Components of the EBP Brief Packet...

This evidence-based practice overview on Functional Communication Training includes the following components:

1. **Overview**: A quick summary of salient features of the practice, including what it is, who it can be used with, what skills it has been used with, and settings for instruction.
2. **Evidence-base**: The FCT Evidence-base details the NPDC criteria for inclusion as an evidence-based practice and the specific studies that meet the criteria for this practice.
3. **Step-by-Step Guide**: Use the FCT Step-by-Step Practice Guide as an outline for how to plan for, use, and monitor FCT. Each step includes a brief description as a helpful reminder while learning the process.
4. **Implementation Checklist**: Use the FCT Implementation Checklist to determine if the practice is being implemented as intended.
5. **Data Collection Sheets**: Use the data collection sheets as a method to collect and analyze data to determine if progress is being made for a learner with ASD.
6. **Tip Sheet for Professionals**: Use the FCT Tip Sheet for Professionals as a supplemental resource to help provide basic information about the practice to professionals working with the learner with ASD.
7. **Parent Guide**: Use the FCT Parent Guide to help parents or family members understand basic information about the practice being used with their child.
8. **Additional Resources**: Use the Additional Resources to learn more about the practice.
9. **CEC Standards**: A list of CEC Standards that apply specifically to FCT.
10. **Module References**: A list of numerical References utilized for the FCT module.

**Suggested citation:**
What Is FCT?

Many learners with autism display inappropriate, maladaptive, and even aggressive behaviors towards others and themselves. Often, these behaviors stem from difficulties with communication, leading to unexpected and often undesirable methods to obtain certain wants, needs, and interests. Functional communication training addresses these interfering behaviors by systematically identifying the function of the behavior and providing a replacement behavior in the form of appropriate communication that will enable the learner to get his or her needs met in a more acceptable way.

Evidence-base

Functional communication training meets the evidence-based practice criteria set by NPDC with 12 single case design studies. The practice has been effective with learners in preschool (3-5 years) to high school learners (15-22 years). Evidence-based practices (EBP) and studies included in the 2014 EBP report detailed how functional communication can be used effectively to address: social, communication, behavior, school-readiness, play, and adaptive outcomes.

How Is FCT Being Used?

FCT can be used by a variety of professionals, including teachers, special educators, therapists, paraprofessionals, and early interventionists in educational and community-based environments. Parents and family members also can use FCT in the home.

For more information, visit: www.afirm.fpg.unc.edu
The National Professional Development Center on ASD has adopted the following criteria to determine if a practice is evidence-based. The EBP Report provides more information about the review process (Wong et al., 2014). Efficacy must be established through high quality, peer-reviewed research in scientific journals using:

- randomized or quasi-experimental design studies (two high quality experimental or quasi-experimental group design studies),
- single-subject design studies (three different investigators or research groups must have conducted five high quality single subject design studies), or
- combination of evidence [one high quality randomized or quasi-experimental group design study and three high quality single subject design studies conducted by at least three different investigators or research groups (across the group and single subject design studies)].

---EVIDENCE-BASE FOR FUNCTIONAL COMMUNICATION TRAINING---

Functional communication training addresses interfering behaviors by systematically identifying the function of the behavior and providing a replacement behavior in the form of appropriate communication. Functional communication training meets the evidence-based practice criteria with 12 single case design studies. The practice has been effective with learners in preschool (3-5 years) to high school learners (15-22 years). Studies included in the 2014 EBP report detailed how functional communication training can be used effectively to address: social, communication, school readiness, play, adaptive, and behavior outcomes.

In the table below, the outcomes identified by the evidence base are shown by age of participants.

