# Evidence Based Practice Training:

Task Analysis (TA)

Adapted from Sam, A., & AFIRM Team. (2015). *Task Analysis.* Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from https://afirm.fpg.unc.edu/task-analysis

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SELPA Content Lead
EVIDENCE Based Practices
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What is CAPTAIN

The California Autism Professional Training And Information Network (CAPTAIN) 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.
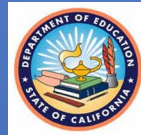
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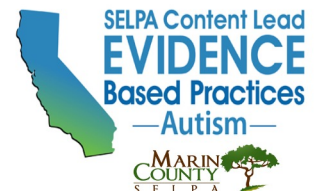—Autism—
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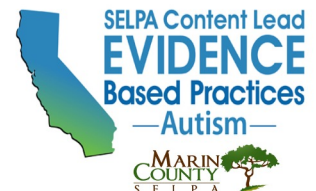
What is CAPTAIN

Marin County SELPA in partnership with CAPTAIN, are members of the Statewide System of Support as the Special Education Content Lead for Autism

This project is funded by the California Department of Education and the California Collaborative for Educational Excellence.

Levels of Professional Development to Reach Implementation

Systems Support

Information Session

Workshop/ Training

Implementation Coaching

Systems Support

This is a Workshop/Training and is designed to increase your KNOWLEDGE of the topic. Implementation supports to assist you with use of this EBP will be outlined following the TRAINING/WORKSHOP

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Before We Begin…

Please complete the **Pre Training Survey** sent to your email

Learning Objectives:

- Describe what EBPs are

- Define and describe tasks analysis and the skills and learners it can be used for

- Demonstrate the development of a Task Analysis in preparation for skills teaching
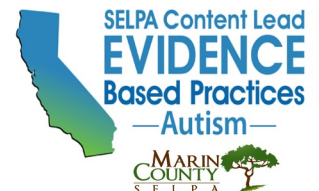
What are Evidence Based Practices?
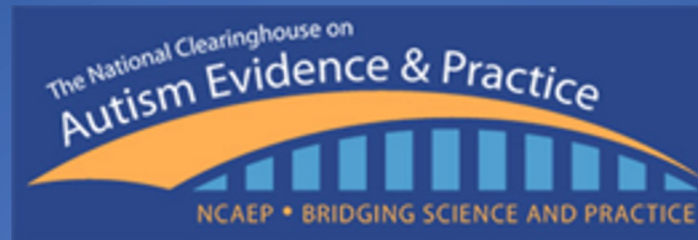
NCAEP definition of an EBP:

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

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.

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Evidence Based Practice Matrix (28 EBPs)

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

Selecting EBPs

Before beginning a new practice with a learner, it is important to follow four planning steps

