evidence-Based Practices (EBPs): Supporting Families of Children with Autism Spectrum Disorder (ASD) and Other Developmental Disabilities



CAPTAIN (California Autism Professional Training and Information Network) is a multi-agency (Schools, Regional Centers, and Family Resource Centers) network developed to support the understanding and use of evidencebased practice for individuals with Autism Spectrum Disorder across the state.

Why is Family Participation So Important?

- Parent-professional collaboration, with active involvement of parents/caregivers, is not just an evidencebased practice in designing services for individuals with autism; it is also the law! (Section 300.300 of the Code of Federal Regulations)
- The family-centered model of service delivery acknowledges that interventions and supports for children
 with disabilities are most successful when the family's concerns, priorities, choices, and strengths are
 considered. (Peterson & Speer, 2000)

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- Providing information, support, and resources helps parents recognize evidence-based practices. This
 knowledge can increase families' capacity and confidence as partners with children's service providers.

What Are Examples of Barriers Families May Face When Participating in Interceptions and Service Decisions?

- Time: Children with ASD are often involved with several different intervention activities that take tremendous amounts of the family's time and coordination of care.
- Money: Decisions regarding interventions may have financial implication, including things like co-pays, medications, special diets, etc.
- Emotional Stressors: Parents may feel overwhelmed as they decide how to allocate their attention and energy across family and professional obligations.
- Information and Confidence: Parents may worry that they lack sufficient information about EBPs and may be more confident deferring to professionals to make treatment decisions.

-Information for Family Support Personnel —

Identifying, Understanding, and Accessing Evidence-Based Practices (EBPs): Supporting Families of Children with Autism Spectrum Disorder (ASD) and Other Developmental Disabilities



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www.captain.ca.gov



PADLET

Resources for Educators and Families during School Closure English

https://padlet.com/SELPACAPTAIN/xr3r3q3szpyf

CAPTAIN

EVIDENCE

SELPA Content Lead-ASD, CAPTAIN and Marin County SELPA + 2 . 2d

RESOURCES TO SUPPORT SCHOOL CLOSURES/DISTANCE LEARNING FOR STUDENTS WITH AUTISM

SELPA Content Lead-ASD, CAPTAIN and Marin County SELPA

RESOURCES TO EXPLAIN COVID-19 TO STUDENTS WITH AUTISM

Social Stories by Carol Gray:

Pandemics and the Corona Virus (English)



SOCIAL STORY BY CAROL GRAY Pande...

Casial Ctarias by Caral Cray

RESOURCES FOR PARENTS TO SUPPORT HOME LEARNING

AFIRM Modules

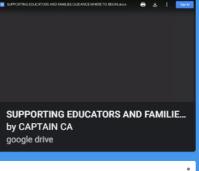
- 1. Visual Supports
- 2. Antecedent Based Interventions
- 3. Reinforcement

Autism Spectrum Disorder

AFIRM Modules
Our funding has ended. Find out how to ...

RESOURCES FOR EDUCATORS TO SUPPORT DISTANCE LEARNING

GUIDANCE DOCUMENT: What to do and Where to Start



Webinar: Teaching Online

APPS, ETC., TO SUPPORT LEARNING, BEHAVIORS, AND MAINTENANCE OF SKILLS

Schedules:

- iCal (Apple Calendar)
- Google Calendar (iPhone and Android Apps)
- First/Then Visual Schedule App (\$14.99)

Timers:

- TimeTimer App (\$2.99)
- 20 Types of Visual Timers:













PADLET

Resources for Educators and Families during School Closure **Spanish**

https://padlet.com/SELPACAPTAIN/c4ibcglc414h

padlet



SELPA Content Lead-ASD, CAPTAIN and Marin County SELPA • 6d

RECURSOS EN ESPAÑOL PARA LAS FAMILIAS CON ESTUDIANTES CON AUTISMO

SELPA Content Lead-ASD, CAPTAIN and Marin County SELPA www.captain.ca.gov

Cómo Explicar COVID-19 a los Niños

Historias Sociales por Carol Gray:

Mi historia sobre Pandemias y el Coronavirus



SOCIAL STORY BY CAROL GRAY PANDE... by CAPTAIN CA google drive

Historias Sociales por Carol

Información Básica Sobre El Trastorno Del Espectro Autista



Español | Autism Speaks El autismo, o trastorno del espectro autis...