<table>
<thead>
<tr>
<th>Early Intervention (0-2)</th>
<th>Preschool (3-5)</th>
<th>Elementary (6-11)</th>
<th>Middle (12-14)</th>
<th>High (15-22)</th>
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<tbody>
<tr>
<td>No studies</td>
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<td>Behavior</td>
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<td>Behavior</td>
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<tr>
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<tr>
<td>Play</td>
<td>Play</td>
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<tr>
<td>Adaptive</td>
<td>Adaptive</td>
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<td>Adaptive</td>
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</tbody>
</table>

---OVERVIEW---

Functional communication training addresses interfering behaviors by systematically identifying the function of the behavior and providing a replacement behavior in the form of appropriate communication. Functional communication training meets the evidence-based practice criteria with 12 single case design studies. The practice has been effective with learners in preschool (3-5 years) to high school learners (15-22 years). Studies included in the 2014 EBP report detailed how functional communication training can be used effectively to address: social, communication, school readiness, play, adaptive, and behavior outcomes.
Early intervention (0-2 years)
No studies

Preschool (3-5 years)


Elementary (6-11 years)


Elementary (6-11 years continued)


Middle (12-14 years)


High (15-22 years)


* Research which included participants in multiple age ranges.
This practice guide outlines how to plan for, use, and monitor the practice of functional communication training.

Keep in mind that FCT can be used to help learners with ASD to use and generalize appropriate communicative behaviors.

BEFORE YOU START...

Each of the following points is important to address so that you can be sure the selected EBP is likely to address the learning needs of your student.

- Have you found out more information about...?

- 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...

- Identifying evidence-based practices...

If the answer to any of these is “no,” review the process of how to select an EBP.

For more information, visit: www.afirm.fpg.unc.edu
Step 1: FCT Planning

The planning step explains initial steps and considerations involved when using FCT as an intervention for a learner.

1.1 Identify an interfering behavior appropriate for FCT

FCT can be used to address a variety of problematic behaviors, including aggression, tantrums, destructive behaviors, self-injurious behaviors, and elopement. The types of behavior that might not necessarily be targeted by FCT are stereotypic or repetitive behaviors, which may not serve a clear communicative function. However, problematic behaviors associated with stereotypic or repetitive behaviors can still be addressed using FCT.

1.2 Determine function of interfering behavior through Functional Behavior Assessment

A Functional Behavior Assessment (FBA) should be conducted to aid in identifying the most likely function of the interfering behavior.

Note: Check out the module on FBA for more information about this specific process.

1.3 Choose a replacement communicative behavior

Understanding the function of the interfering behavior will aid in selecting a replacement communicative behavior. Important considerations for the communicative behavior that is selected include:

• the function of the replacement communicative behavior (which should be the same as the function of the interfering behavior),
• the form of communication that the learner will use (which should be based on the learner’s current communication skills, abilities, and needs), and
• the effort it will require for the learner to produce (which should initially be relatively low).

Use the FCT Planning Sheet as a companion for completing the planning step.

1.4 Ensure all team members are familiar with the replacement communicative behavior

It is important for people who may be interacting with the learner to understand what the learner is trying to communicate and to be able to respond accordingly; if the learner’s use of the replacement communicative behavior is unsuccessful, the learner may return to the use of maladaptive behaviors.

1.5 Gather and organize supporting materials

Gather materials such as picture cards or communication cards; program devices for some learners. When the replacement communicative behavior will involve requesting preferred items, make sure to obtain preferred items that the learner might request (as appropriate), such as toys, books, games, food, etc.
Step 2: Using FCT

This section describes the process of implementing FCT, including teaching, reinforcement procedures, and addressing generalization.

2.1 Teach use of the replacement communicative behavior using a most to least prompt hierarchy

The teaching process may vary based on the skills of the learner and the form of the replacement communicative behavior, but will generally involve prompting and guidance to use the replacement communicative behavior, starting at the highest level of prompting needed and gradually fading prompts (i.e., most-to-least prompt hierarchy).

*Note:* Refer to chart on most to least prompt hierarchy for more information about this procedure.  
*Note:* Another instructional strategy that may be useful is time delay; more information about this specific teaching procedure can be found in the module on Time Delay.

2.2 Reinforce the replacement communicative behavior

The instructor should reinforce the replacement communicative behavior by providing the relevant response that yields the desired outcome (such as providing a break from a task when escape was desired). Early in the teaching process, it is important to reinforce the replacement communicative behavior consistently and frequently; thus, the teaching environment may need to be structured in a way that provides frequent opportunities for the learner to practice use of the skill.

