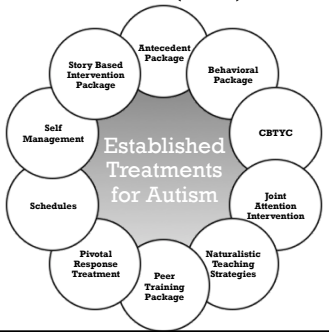
Introduction
To
Functional Communication
Training
FCT

2013-14

Functional Communication Training
Session 1 of 2

National Autism Center (NAC) Established Practices (2009)



See appendix for further info. on NAC – Established Practices.

FCT and Behavioral Package

- Behavioral Package – designed to reduce problem behaviors and teach functional alternative behaviors or skills.
  - Effective with wider range of target skills and behaviors
  - Functional communication training (FCT) fall under the umbrella of the Behavioral Package

+ Problem Behavior is telling us what?

+ Problem Behavior is telling us what?

+ Behavior and Communication

"Research has indicated that the ability to communicate is often directly related to the prevalence of maladaptive behavior."

(Carr & Durand, 1985).

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Why Use FCT????

Communication Hypothesis

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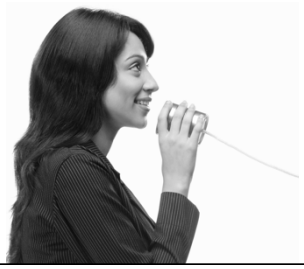
- Problem behavior = primitive form of communication in order to bring about a desired outcome (Carr and Durand)



+ What do we know about Communication?

- Parents routinely try to determine function of crying
- More advanced communication = less crying, less problem behavior
- Children with less developed communication skils may begin to use more problematic behaviors.

What Do We Know about Behavior?

- For children who have limited communication skills, challenging behavior serves to communicate needs and wants
- Behavior is learned. If behavior meets the need of the individual, it will continue.

Challenging behaviors *are meeting the needs of*

Gaining   *something*

or

Escaping  *from something*

but are

***not* Communicated appropriately.**

FUNCTIONS of:

Communication

- Request
- Protest/request
- Comment/label
- Gain information
- Negotiate

+ FUNCTIONS of:

Behavior

- Escape
- Obtain
- Multiple
- Automatic

+ FUNCTIONS of:

Communication

- Request
- Protest/reject
- Comment/label
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- Escape
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Functions Serve a Purpose:

Communication

- request
- protest/reject
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+ Behavior can be used to Communicate

What might this be telling us?

What about this?

+ Same Topography = Different Functions

Little Girl Crying

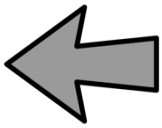
- "I don't want to play anymore" – (escape)
- I don't want to listen the story (escape)
- I want the doll (gain tangible)
- I want you to talk to me (attention)

Man busting Computer

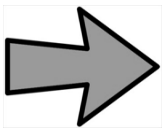
- "I don't want to do ANYMORE work!" (Escape)
- "I want a new computer!" (Gain Access/ Tangible)
- "I want you to come into this room" (Attention)

+ How Do We Identify Function?

- Identify Antecedents to defined behavior(s) of concern
  - Antecedents: a condition or event that occurs immediately before a behavior



- Identify Consequences to defined behavior(s) of concern
  - Consequence: What immediately follows behavior



Antecedents: Examples

- Math task
- Fine motor task
- Computer is restricted
- Peer is playing with child's preferred toy
- Student is receiving adult attention
- Student is not receiving adult attention
- Adult is working with another student

Consequences: Examples

- Student is reprimanded
- Assistance with work task provided
- Student is offered a break to calm down
- Offered computer time to calm down
- Offered an alternative task
- Peers laugh
- Work is delayed

Positive/Negative Reinforcement and Learning

- Reinforcement increases the likelihood that the individual will display the behavior again
  - Positive is "adding" something (attention, toy)
  - Negative is "taking" something away that the individual does not like (work demand, attention)
- *Individuals learn that problem behavior is effective in getting what they want or getting away from what they don't want*

+ Positive Reinforcement Examples
(based around problem behavior)

- Student not working and adult comes to find out what is wrong (not working led to addition of adult attention)
- Student is disruptive and is "written up" and goes to the office to talk to the principal (disruption led to addition of adult attention)
- Student says, "I can't do this" and adult comes to help.
- Student blurts out and adult stops teaching to address blurting
- Student sees toy he wants and takes it (taking led to acquisition of toy)

+ Negative Reinforcement Examples
(based around problem behavior)

- Student tears up work and is sent to office or special education room (tearing led to delay and/or removal of work)
- Student puts head down on desk during work time (head down led to delay and/or removal of work)
- Student loses recess for not getting work completed (unfinished work led to removal or recess)
- Student "negotiates" work and subsequently the teacher decreases the amount of work they need to do.

