



Functional Communication Training (FCT)

Elementary (6-11 years continued)

Casey, S. D., & Mercial, C. L. (2006). The use of functional communication training without additional treatment procedures in an inclusive school setting. *Behavioral Disorders, 32*(1), 46-54.

Fisher, W. W., Kuhn, D. E., & Thompson, R. H. (1998). Establishing discriminative control of responding using functional and alternative reinforcers during functional communication training. *Journal of Applied Behavior Analysis, 31*(4), 543-560. doi: 10.1901/jaba.1998.31-543

*Volkert, V. M., Lerman, D. C., Call, N. A., & Trosclair-Lasserre, N. (2009). An evaluation of resurgence during treatment with functional communication training. *Journal of Applied Behavior Analysis, 42*(1), 145-160. doi: 10.1901/jaba.2009.42-145

Middle (12-14 years)

*Brown, K. A., Wacker, D. P., Derby, K. M., Peck, S. M., Richman, D. M., Sasso, G. M., ... & Harding, J. W. (2000). Evaluating the effects of functional communication training in the presence and absence of establishing operations. *Journal of Applied Behavior Analysis, 33*(1), 53-71. doi: 10.1901/jaba.2000.33-53

*Tiger, J. H., Fisher, W. W., Toussaint, K. A., & Kodak, T. (2009). Progressing from initially ambiguous functional analyses: Three case examples. *Research in developmental disabilities, 30*(5), 910-926. doi: 10.1016/j.ridd.2009.01.005

High (15-22 years)

Kuhn, D. E., Hardesty, S. L., & Sweeney, N. M. (2009). Assessment and treatment of excessive straightening and destructive behavior in an adolescent diagnosed with autism. *Journal of Applied Behavior Analysis, 42*(2), 355-360. doi: 10.1901/jaba.2009.42-355

*Tiger, J. H., Fisher, W. W., Toussaint, K. A., & Kodak, T. (2009). Progressing from initially ambiguous functional analyses: Three case examples. *Research in developmental disabilities, 30*(5), 910-926. doi: 10.1016/j.ridd.2009.01.005

* Research which included participants in multiple age ranges.



Functional Communication Training (FCT) ---Step-by-Step Guide---

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.

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.

Now you are ready to start...

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.

Functional Communication Training (FCT) ---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 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					



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--- FCT Planning Worksheet---

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Interfering Behavior: _____

Conduct a Functional Behavior Assessment:

If a challenging behavior interferes with the child's ability to learn, than 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:

Function

What is the function of the interfering behavior?

- Escape/Avoid
- Obtain preferred item/activity
- Other: _____

Form

What is the learner's primary mode of communication?

- PECS
- sign language
- voice output device
- verbal
- Other: _____

Effort

What is the replacement communicative behavior?

- _____

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



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---Functional Behavior Assessment---

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Interfering Behavior: _____

A-B-C Data Chart:

In the table below, record your observations

	Setting	Antecedent	Behavior	Consequence
Date: Time:				
Date: Time:				
Date: Time:				
Date: Time:				
Date: Time:				
Date: Time:				
Date: Time:				
Date: Time:				
Date: Time:				
Date: Time:				
Date: Time:				

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information, visit:**
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---Replacement Communicative Behavior Data Collection---

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Data Collection for Replacement Communicative Behavior:

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

Interfering Behavior (IB):						
Replacement Communicative Behavior (RCB):						
Date	Location	Antecedent	IB or RCB	Prompt Needed	Consequence	Notes

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

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---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.

Interval Duration:							Observation Period:					
Date	Start Time	1	2	3	4	5	6	7	8	9	10	Stop Time

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

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Functional Communication Training (FCT) ---Professional's Guide---

Functional Communication Training

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:

Early Intervention (0-2)	Preschool (3-5)	Elementary (6-11)	Middle (12-14)	High (15-22)
No studies	Social	Social		
	Communication	Communication	Communication	Communication
	Behavior	Behavior	Behavior	Behavior
	School-Readiness	School-Readiness		
	Play	Play		
	Adaptive	Adaptive		Adaptive



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.