1. Identify the behavior

2. Collect baseline data on the behavior

3. Establish an observable and measurable goal

4. Choose an EBP

   – Consider the child and family characteristics

   – Consider the teacher and team characteristics

   – Consider other available resources

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Selecting an EBP Checklist

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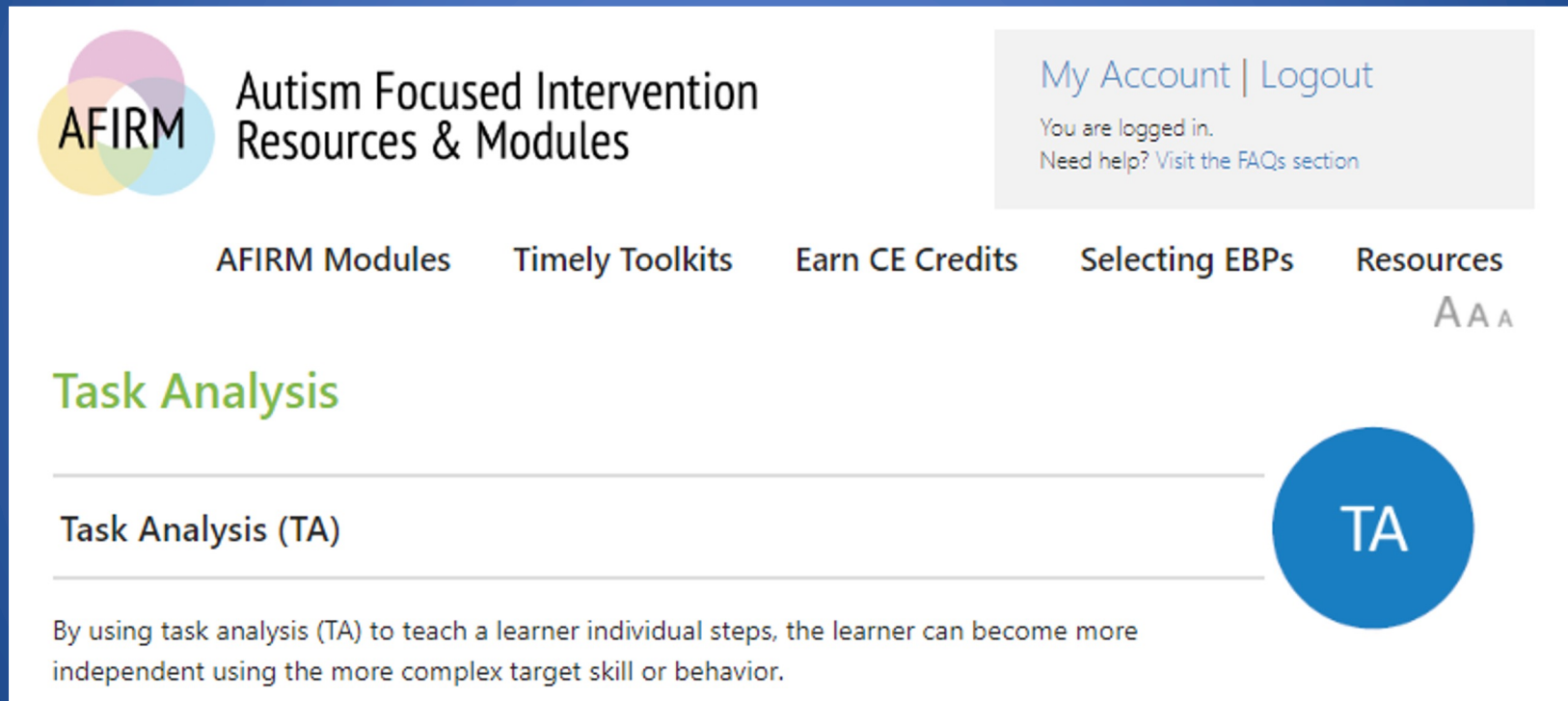
High Quality Training:
Autism Focused Intervention Resources and Modules (AFIRM)

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

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Task Analysis (TA)

- Breaking down a complex skill into smaller components in order to aide in the teaching of the skill

- Learners are taught to perform steps of the sequence using additional evidence based practices such a prompting and reinforcement

Example of a Task Analysis

Brushing Your Teeth	
Step	**Component Skill**
1	Pick toothpaste up.
2	Twist off cap.
3	Apply toothpaste to toothbrush.
4	Turn on cold water.
5	Wet toothbrush.
6	Brush teeth.
7	Spit in sink.
8	Wash mouth out with cup of water.
9	Spit out water.
10	Put cap on toothpaste.

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Outcome Areas		Age Ranges					
		0-2 Toddlers	3-5 Preschoolers	6-11 Elementary School	12-14 Middle School	15-18 High School	19-22 Young Adults
Communication	Communication		✓	✓	✓		
	Social			✓			
	Joint attention		✓		✓		
	Play				✓		
Cognitive	Cognitive						
	School readiness						
	Academic/ Pre-academic			✓	✓		
Adaptive	Adaptive/ self-help		✓	✓			
	Challenging/ Interfering behavior						
	Vocational				✓	✓	✓
	Motor			✓			
Mental health	Mental health						
	Self-determination						

(Steinbrenner, 2020)

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Case Examples: Task Analysis

https://afirm.fpg.unc.edu/task-analysis/lesson-1-basics-ta/how-ta-being-used

Think - Pair - Share

Describe a student and a skill that you think would
be a good fit for using Task Analysis

Planning for Use of Task Analysis

Step 1: Planning

1.1	Determine if learner has prerequisite skills needed to learn target skill/behavior
1.2	Identify the components of the target skill/behavior
1.3	Check if task is completely analyzed
1.4	Select appropriate task analysis procedure
1.5	Select appropriate method for teaching steps of task analysis
1.6	Develop presentation materials of the steps

Identifying Components of the Skill

- Observe others that have mastered the skill or behavior

- Record each step needed to complete the behavior or skill

- Each step should be discrete, manageable, based on the needs of the learner

Individualized for the Learner

AFIRM — Autism Focused Intervention Resources and Modules

https://afirm.fpg.unc.edu/resources/plan-ta-check-ta-steps

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Let's Practice!