+ FBA – ABC Data Sheet (put in Appendix paper)

ABC (blank)

Functional Assessment: A → B → C

This observation form is designed to record the student's target behavior as well as antecedent and consequent events. The target behavior must have an observable and measurable definition. This functional analysis will help determine what is causing or maintaining the behavior.

Student: ____________ Date: ____________

Class: ____________ Time: ____________

Target Behavior: ________________________

Antecedents	Behavior	Consequences

ABC with Checkmarks

ABC data

Student: ____________ Date: ____________ Data Collector: ____________

Antecedent(s) (exactly what happened prior to the behavior)	**Behavior of Concern**	**Consequence(s)**	**Final Consequences**
☐ group instruction ☐ independent work ☐ given a request/instruction ☐ getting no attention ☐ ☐		☐ attention from peer ☐ attention from teacher ☐ didn't finish work ☐ left room ☐ ☐	☐ time out ☐ loss of recess ☐ sent to office ☐ ☐ ☐
☐ group instruction ☐ independent work ☐ given a request/instruction ☐ getting no attention ☐ ☐		☐ attention from peer ☐ attention from teacher ☐ didn't finish work ☐ left room ☐ ☐	☐ time out ☐ loss of recess ☐ sent to office ☐ ☐ ☐
☐ group instruction ☐ independent work ☐ given a request/instruction ☐ getting no attention ☐ ☐		☐ attention from peer ☐ attention from teacher ☐ didn't finish work ☐ left room ☐ ☐	☐ time out ☐ loss of recess ☐ sent to office ☐ ☐ ☐
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https://www.youtube.com/watch?v=c66KoeifoLI

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"I don't want to do my homework!"

Activity 1

Watch and record ABC Data!

http://youtu.be/JnP-1cd6ggg

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How Do We Merge Communication and Behavior?

Functional Communication Training

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THE ELEPHANT IN THE ROOM!

- "If he could communicate, he wouldn't act this way. Will you work on this?"
- "If the behavior was under control, I could work on the communication skills."
- "He can talk! He could tell us if he wanted to."

Integrated Team Work predicts Greater Results!!!!

Communication focus

- Identify the form likely to result in successful teaching
- Target opportunities for instruction in natural contexts

Behavior focus

- Identifying the function of the challenging behavior.
- Determine an appropriate replacement skill.

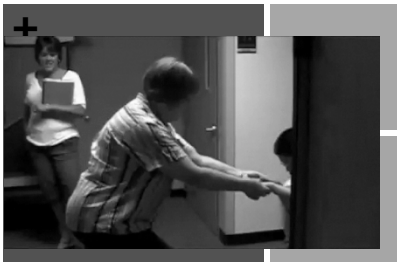
Skill Sequence

1. Instructional Control- pair self with reinforcer
2. Choose communication form
3. Practice using FCT in situations where problem behavior usually occurs
4. Use replacement system everywhere.
5. Build tolerance for delay
6. Generalize

Instructional Control

- Build rapport
- Teacher/adult becomes paired with reinforcement
- May need to begin non-contingently (giving for free).

+ Instructional Control Example



Instructional Control-Adult paired with Fun!

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Instructional Control

FCT in the Classroom Activity 2

- Read *Functional Communication Training in the Classroom: A Guide for Success – Mancil and Bowman*
  - *Benefits of FCT*
  - *3 identified steps*
  - *Identify all components*
  - *Can you think of a student this would be helpful with? Why? Why not?*
  - Find commonalities between students you serve, FCT sequence, and article.