2.3 Remove reinforcement for the interfering behavior

An additional strategy relevant to responding to the learner is to ignore the interfering behavior and/or block access to the desired outcome so the interfering behavior is not reinforced (i.e., it no longer enables the learner to gain access to the desired outcome).

2.4 Support the learner's generalization of the replacement communicative behavior across people and settings

Set up multiple, structured opportunities for the learner to practice using the replacement communicative behavior with different people and in different settings in order to support generalization.

2.5 Consider shaping the replacement communicative behavior

For some learners, the initially acceptable form of the replacement communicative behavior may consist of a single word, picture, or some approximation that is not at the level at which the learner can communicate. The shaping process involves gradually reinforcing closer approximations of the desired form of communicative behavior.
Step 2: Using FCT (continued)

2.6 Thin reinforcement for replacement communicative behavior

Thinning reinforcement involves gradually increasing the interval of time between the learner's use of the replacement communicative behavior and the reinforcing response (such as providing a preferred item or removing demands). This step teaches the learner to wait for the reinforcer. The time interval selected will be individualized for each learner, but may be as short as 5-10 seconds initially.

Step 3: Monitoring FCT

The following process describes how the replacement communicative behavior as well as the interfering behaviors can be monitored and how this data can be used to guide further support of the learner.

3.1 Collect data on the interfering behavior and the learner's replacement communicative behavior

Data collection should focus on the interfering behavior targeted by the intervention as well as the replacement communicative behavior being taught. The form of data collection will vary based on the type of interfering behavior, but should include information such as setting, time, antecedents, and consequences as well as frequency, intensity, and/or duration of the behavior. Data collection on the replacement communicative behavior might include the level of support and prompting the learner needs as well as relevant details such as the setting, time, antecedents, and/or consequences.

- Use the FCT Functional Behavior Assessment to collect data on an interfering behavior.
- Use the FCT Replacement Communication Behavior to help you identify the level of learner needs/support.
- Use the FCT RBC-Interval to collect data on RBCs that frequently occur.

3.2 Determine next steps based on the learner's progress

The data that is collected about the learner's interfering behaviors and use of the replacement communicative behavior can be used to determine next steps based on whether the learner is making progress. Other considerations might include data relevant to communication partners, settings, and prompting. In addition, the learner may also have skill deficits related to the interfering behavior that need to be addressed (such as academic weaknesses related to the academic tasks that the learner is avoiding).

Collecting data will help team members determine if a learner is making progress. If a learner is making progress based upon data collected, team members should continue to use FCT.

If the learner with ASD is not showing progress with scripting, ask yourself the following questions:

- Is FCT being used with fidelity (Implementation Checklist)?
- Did a functional behavior assessment (FBA) indicate the function of the behavior?
- Is the replacement communicative behavior (RCB) addressing the function of the interfering behavior?
- Are team members providing the learner with reinforcement for using the RCB?

If these issues have been addressed and the learner with ASD continues to not show progress, consider selecting a different evidence-based practice to use with the learner.
### 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.*

### Implementation Checklist

<table>
<thead>
<tr>
<th>Observation</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>Date</td>
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<tr>
<td>Observer’s Initials</td>
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</table>

#### Step 1: Planning

1.1 Identify an interfering behavior appropriate for FCT  
1.2 Determine function of interfering behavior through Functional Behavior Assessment  
1.3 Choose a replacement communicative behavior  
1.4 Ensure all team members are familiar with the replacement communicative behavior  
1.5 Gather and organize supporting materials

#### Step 2: Using

2.1 Teach use of the replacement communicative behavior using a most to least prompt hierarchy  
2.2 Reinforce the replacement communicative behavior  
2.3 Remove reinforcement for the interfering behavior  
2.4 Support the learner's generalization of the replacement communicative behavior across people and settings  
2.5 Consider shaping the replacement communicative behavior  
2.6 Thin reinforcement for replacement communicative behavior

#### Step 3: Monitoring

3.1 Collect data on the interfering behavior and learner’s replacement communicative behavior  
3.2 Determine next steps based on the learner’s progress
Conduct a Functional Behavior Assessment:
If a challenging behavior interferes with the child's ability to learn, then a functional behavior assessment (FBA) is needed. A FBA can be used when the intensity, duration, of type of interfering behavior creates safety concerns or impacts a child's development.

