

Evidence Based Practice Training

Functional Communication Training



CSESA

The Center on Secondary Education for
Students with Autism Spectrum Disorders

Objectives

- Become aware of 27 EBPs identified for students with ASD
- Describe the purpose of Functional Communication Training (FCT)
- Describe key steps to implementing FCT
- Identify ways to learn more about FCT and other EBPs

What are EBPs?

Focused interventions that:

- Produce specific behavioral and developmental outcomes for a child
- Have been demonstrated as effective in applied research literature
- Can be successfully implemented in educational settings

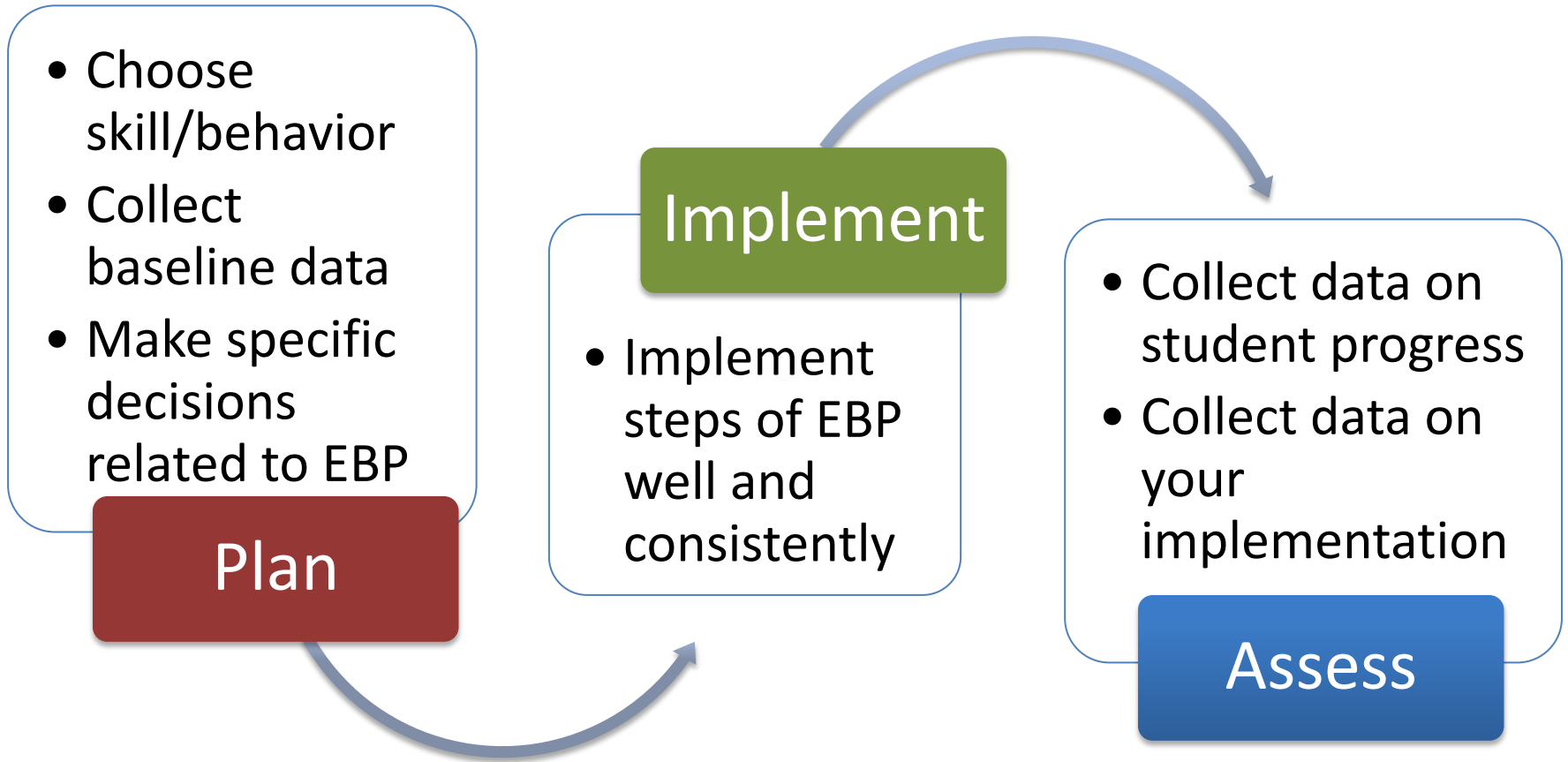
(Odom, Colett-Klingenberg, Rogers, & Hatton, 2010)