Choose Communication Form

- Verbal
- Sign
- Symbol
- Voice Output

Easy and Efficient

Communication Mode Assessment

How to determine which mode?
(pro's and con's)

Verbal	Sign	Symbol	Voice Output
Pro's ■ Easily heard and transported ■ specific requests can be made Con's ■ may not be efficient as the problem behavior ■ student might not have much verbal communication	Pro's • Many different requests can be made • Good match for kids who are good imitators Con's • Audience may not know the language, doesn't gain listeners attention	Pro's ■ specific requests can be made ■ easily understandable ■ process to gain listener's attention taught Con's ■ bulky, difficult to transport	Pro's • easy to hear; can more easily be used/heard across distances Con's • might break • difficult to provide lots of choices • expensive, can be difficult to program/use

Assisstive Technology
in Functional Communication Training

Why consider the right form of communication:

- Behavior is Communication, but not effective
- Needs fast, effective way to communicate what behavior is "supposed" to communicate
- Communication strategies the child has, e.g. speech, dynamic display device, sign, etc. are not "available" to him when he's upset

AAC Tools in FCT

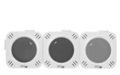
- Augmentative Alternative Communication (AAC) tools should be simple
- May need more than one method to meet communication needs
- Consider:
  - Size
  - Volume
  - Portability
  - Accessibility
  - Durability

AT Examples

- Talking Photo Frame, Go Talk Button, Talking Brix, BigMACK
- Talking Photo Album
- Picture symbols on wristband, Communication Charms
- GoTalks- top three messages constant
- Tech/Talk with added paper symbol choices
- PODD, PECS

Go Talk Button

Communication Charm Bracelet



Talking Brix

Talking Photo Album

Big Mack

Go Talk

Tech Talk

PECS book

PODD books

Choosing a Replacement Behavior

- Simple
  - Taught in a short amount of time
  - Allows the learner to quickly learn behavior
  - Quickly gain access to reinforcement
- Acceptable and Appropriate
- Recognized/responded to by multiple partners

Activity 3

- Each group will read selected student FBA summaries.
- As a group decide on the replacement behavior and any additional strategies you think will be needed.
- Share out

Things to Think About for Activity 3

- Does the student have a way to gain the listener's attention?
- Is there a low tech backup for your high tech system?
- Training for staff
- How to create communication opportunities

Pre-Teaching: I want a break

Teaching the Replacement Behavior

- Teach in the absence of problem behavior
- Set up situation to motivate student to use problem behavior
- Identify prompt level individualized to student to ensure replacement behavior is used
- Reinforce use of replacement behavior (matched to function of problem behavior)

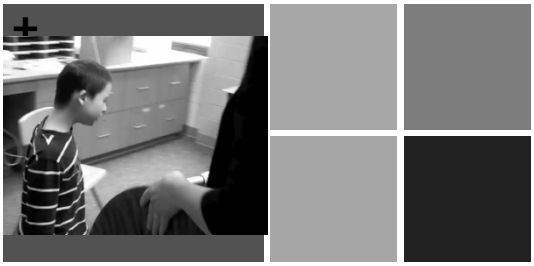
Prompting

- **Indirect Verbal** - Hinting that something should occur without repeating the request
- **Direct Verbal** - Stating exactly what should be done
- **Positional** - moving of an item or object to a location so that the response is more likely to occur
- **Gestural** - Any gesture to increase the likelihood of a correct response (pointing, tapping, glancing)
- **Imitative / Echoic** - Modeling of correct response so that the student may copy your actions
- **Physical / Partial Physical** - Physical manipulation of the student's body so that the response occurs

Ben T – capture motivation and prompting ask for help

Prompting – "I want to play"

Reducing Prompts

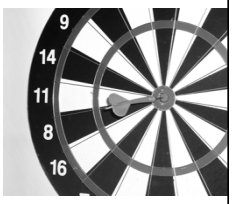


Asking to Play-voice output

Video example – Asking to talk

"Shaping" up "messy" responses

- Initially, accept responses that approximate the desired behavior/communication (*if student picks up the break card w/o giving to a listener still provide break or says part of the word "help" or "break", honor this*)
- Prompt and reinforce behavior/ communication that is "closer" to what you would like see in the end.
- Continue this until the response looks like what you want!



Shaping – Asking for Help

"No Thank You"

Where to Implement?

- Teach the replacement behavior in the environment/s where problem behavior occurs.
- Manipulate the environment to provide many opportunities per day

What's the problem? What's the function?

- Problem behavior definition
- Determine function of behavior
- Identify replacement behavior
- How to teach

What's the problem? What's the function?

- Problem behavior definition
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Activity 4
Behavior Intervention Plan

- Behavior Intervention Plan (BIP)
  - What form of communication?
  - How will replacement behavior be taught including prompts needed?
  - Where will teaching begin?
  - How will appropriate communication be reinforced?

