

Evidence Based Practice Training:

Task Analysis (TA)

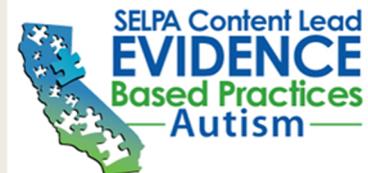
Adapted from Sam, A., & AFIRM Team. (2015). *Task Analysis*. Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from <https://afirm.fpg.unc.edu/task-analysis>

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 affected by Autism Spectrum Disorders (ASD) across the state of California.



www.captain.ca.gov



What is CAPTAIN

Marin County SELPA in partnership with CAPTAIN, are members of the Statewide System of Support as the SELPA Content Lead for ASD.

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



www.captain.ca.gov



Levels of Professional Development to Reach Implementation



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

Before We Begin...

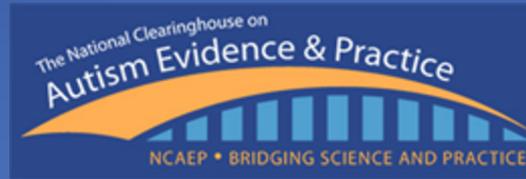
- Please complete the Pre Training Assessment:

Trainer must enter their Regional specific link to Pre-Training Assessment

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.

Name of EBP		Task Analysis (TA)					
Definition of EBP		Task analysis (TA) is the process of breaking down a complex or "chained" behavioral skill into smaller components in order to teach a skill. The learner can be taught to perform individual steps of the chain progressively until the entire skill is mastered (also called "forward chaining"), or the learner may be taught to perform individual steps beginning with the final step and progressively moving back through the chain of skills until the whole task is mastered from the beginning (backward chaining). TA may also be used to present a whole task to a learner at once with clear steps on how to achieve the skill from start to finish. Other practices, such as reinforcement, video modeling, or time delay, should be used to facilitate learning of the smaller steps. As the smaller steps are mastered, the learner becomes more independent in his/her ability to perform the larger skill.					
Outcome Areas		Age Ranges					
		0-2	3-5	6-11	12-14	15-18	19-22
		Toddlers	Preschoolers	Elementary School	Middle School	High School	Young Adults
	Communication		✓	✓	✓		
	Social			✓			
	Joint attention		✓		✓		
	Play				✓		
	Cognitive						
	School readiness						
	Academic/ Pre-academic			✓	✓		
	Adaptive/ self-help		✓	✓			
	Challenging/ Interfering behavior						
	Vocational				✓	✓	✓
	Motor			✓			
	Mental health						
	Self-determination						

(Steinbrenner, 2020)

Components of this Module:

- Definition
- Age range
- Skill domains
- Prerequisite steps
- Planning
- Implementation
- Monitoring

Evidence (Age and Domains)

Early Intervention (0-2)	Preschool (3-5)	Elementary (6-11)	Middle (12-14)	High School (15-22)
No Studies	No Studies	Social		No Studies
		Communication	Communication	
			Joint Attention	
		Motor		
		Adaptive		
			Academic	

Task Analysis: Defined

- Task analysis breaks down complex target skills or behaviors into smaller sequential steps.
- Team members then work with the learner to systematically teach the individual steps until the skills is demonstrated independently.