Evidence – Based Practices (2014)

Antecedent-based interventions
Cognitive behavioral intervention*
Differential reinforcement
Discrete trial training
Exercise
Extinction
Functional behavior assessment
Functional communication training
Modeling
Naturalistic interventions
Parent-implemented intervention
Peer-mediated instruction/intervention
Picture Exchange Communication System™

Pivotal response training
Prompting
Reinforcement
Response interruption/redirection
Scripting
Self-management
Social narratives
Social skills training
Structured play groups
Task analysis
Technology-aided intervention/instruction
Time delay
Video modeling
Visual supports

For All EBPs



Functional Communication Training (FCT)

Who uses Functional Communication Training?



- Children and youth with ASD, regardless of cognitive level and/or expressive communicative abilities.
- There is evidence to support FCT as an effective intervention for learners at the early childhood and elementary levels, but it is reasonable to assume that it would be effective for older learners, as well.

Definition of Functional Communication Training

- FCT is a standardized practice to teach appropriate and effective communicative behaviors or skills to replace inappropriate behaviors or subtle communicative acts.
- It teaches learners with ASD to use more appropriate replacement behaviors rather than engaging in behaviors that interfere with their learning and development.

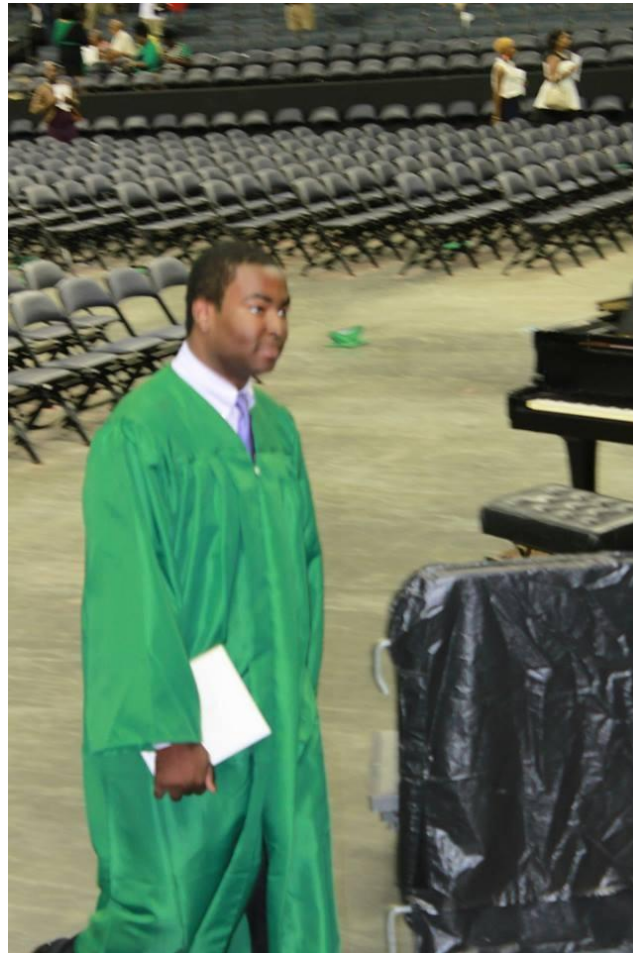
Target Skills Addressed

- FCT provides skills that help youth with ASD effectively communicate with others in a variety of situations and settings.
- FCT is used to decrease the incidence of target behaviors and to replace indirect communicative forms (e.g., leading an adult by the hand to a desired item) with more direct communicative forms (e.g., pointing).

Steps for Implementation

- Step 1: Identify behaviors and triggers for these behaviors, and the function/purpose of these behaviors.
- Step 2: Provide a communicative response to the trigger which replaces the undesired behavior.
- Step 3: Support the student in using communicative response in the context of naturally occurring opportunities.
- Step 4: Fade cues

Let's Walk Through the Steps Together with an Example



Case Study

- Amir is a ninth grader with ASD. He is highly verbal, and does well academically. However, Amir recently developed some interfering behaviors. Specifically, he started biting his hand and humming during science class in the afternoon. His teacher was very frustrated because it was disrupting the class, and he was hurting himself. As a consequence, the teacher started sending Amir to the resource room when he engaged in the behaviors.

Step 1: Identify behaviors and triggers for these behaviors, and the function/purpose of these behaviors.