Practice writing a task analysis by breaking down the sequence of skills required for your classroom entry routine

Task Analysis

AFIRM
Autism Focused Intervention
Resources & Modules

---Progress Monitoring Form---

Learner's Name: _____   Date/Time: _____
Observer(s): _____
Target Behavior: _____
_____
Task Analysis Procedure: _____
Additional EBPs: _____

Steps	Dates				
	__/__	__/__	__/__	__/__	__/__

I=Independent; IS=Independent with support (visual support, video modeling, social narrative); VP=Verbal Prompt;
VSP = Visual Support Prompt; MP = Model Prompt; PP = Physical Prompt; GP= Gestural Prompt; 0=error

Anecdotal Notes:

Date	Observer Initials	Target Skill/Behavior, Comments, and Plans for Next Steps

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Teach the Steps of the Task Analysis:
Use Prompting and Reinforcement
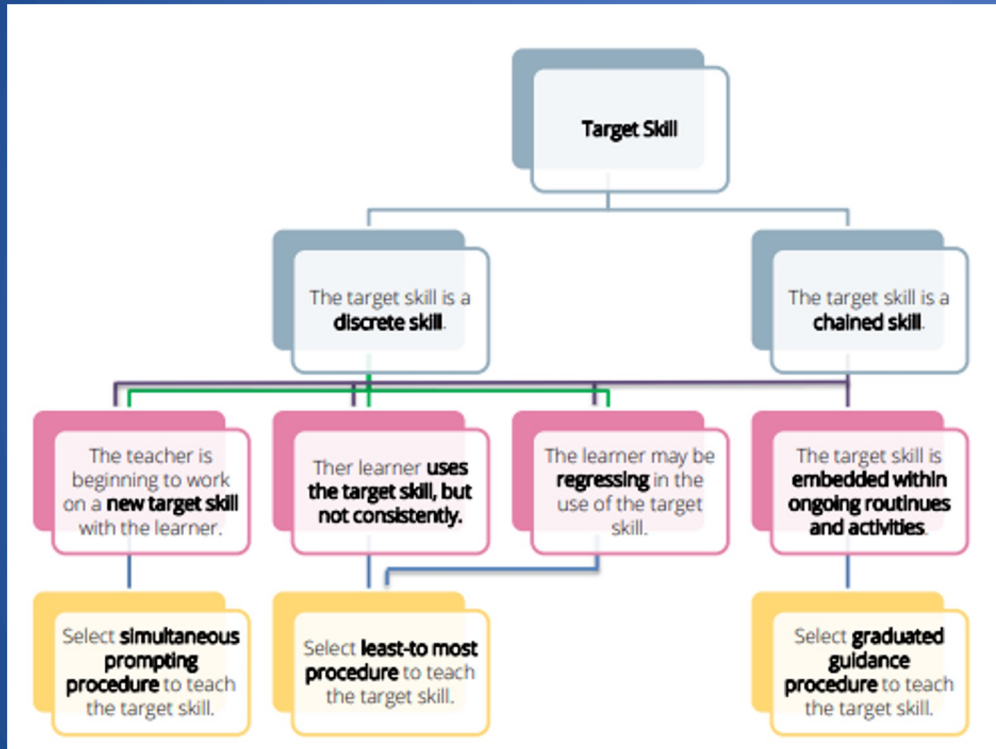
Support the Learning with Other EBPs

Washing hands

	Water on
	Hands wet
	Rub hands with soap
	Rinse
	Water off
	Dry

Visual Supports

Video Modeling

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Example of Developing Materials

AFIRM Autism Focused Intervention Resources and Modules

- https://hml.fpg.unc.edu/player?autostart=n&fullscreen=y&width=835&height=505&videoId=2755&captions=y&chapterId

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Implementation of a Task Analysis

- Backward Chaining

- Forward Changing

- Total Task Presentation

PROCEDURE	DESCRIPTION	EXAMPLE
FORWARD CHAINING	The first step in a chain is taught first. As each step is mastered, the next step is taught.	When teaching a learner to wash hands, the step of turning on the water would be taught and reinforced before teaching a learner to rub hands together with soap.
BACKWARD CHAINING	The final step in a chain is taught first. As each step is mastered, the previous step is taught.	When teaching a learner to wash hands, the final step of drying hands with a paper towel would be reinforced before teaching the learner to turn off the water.
TOTAL TASK PRESENTATION	Learner performs entire chain with reinforcement at each step and the most effective reinforcer at completion of task.	When teaching a learner to wash hands, the learner would be prompted and reinforced at each step with the most effective reinforcer provided at the final step.