Aprenda los signos. Reaccione * pronto.

Ayuda para las Familias

Información para las familias en Español:

1-888-772-9050



Autism Response Team (ART) | Autism ... The Autism Response Team (ART) is an i... autismspeaks

Tarjetas de Autismo

USC UCEDD

Estrategías de Enseñanza para las Familias

ADEPT: (Entrenamiento en Autismo para Padres Educación a la Distancia) Aprendizaje Interactivo Versión en Español













PADLETS ON CAPTAIN WEBSITE WWW.CAPTAIN.CA.GOV

① Not secure | captain.ca.gov



















WWW.CAPTAIN.CA.GOV

RESOURCE AND GUIDANCE PADLETS DURING SCHOOL
CLOSURES FOR STUDENTS WITH ASD
SELPA CONTENT LEAD-ASD, CAPTAIN/Marin County SELPA



Here is the link to the English Padlet: https://padlet.com/SELPACAPTAIN/xr3r3q3szpyf

Here is the link to the Spanish Padlet for Families: https://padlet.com/SELPACAPTAIN/c4ibcglc414h

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.

Google Custom Search

Search

CAPTAIN Events

Calendar

CAPTAIN Summit [by invitation only]

November 2-3, 2020 One Statewide Summit Riverside Convention Center, Riverside CA











CAPTAIN CAPTAIN_EBPS





@CAPTAIN_EBPS **CAPTAIN**



understanding and use of Evidence Based Practices for

CAPTAIN is dedicated to the following:

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- implement ESP's and ensure fidelity of implementation.
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- Providing an armual training summit and a forum for college. communication and support to CAPTAIN Cadre members.
- . Providing web based access to materials and resources that are
- Providing information and outreach to other interested stakeholden and provider groups who could barefit from learning more about ESI's (E.g. Professional Organizations, Higher Education, Self Advocates,







Development Center On Autom

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Spectrum Disorders

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CAPTAIN Resources

ESP Trainings

Autom Fact Sheets

English/Spenish Other Large season

CAPTAIN Cadre

CAPTAIN Leadership Learn the Signs. Act Early

Effective Early Chichood

ASD Todder Initiative

Authors Chickerys Extendion

CAPTAIN Partners

Network of Calfornia

Center for Excelence for Developmental Disobilities at UC Davis MIND Institute

USC University Center for

Disabilities (USC UCEDD) Developmental Services

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Links to ASD Resources

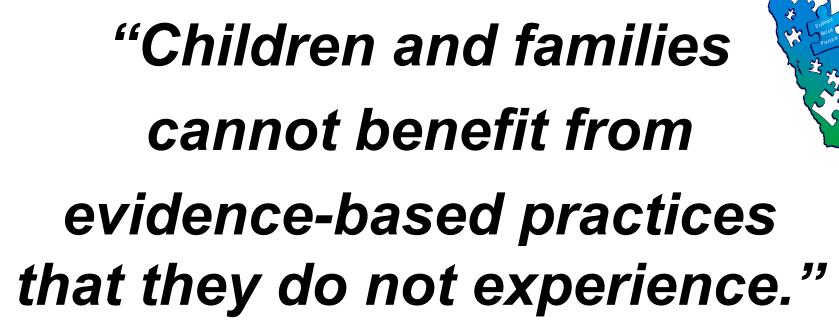
CAPTAIN **Social Media** Links



www.captain.ca.gov







-Dean Fixsen, NIRN, 2006



For Further Information

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plschetter@ucdavis.edu

www.captain.ca.gov