- To identify behaviors and triggers for Amir's hand biting and humming his team completed a thorough and high-quality Functional Behavioral Assessment (FBA).
- To conduct an FBA the teacher or other adult observed Amir's behavior and recorded what happened right before he bit his hand or hummed (antecedent) and what happened right after he bit his hand or hummed (consequence). These observations are recorded on a data collection sheet.

Here is an example of a data collection sheet

Student: Amir

Observer: Mr. Robins

Behavior: Hand biting and humming

| Date | Antecedent | Behavior | Consequence |
|-------|--|-------------|-----------------------|
| 10/8 | Teacher asked students to get in lab groups | Humming | Sent to resource room |
| 10/10 | Student approached Amir and told him to join the group | Hand biting | Sent to resource room |
| 10/13 | Teacher reviewed schedule for the day | Hand biting | Sent to resource room |
| 10/14 | Teacher assigned new lab groups | Humming | Sent to resource room |

- After collecting data for two weeks, Amir's team began to notice a pattern. They determined that the behavior always occurred when group work was on the schedule in science class, and that the function of the behavior was to avoid the group work.
- Now that they have determined the function of the behavior, they can identify a replacement behavior that serves the same function as the interfering behavior, but in a more conventional way.

Step 2: Provide a communicative response to the trigger which replaces the undesired behavior.

- Amir's team discussed the situation, and decided it was more important for Amir to verbally advocate for his own needs than to participate in group activities. They decided the replacement behavior would be teaching Amir to say, "May I work on my independent project?" When Amir asks that question, he will be allowed to work in the library on his independent project during science class.
- Amir's team talked with other adults who communicate with Amir prior to starting the FCT to teach them how to respond appropriately to the new skills they were going to teach Amir.

- After the team had communicated the new “plan” to other adults, his science teacher sat down with Amir and explicitly explained that if he raised his hand and requested, “May I work on my independent project?” that he would be allowed to spend science class in the library.
- Amir was thrilled to have the choice of staying in class or working independently in the library.

Step 3: Support the student in using communicative response in the context of naturally occurring opportunities.

- After Amir's teacher met with him, his teacher carefully observed Amir so he could provide prompts as needed. If his teacher noticed Amir beginning to hum or bite his hand, his teacher prompted Amir by saying "Amir, what is your choice for today?" That simple prompt reminded Amir that he had the choice to stay in the classroom or go to the library if he asked.
- As promised, Amir's teacher always followed through. If Amir asked if he could work on his independent project he was allowed to work in the library.

Step 4: Fade cues

- As time progressed, Amir's teacher began to fade his prompting. Amir became more independent in asking to work on his independent project.
- As the year went on, however, Amir became more interested in some of the class activities, especially when they were specific to his interests. He began staying in class for some group work, requesting independent work when it suited him.

- Allowing Amir to make choices about his own environment and verbally advocate for his own needs kept his interfering behaviors out of the classroom, and eventually led to his participation in group work.

Collect Data to monitor Student Progress

**National Professional Development Center on
Autism Spectrum Disorders**

Module: Functional Communication Training (FCT)

Blank FCT Data Collection Sheet

Learner _____

Person collecting data

Interfering Behavior (IB):

[illegible]

Key: I = Independent, P = Physical prompt, G = Gestural prompt, V = Verbal prompt

National Professional Development Center on
Autism Spectrum Disorders

Module: Functional Communication Training (FCT)

Example: FCT Data Collection Sheet

Learner: Tiffany

Person collecting data: Teacher

Interfering Behavior (IB): Tiffany hits peers when she wants toys they are playing with

Replacement Behavior (RB): Tiffany will say, "My turn" when she wants a toy that a peer is playing with

| Date | Activity/setting | Antecedent (record what happens right before the IB or RB) | IB or RB? | Prompts | Consequence (record what happens right after the IB or RB) | Notes |
|------|------------------|---|-----------|---------|---|-------|
| 2/20 | Free play | Peer picks up toy near Tiffany | RB | I P G V | Peer gave toy to Tiffany | |
| 2/20 | Free play | Peer sat near Tiffany with an animal | IB | I P G V | Peer started crying | |
| 2/20 | Small groups | No more brushes at painting activity | RB | I P G V | Peer gave Tiffany paintbrush | |
| 2/21 | Outside | Tiffany sat down in sandbox next to peer with shovel | RB | I P G V | Peer gave Tiffany shovel | |
| | | | | I P G V | | |
| | | | | I P G V | | |
| | | | | I P G V | | |
| | | | | I P G V | | |
| | | | | I P G V | | |

Key: I = Independent, P = Physical prompt, G = Gestural prompt, V = Verbal prompt

CAUTION!