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Monitoring

- Data collection

- Make data-based decisions for next steps
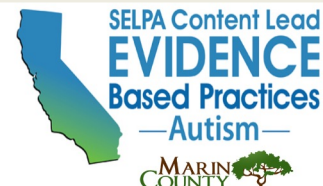
Criteria to back up modify: Requiring full physical prompts on a step for 5 days

Instructions: In a calm and encouraging manner, give the instruction to "take your pants off". Support the student through the chain of behaviors involved in the taking their pants off program. Provide Least to Most Prompting for each step and record the prompt required to complete the step.

+	Correct/unprompted	V	Verbal
GM	Gesture/model	**P**	Physically Prompted (shaped)

Step	Component Skill	Date	Date	Date	Date	Date	Date	Date
1	Grab waist of pants	P						
2	Pull pants down	P						
3	Sit down	P						
4	Cross midline and grab opposite pant leg	P						
5	Hold ankle of pants and pull leg out	P						
6	Cross Midline and grab ankle of other pant leg	G						
7	Hold ankle of pants and pull leg out	+						

Monitoring

Let's Practice!

Which step seems to be an issue for Jordan?

- ○ Go to media center
- ○ Say "hi" to friends
- ○ Play games
- ○ Talk with friends
- ○ Say "goodbye" to friends

Steps	Date 9-2	9-3	9-4	9-5	9-6
Go to media center	IS	IS	IS	I	I
Say "hi" to friends	P	P	P	P	IS
Play games	O	O	P	P	P
Talk with friends	O	O	O	O	O
Say "goodbye" to friends	P	P	IS	IS	I

I=Independent; IS=Independent with support (visual support, video modeling, social narrative);
P=Prompt (verbal, physical, model, etc.); O=error

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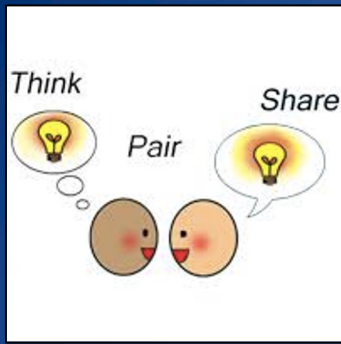
My Takeaways

1. What are 4 things you remember from today's training?

1. What are 2 things you see yourself doing?

1. What is the 1 thing you can implement tomorrow?

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Next Steps

Task Analysis (TA)
---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				
Observer's Initials				
Step 1: Planning				
1.1 Determine if learner has prerequisite skills needed to learn target skill/behavior				
1.2 Identify the components of the target skill/behavior				
1.3 Check if task is completely analyzed				
1.4 Select appropriate task analysis procedure				
1.5 Select appropriate method for teaching steps of task analysis				
1.6 Develop presentation materials of the steps				
Step 2: Using				
Backward Chaining:				
☐ Provide assistance with initial steps				
☐ Prompt learner to perform final step				
☐ Reinforce learner for completing final step				
☐ When final step mastered, previous step is added one at a time				
Forward Chaining:				
☐ Prompt learner to perform first identified step				
☐ Reinforce learner for completing step				
☐ Guide learner through remaining steps				
☐ When first step is mastered, the next step is added one at a time				
Total Task Presentation:				
☐ Prompt learner to perform first identified step				
☐ Reinforce learner for completing step				
☐ Apply most effective reinforcer at completion of task				
☐ Fade reinforcers as quickly as possible				
Step 3: Monitoring				
3.1 Collect data on target behaviors				
3.2 Determine next steps based on learner progress				

AFIRM Autism Focused Intervention Resources and Modules

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After the Training…

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that will be sent to your email

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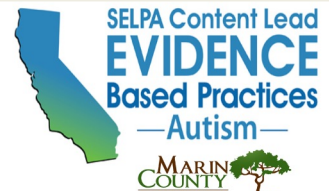
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