Determine the replacement communicative behavior:

What is the function of the interfering behavior?
- Escape/Avoid
- Obtain preferred item/activity
- Other: ____________________________

What is the learner's primary mode of communication?
- PECS
- sign language
- voice output device
- verbal
- Other: ____________________________

What is the replacement communicative behavior?
- ____________________________
- ____________________________
- ____________________________
A-B-C Data Chart:

In the table below, record your observations

<table>
<thead>
<tr>
<th>Setting</th>
<th>Antecedent</th>
<th>Behavior</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
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</table>
Data Collection for Replacement Communicative Behavior:

Use this form when collecting data on learner’s use of the target communicative behavior.

<table>
<thead>
<tr>
<th>Interfering Behavior (IB):</th>
<th>Replacement Communicative Behavior (RCB):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Location</td>
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</table>

Prompt Key: VP = Verbal Prompt; VC = with Visual Cue; GP = Gestural Prompt; PP = with Partial Physical; FP = Full Physical; I = Independently;

For more information, visit: 
www.afirm.fpg.unc.edu
---RCB Data Collection - Interval---

Learner’s Name: ________________  Date/Time: ________________
Observer(s): ____________________________________________
Interfering Behavior: ______________________________________

Data Collection:

Use this form when collecting data on learner’s use of the target communicative behavior when multiple opportunities for use of the replacement communicative behavior are provided or in situations where the behaviors are frequently occurring.

<table>
<thead>
<tr>
<th>Interval Duration:</th>
<th>Observation Period:</th>
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</thead>
<tbody>
<tr>
<td>Date</td>
<td>Start Time</td>
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For more information, visit: www.afirm.fpg.unc.edu
Functional Communication Training (FCT)---Professional’s Guide---

FCT is...
- an evidence-based practice for children and youth with autism spectrum disorder (ASD) from 3-22 years old that can be implemented in multiple settings.
- a systematic practice to replace interfering behaviors with more appropriate and effective communicative behaviors.
- is specifically employed after a FBA or functional analysis has been conducted to identify the function of an interfering behavior.

Why Use?
- FCT is helpful for learners with social communication deficits and challenging behaviors because it provides a more acceptable form of communication that enables the learner to achieve the same desired outcome (such as escaping a non-preferred task, obtaining attention, obtaining access to a preferred item or activity, etc.).
- FCT serves to reduce problematic behaviors that might be detrimental to the learner and others as well as to improve the communication skills of the learner.
- FCT can also be a low-cost intervention that does not take long to create.
- Some of the problematic behaviors that can be addressed by FCT include: aggression and self-injurious behaviors, property destruction, tantrums, elopement, and/or disruption.

Outcomes
- The evidence-base for FCT supports the use of this practice to address the outcomes below:

<table>
<thead>
<tr>
<th>Early Intervention (0-2)</th>
<th>Preschool (3-5)</th>
<th>Elementary (6-11)</th>
<th>Middle (12-14)</th>
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<tbody>
<tr>
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<tr>
<td></td>
<td>Adaptive</td>
<td>Adaptive</td>
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</table>

TIPS:
- Stereotypic behaviors are often NOT targeted by FCT, as they might not serve a clear communicative function, but problematic behaviors associated with repetitive behaviors can still be addressed using FCT.
- Use a FBA to guide the selection of an appropriate replacement communicative behavior that will fulfill the same function as the interfering behavior.
- The first form of the replacement communicative behavior should be as simple and low effort as possible for the learner to use effectively.
This tip sheet was designed as a supplemental resource to help provide basic information about the practice.