Avoid

Trying to identify a replacement behavior that serves the same purpose as the target behavior before completing the FBA!



The Key to Effective Functional Communication Training

- Perform a comprehensive FBA first.
- Make sure the replacement behavior matches the function of the interfering behavior.
- Use of appropriate prompting and shaping procedures to teach the replacement behavior.



To Learn More...

Find additional information on
Reinforcement and other
Evidence Based Practices within the
following resources.

EBP Case Studies for High School



EVIDENCE-BASED PRACTICE (EBP)

**High School
Case Study:
Reinforcement**



Reinforcement case study files:

- [Reinforcement Case Study GAS Goal 1 form \[PDF\]](#)
- [Reinforcement Case Study GAS Goal 2 form \[PDF\]](#)



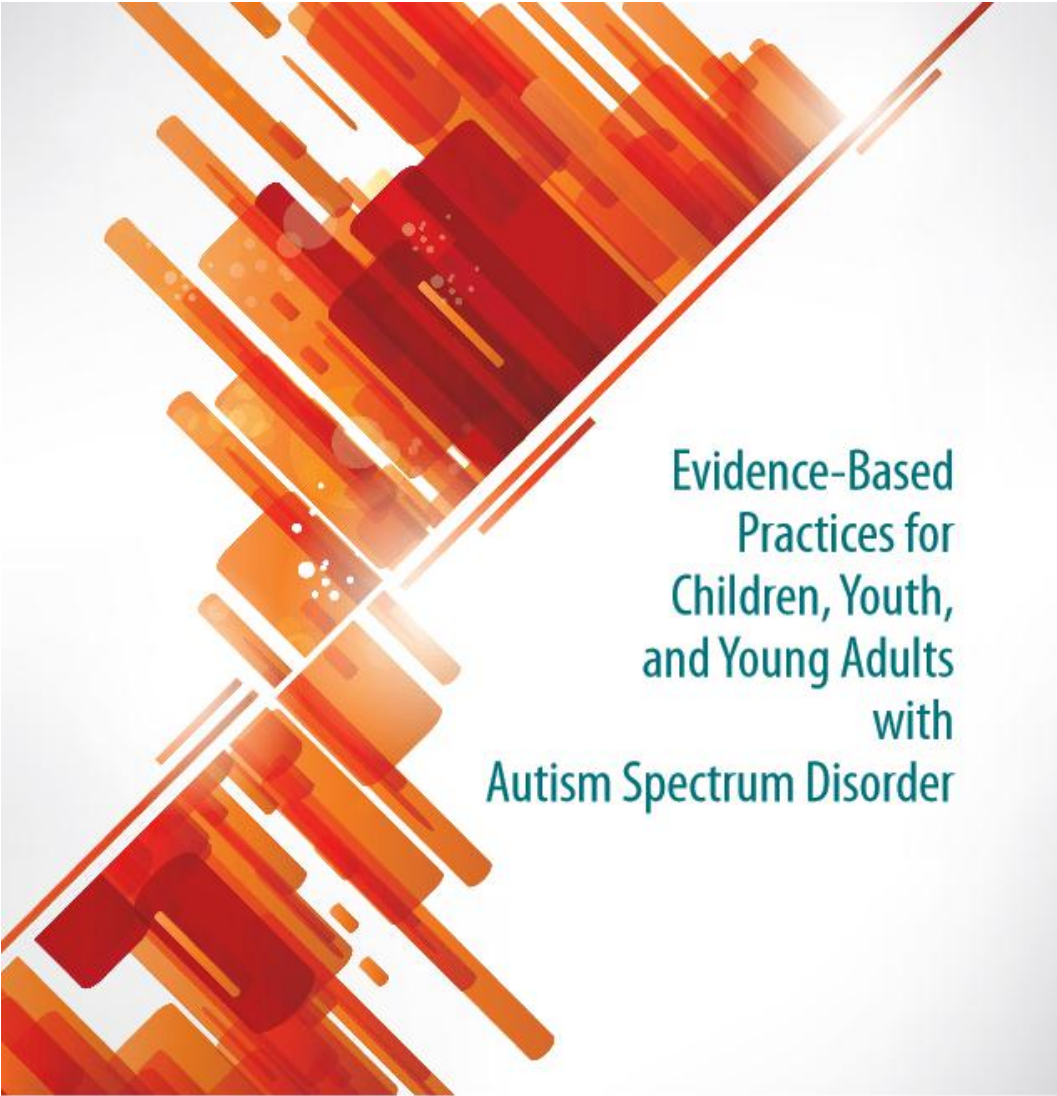
[Reinforcement EBP Brief](#)