**Practice with each other/be prepared to role play for the group!*

Putting it together…..

- Review FCT implementation checklist Pg. 20 of appendix
- Q & A
- 3-2-1 Reflection

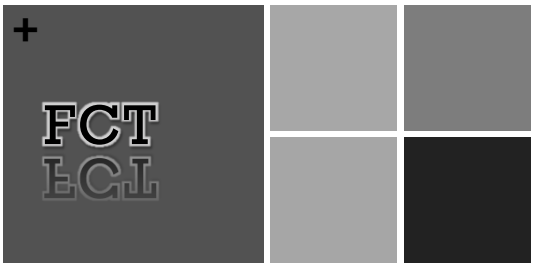
Homework

- Be prepared to demonstrate and share out teaching steps 1, 2, 3, 5, & 7

References

- Carr, Levin, McConnachie, Carlson Kemp, & Smith, (2006). *Communication –Based Intervention for Problem Behavior.* Baltimore, Maryland, *Brookes Publishing Co.*
- Mancil, G. R., Boman, M. (2010) Functional Communication Training in the classroom: A Guide for Success, Preventing School Failure
- NAC (National Autism Center)
- Butterfly Effects Website
- FCT, University of Iowa –Center for Developmental Disabilities
- *Functional Communication Training Module,* (2009). National Professional Development Center on Autism Spectrum Disorders. www.fpg.unc.edu/~autismPDC/resources/resources_public_ebp.cfm

FCT - Day 2



Functional Communication Training-Session 2 of 2

Day 2-Welcome back!

1. Review BIG ideas for today
2. Q & A from last session
3. Review Appendix

Review from Past Session

- Know
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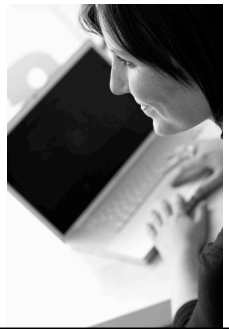
  - Functional Communication Training teaches students a better way to get wants/ needs met.
  - Understanding/Knowing the function of a students problem behavior is the first step in being able to teach a new communicative response.
- Understand
  - Functional Communication Training requires the expertise of various disciplines (Teacher, Para-educator, Behavior leads, Communication leads).
  - Steps in teaching Functional Communication Training are standard. Things that might vary include the mode and message of communication, number of experiences needed to be independent and fluent in using FCT and level of shaping/prompting needed to develop skills.
  - The replacement behavior may not be the same thing as the desired behavior.
- Do
  - Identification of target behavior, it's function, deciding on a replacement behavior (communicative response) , the mode that will be used by the student and strategies to teach the replacement behavior.
  - Opportunity to practice steps of FCT and willingness to share with group at second session.

+ Review Appendix – look at forms

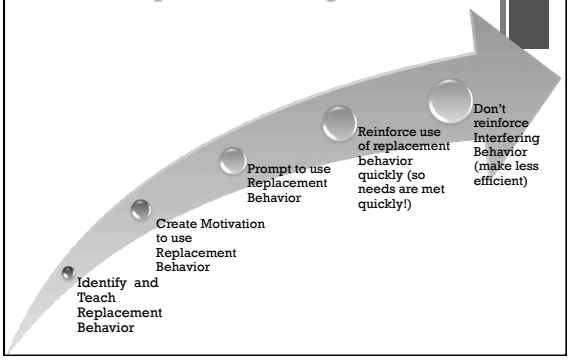


+ Questions and Answers – *from Session 1*

- Teaching FCT
  - *Know the function and know the response, contrive situation so they use it and reinforce the replacement behavior.*
- Family School Collaboration
  - *Work on new skill at school, video tape or invite parent to see the skill "in action", potentially assist parents in generalizing to home.*
- Functions/FCT
  - *Can be used with single function or multiple functions*
- Assessment and Tools
  - *See your appendix or the links provided during training*
- Other (*mode assessment, implementation, case specific examples*)

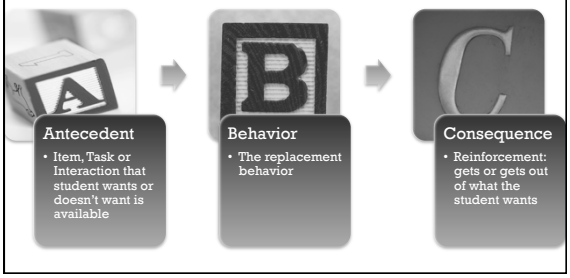
Teaching FCT
Basic Steps

Basic Steps in Teaching FCT (*after function is identified)



How Do I Teach?