For more information, visit: www.afirm.fpg.unc.edu

STEPS FOR IMPLEMENTING

1. Plan
   - Identify an interfering behavior appropriate for FCT
   - Determine function of interfering behavior through Functional Behavior Assessment
   - Choose a replacement communicative behavior
   - Ensure all team members are familiar with the replacement communicative behavior
   - Gather and organize supporting materials

2. Use
   - Teach use of the replacement communicative behavior using a most to least prompt hierarchy
   - Reinforce the replacement communicative behavior
   - Remove reinforcement for the interfering behavior
   - Support the learner’s generalization of the replacement communicative behavior across people and settings
   - Consider shaping the replacement communicative behavior
   - Thin reinforcement for replacement communicative behavior

3. Monitor
   - Collect data on the interfering behavior and learner’s replacement communicative behavior
   - Determine next steps based on the learner’s progress
This introduction provides basic information about functional communication training (FCT).

What is a FCT?
- FCT is an evidence-based practice for child and youth with autism spectrum disorder (ASD) from 3 to 22 years old.
- The FCT process involves:
  - identifying an interfering behavior (that is, a challenging behavior that interferes with the learner’s ability to interact and learn),
  - determining what the learner is trying to communicate with that behavior (such as needing help, wanting a break, wanting attention, etc.), and
  - teaching the learner a more acceptable way to communicate that need.

Why use FCT with my child?
- FCT is helpful for learners with social communication deficits and challenging behaviors because it provides a more acceptable form of communication that enables the learner to achieve the same desired outcome.
- Some of the problematic behaviors that can be addressed by FCT include: aggression and self-injurious behaviors, tantrums, running away, and/or disruption.

What activities can I do at home?
- Think about challenging behaviors your child exhibits as a form of communication, and try to identify other ways your child might be able communicate that need.
- When trying to develop an alternative way for your child to communicate a need (such as asking for a break or requesting a favorite toy), think of the simplest and easiest way for your child to communicate that need at the beginning.
- Remember to praise your child or provide reinforcement when your child uses a more appropriate form of communication to get his or her needs met (such as asking for a preferred activity instead of screaming).
---Additional Resources---

Articles:


Apps:

*TipTalk*  *TipTalk* by TippyTalk (Free with $14.99 subscription)

*image2talk* by Het is Simpel ($24.99)
Books:


Websites:


Functional Communication Training

CEC Standards

The CEC Standards that apply to all 27 evidence-based practices can be found on our website at: http://afirm.fpg.unc.edu/learn.afirm

Below are CEC Standards that apply specifically to Functional Communication Training (FCT) module.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initial Preparation Standard 4: Assessment</strong></td>
<td></td>
</tr>
<tr>
<td>DDA84 S3</td>
<td>Conduct functional behavior assessments that lead to development of behavior support plans</td>
</tr>
<tr>
<td><strong>Initial Preparation Standard 5: Instructional Planning &amp; Strategies</strong></td>
<td></td>
</tr>
<tr>
<td>ISCI 5 S19</td>
<td>Use strategies to support and enhance communication skills of individuals with exceptionalities</td>
</tr>
<tr>
<td>DDA5 S5</td>
<td>Consistently use of proactive strategies and positive behavioral supports</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced Preparation Standard 1: Assessment</strong></td>
<td></td>
</tr>
<tr>
<td>SEDAS1.S8</td>
<td>Conduct functional behavioral assessments (FBA) to determine what initiates and maintains a challenging/interfering behavior</td>
</tr>
<tr>
<td><strong>Advanced Preparation Standard 3: Programs, Services, and Outcomes</strong></td>
<td></td>
</tr>
<tr>
<td>SEDAS3.K3</td>
<td>Modify the verbal and non-verbal communication and instructional behavior in accord with the needs of individuals with developmental disabilities/autism spectrum disorder</td>
</tr>
<tr>
<td>SEDAS3.S7</td>
<td>Design and implement instruction that promote effective communication and social skills for individuals with developmental disabilities/autism spectrum disorders</td>
</tr>
</tbody>
</table>

For more information, visit:
[www.afirm.fpg.unc.edu](http://www.afirm.fpg.unc.edu)
---Module References---