<http://csesa.fpg.unc.edu/high-school-case-studies>

Evidence-based Practice Resources

- EBP literature review
<http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/2014-EBP-Report.pdf>
- EBP Case Studies for High School
- EBP Briefs (<http://autismpdc.fpg.unc.edu>)
 - Overview
 - Evidence Base
 - Steps for Implementing
 - Implementation Checklist
 - Sample Data Collection Forms (optional)
- Autism Internet Modules
(<http://www.autisminternetmodules.org>)

EBP Literature Review



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

Connie Wong, Samuel L. Odom,
Kara Hume, Ann W. Cox, Angel Fettig,
Suzanne Kucharczyk, Matthew E. Brock,
Joshua B. Plavnick, Veronica P. Fleury, and Tia R. Schultz

Autism Evidence-Based Practice Review Group
Frank Porter Graham Child Development Institute
University of North Carolina at Chapel Hill

Example: Step-by-Step Directions

Step 1. Identifying and Setting Up the Device

In Step 1, teachers/practitioners focus on identifying an appropriate SGD device for the learner with ASD by taking into account a number of factors including learner needs and characteristics, and available training and technical assistance.

1. Teachers/practitioners select an appropriate device, taking into account how the information is displayed, the learner's present and potential abilities (e.g., attention span, experience with symbols, ability to establish joint attention), portability of the device, available training and technical assistance, and funding sources.

Teachers/practitioners also choose a number of symbols in the visual field that the learner will be able to discriminate easily by considering the learner's attention span, experience with symbols, and ability to establish joint attention (Ogletree & Harn, 2001).

2. Teachers/practitioners introduce the device to the learner by having a device with few symbols and/or buttons with nothing on them.

To begin, teachers/practitioners introduce a single symbol and have buttons with nothing on them to introduce the idea that the symbol, not the button, is the important factor.

3. Teachers/practitioners include desirable and undesirable symbols to facilitate the learner's ability to discriminate.


Example: Implementation Checklist

| | | | | | | | | | |
|---|---|----------------|----------|----------|----------|----------|----------|----------|----------|
| | Observation | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Date | 6/14/11 | | | | | | | |
| | Observer's Initials | AC | | | | | | | |
| Planning (Steps 1 – 5) | | | | | | | | | |
| Step 1. Identifying and Setting Up the Device | | Score** | | | | | | | |
| 1. | Select an appropriate device, taking into account how the information is displayed, the student's present and potential abilities (e.g., attention span, experience with symbols, ability to establish joint attention), portability of the device, available training and technical assistance, and funding sources. | 2 | | | | | | | |
| 1. | Introduce the device to the student by having a device with few symbols and/or buttons with nothing on them. | 2 | | | | | | | |
| 1. | Include desirable and undesirable symbols to facilitate the student's ability to discriminate. | 0 | | | | | | | |
| Step 2. Introducing Direct Support Persons to the Device | | | | | | | | | |
| 1. | Team members are identified and trained in how to program and use the device. | 2 | | | | | | | |
| 1. | One or two key members of the team are identified as primary contacts regarding its use. | 0 | | | | | | | |

****Scoring Key:** 2 = implemented; 1 = partially implemented; 0 = did not implement; NA = not applicable

Autism Internet Modules

- <http://www.autisminternetmodules.org/>

 **AUTISM INTERNET MODULES**
Linking research to real life.

AUTISM INTERNET MODULES > DASHBOARD

Dashboard


Module Navigator

Professional Development
Certificates


Continuing Education
Credits


College and University
Course Credit


Module Navigator


 Print Assessment Results

Welcome to the **Autism Internet Modules (AIM)**! AIM is designed to provide high-quality information and professional development for anyone who supports, instructs, works with, or lives with someone with autism. AIM modules are available at no cost. Each module guides you through case studies, instructional videos, pre- and post-assessments, a glossary, and much more. If you would like to receive credit for your time on AIM, certificate and credit options are available for a fee. **Need assistance?** Visit the [help page](#).

 Recognizing Autism

 Infants and Toddlers with Autism

 Autism at Home

 Autism in the Classroom

Browse Modules A-Z

Current Modules (43)

- Antecedent-Based Interventions (ABI)
- ASD-4-EI: What Early Interventionists Should Know
- Assessment for Identification
- Autism and the Biopsychosocial Model: Body, Mind, and Community
- Cognitive Differences
- Comprehensive Program Planning for Individuals With Autism Spectrum

Action Plan

What will I do tomorrow:

1.

2.

3.

Questions