Remember the A-B-C's!



Antecedent
- Item, Task or Interaction that student wants or doesn't want is available

Behavior
- The replacement behavior

Consequence
- Reinforcement: gets or gets out of what the student wants

Functional Communication Training

Replacing Interfering Behavior used to Escape Aversive and Overview of FCT

- What made this boy's escape response successful before teaching replacement behavior?

Butterfly Effects Web Resource

http://www.youtube.com/watch?v=cfzjEgZLLCY

Demonstrating of the Teaching Process: Gain Attention Function

- *Role Play*

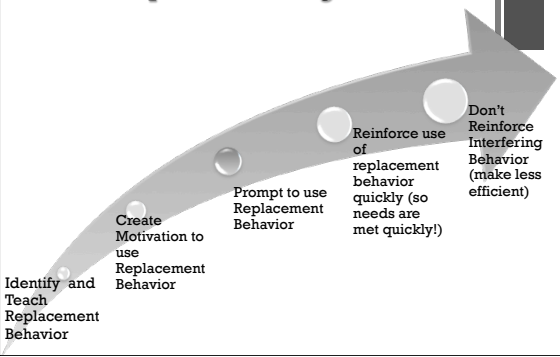
- What is the replacement behavior?
- What mode is used? Why?
- Steps of the teaching process?
- How was the replacement behavior reinforced?

Escape Function

- *Role Play*

1. What is the replacement behavior?
2. What mode is used? Why?
3. Steps of the teaching process.
4. How was the replacement behavior reinforced?

Basic Steps in Teaching FCT (*after function is identified)

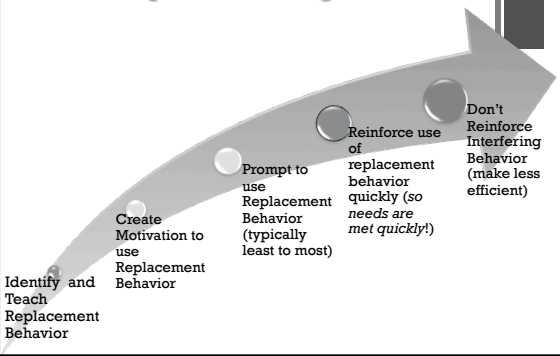


Errorless Teaching

ATS – Autism Training Solution

- Watch for types of prompts provided
  - Gestural
  - Positional
  - Verbal
  - Physical

Basic Steps in Teaching FCT (*After function is identified)



Reinforcing the Replacement Behavior- *Differential Reinforcement*

- What was the interfering behavior?
- What did teaching look like?
- How was use of the replacement behavior reinforced?
- How did the teacher respond to the problem behavior?

http://youtu.be/CPOQEdDc48Q

+ Example of Lesson Plan

Social Skills Lesson Plan

Review and Check (prerequisite skills or previous lesson):	
Present New Skill: Objective:	
Instructional Sequence: Model (I do it.) – Lead (We do it.) – Test (You do it.) –	**3-step Corrective Feedback** 1. State the rule: 2. Show me how ___: 3. Praise:
Independent Practice: Indicate 5 preplanned opportunities for student to practice this skill with immediate feedback (positive or corrective feedback) provided within a 24-hour period: **Precorrection:** **Most-to-least prompting sequence:** **Reteach and Practice:**	
Review after Mastery Indicate at least 5 preplanned review times (across multiple settings) for this skill to be practiced within the next 30 days: **Examine errors:** If a pattern of mistakes occurs, reteach and practice this skill.	

+ Adult Response to Problem Behavior – "make it not work!"

- Don't reinforce any instances of targeted problem behavior
  - *If you can't ignore, give minimal and very neutral attention (eg. No eye contact, nagging, talking to others about the problem behavior)*
  - *Make sure problem behavior don't result in the student gaining what they want (getting out of, gaining access to or getting attention)!*
- Prompt replacement behavior (e.g. What do you want?)
  - *If using a augmentative device or picture exchange, position so they are very near the student*
- Provide reinforcement for use of replacement behavior

+ Planned Ignoring Example-*ButterflyEffects.com*

Used when attention is valuable –
Putting interfering behaviors used to gain attention on extinction.