Case Examples: Task Analysis

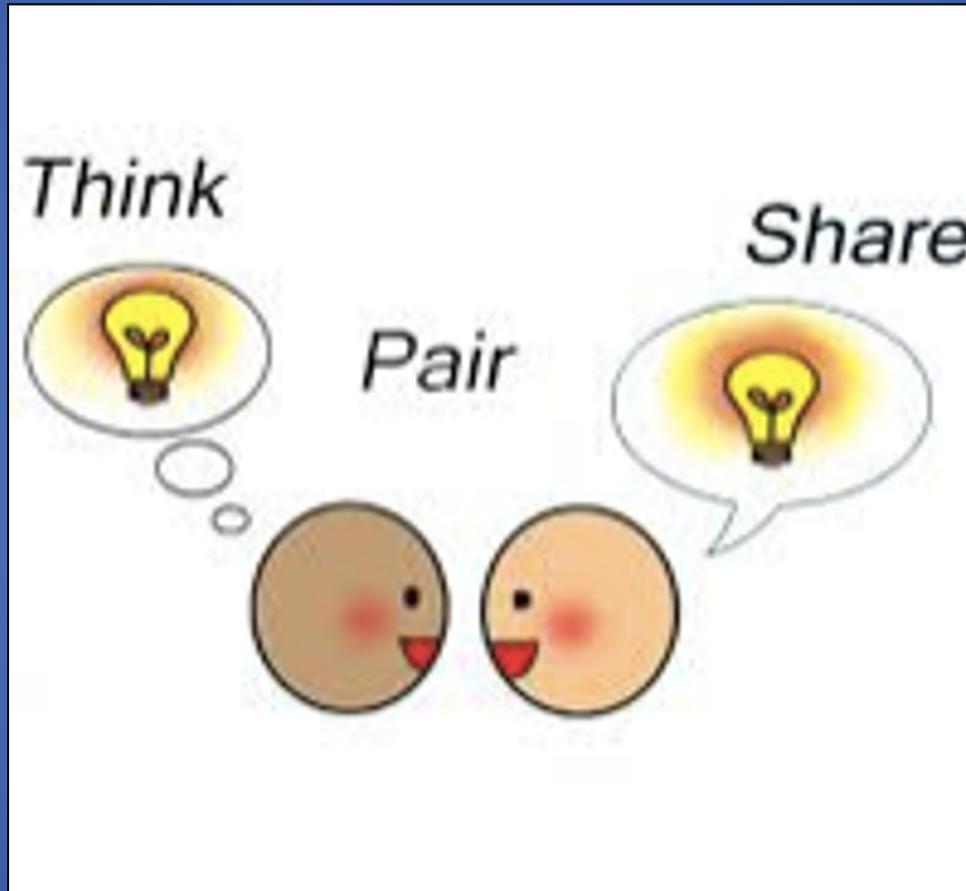


AFIRM

Autism Focused Intervention
Resources and Modules

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

Think - Pair - Share



A Case for Task Analysis



AFIRM

Autism Focused Intervention
Resources and Modules

- <https://afirm.fpg.unc.edu/resources/case-ta>

Prior to using Task Analysis

- The behavior is identified
- Collect data by direct observation
- Establish a goal or outcome
- Does the learner have the prerequisite needed for the target skill or behavior?

Planning

- 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>

Practice with Feedback



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: _____

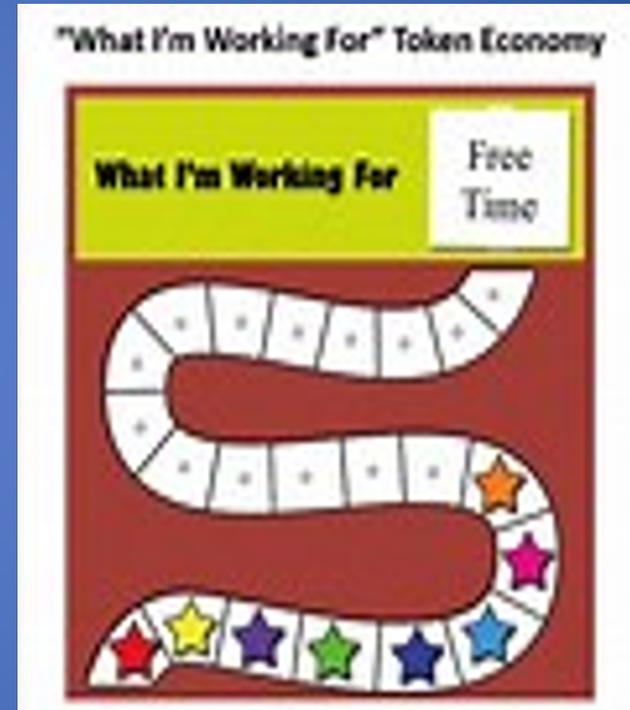
Steps	Dates				
	___/___/___	___/___/___	___/___/___	___/___/___	___/___/___

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; O=error

Anecdotal Notes:

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

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



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>

Implementation of a Task Analysis

- Backward Chaining
- Forward Chaining
- 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.

Monitoring

- Data collection
- Make data-based decisions for next steps

Question 1 of 3

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	0	0	P	P	P
Talk with friends	0	0	0	0	0
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.); 0=error

Next Steps

Continue use of Task Analysis if the learner's data indicates progress

- If progress is not occurring:
 - Target behavior or skill defined?
 - Observable?
 - Measureable?
 - Prerequisites?
 - Is the task well analyzed?
 - Teaching methods?
 - Fidelity of steps and/or prompting

Implementation Checklist Resource

Task Analysis (TA) --Implementation Checklist--

	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					
<i>Backward Chaining:</i>					
<input type="checkbox"/> Provide assistance with initial steps					
<input type="checkbox"/> Prompt learner to perform final step					
<input type="checkbox"/> Reinforce learner for completing final step					
<input type="checkbox"/> When final step mastered, previous step is added one at a time					
<i>Forward Chaining:</i>					
<input type="checkbox"/> Prompt learner to perform first identified step					
<input type="checkbox"/> Reinforce learner for completing step					
<input type="checkbox"/> Guide learner through remaining steps					
<input type="checkbox"/> When first step is mastered, the next step is added one at a time					
<i>Total Task Presentation:</i>					
<input type="checkbox"/> Prompt learner to perform first identified step					
<input type="checkbox"/> Reinforce learner for completing step					
<input type="checkbox"/> Apply most effective reinforcer at completion of task					
<input type="checkbox"/> 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					

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.

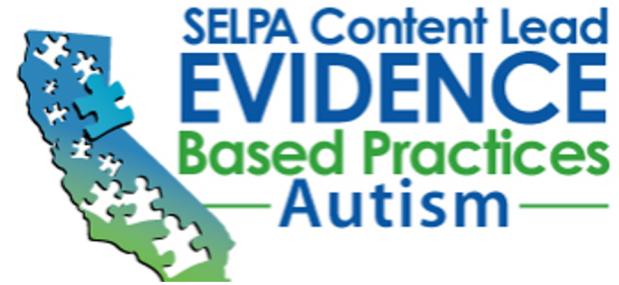
If the answer to any of these is "no", refer to the "Selecting EBPs" section on the website.


Autism Focused Intervention Resources and Modules

Post Training

- Please complete the Post Training Assessment:

Trainer must enter their Regional specific link to Post-Training Assessment



CAPTAIN



@CAPTAIN_EBPS



CAPTAIN_EBPS



CAPTAIN

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