Functional Communication Training

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



Functional Communication Training (FCT) ---Professional's Guide---

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



Functional Communication Training (FCT) ---Parent's Guide---

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).

This parent introduction to **Functional Communication Training** is designed as a supplemental resource to help answer basic questions about this practice.

To find out more about how **Functional Communication Training** is used with your child, speak with:

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



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Check out
these
resources to
support your
use of type
Functional
Communi-
cation
Training.

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---Additional Resources---

Articles:

- Battaglia, D. (2015). Functional communication training in children with autism spectrum disorder. *Young Exceptional Children*, doi:10.1177/1096250615576809
- Fragale, C., Rojeski, L., O'Reilly, M., & Gevarter, C. (2016). Evaluation of functional communication training as a satiation procedure to reduce challenging behavior in instructional environments for children with autism. *International Journal of Developmental Disabilities*, 62(3), 139-146. doi:10.1080/20473869.2016.1183957
- Mihara, A., & Eto, H. (2013). The effects of functional communication training on the challenging behaviors of a student with autism. *Journal of Policy and Practice in Intellectual Disabilities*, 10(2), 149-149.
- Schmidt, J. D., Drasgow, E., Halle, J. W., Martin, C. A., & Bliss, S. A. (2014). Discrete-trial functional analysis and functional communication training with three individuals with autism and severe problem behavior. *Journal of Positive Behavior Interventions*, 16(1), 44-55. doi:10.1177/1098300712470519
- Wacker, D. P., Lee, J. F., Padilla Dalmau, Y. C., Kopelman, T. G., Lindgren, S. D., Kuhle, J., . . . Waldron, D. B. (2013). Conducting functional communication training via telehealth to reduce the problem behavior of young children with autism. *Journal of Developmental and Physical Disabilities*, 25(1), 35-48. doi:10.1007/s10882-012-9314-0

Apps:



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



image2talk *image2talk* by Het is Simpel (\$24.99)

Books:

- Durand, V. M. (1990). *Severe behavior problems: A functional communication training approach (Treatment manuals for practitioners)*. The Guilford Press.
- Reichle, J., & Wacker, D. (2017). *Functional communication training for problem behavior*. The Guilford Press.
- Steward, K., & Huer, M. (2005). *Functional Augmentative Communication Training Strategies (FACTS): Daily routines*. Academic Communication Associates

Websites:

- Clark, C., (2016). What is Functional Communication? Retrieved on February 13, 2017 from: <https://www.speechandlanguagekids.com/functional-communication/>
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- Raising Children Network. (2017). At a glance: Functional Communication Training (FCT) Retrieved on February 13, 2017 from: http://raisingchildren.net.au/articles/functional_communication_th.html
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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.

Standard	Description
Initial Preparation Standard 4: Assessment	
DDA84 S3	Conduct functional behavior assessments that lead to development of behavior support plans
Initial Preparation Standard 5: Instructional Planning & Strategies	
ISCI 5 S19	Use strategies to support and enhance communication skills of individuals with exceptionalities
DDA5 S5	Consistently use of proactive strategies and positive behavioral supports

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

**For more
information, visit:**
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---Module References---

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10. Mancil, G. R., Conroy, M. A., Nakao, T., & Alter, P. J. (2006). Functional communication training in the natural environment: A pilot investigation with a young child with autism spectrum disorder. *Education and Treatment of Children, 29*(4), 615-633.

11. Gibson, J. L., Pennington, R. C., Stenhoff, D. M., & Hopper, J. S. (2010). Using desktop videoconferencing to deliver interventions to a preschool student with autism. *Topics in Early Childhood Special Education, 29*(4), 214-225. doi: 10.1177/0271121409352873
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<http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/imce/documents/2014-EBP-Report.pdf>