- When did the instructor give attention?
  - How did he give attention?
- When did he NOT give attention?
  - How did he do this?

- http://youtu.be/bAYGOQwobDE

Participant will….

Discuss experience using steps from FCT implementation checklist in small group

Choose 1 experience from table to share out

- *identify problem behavior and it's function*
- *replacement behavior*
- *how it was taught*

Demonstration (role play) of skill sequence

Feel free to make changes prior to demonstrating

Big Ideas for Day 2 - FCT

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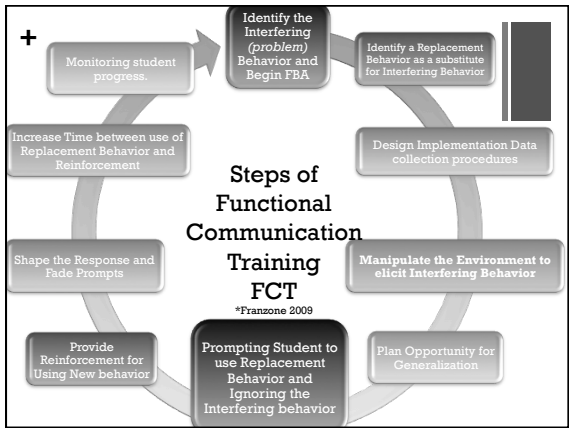
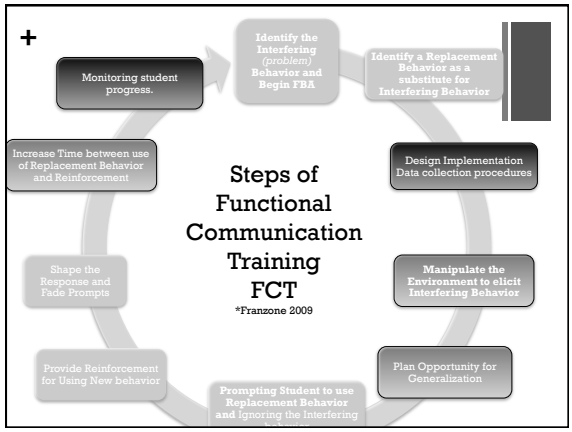
Teaching Sequence

Franzone 2009

1. **Identify the Interfering** *(problem)* **Behavior**
2. **Complete a Functional Behavior Assessment (FBA)**
3. **Identify a Replacement Behavior as a substitute for Interfering Behavior**
4. Design Implementation Data collection procedures
5. **Manipulate the Environment to elicit Interfering Behavior**
6. Plan Opportunity for Generalization
7. **Prompting Student to use Replacement Behavior**
8. Ignoring the Interfering behavior
9. Provide Reinforcement for Using New behavior
10. Shape the Response
11. Fade Prompts
12. Increase Time between use of Replacement Behavior and Reinforcement
13. Monitoring student progress.





Data Collection : Before FCT, During and After

- Before Beginning FCT (often part of FBA)
  - *Antecedents to Problem Behavior*
  - *Collect data on problem behavior (when it occurs, when it doesn't and something measurable related problem behavior (often is frequency)*
- During FCT
  - *Antecedents – what environments/demands trigger either problem or replacement behavior?*
  - *Prompts required to produce the replacement behavior*
  - *Frequency of Interfering behavior (should be going down from baseline)*
  - *Consequences of the Replacement and Interfering Behavior*
- After Initial Implementation (tolerance for delay)
  - *Use in all settings (does it work better some places?*
  - *Prompting needed to use replacement behavior*

+ Data Collection Samples

GOAL: In 36 weeks, _____ will spontaneously use functional communication in a variety of settings _____% of opportunities.

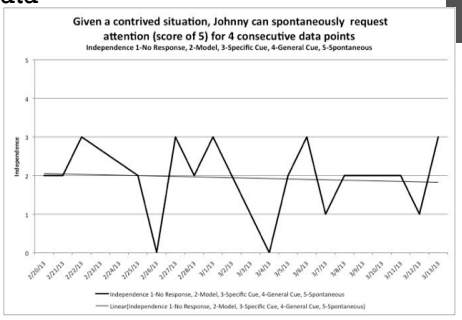
Date: Environment:	No response	Model (motions, hand over hand, info giving)	Specific cue (t-in, _____ touch, point, visual, hand out	General Cue (What do you say, wait, etc.) "point to picture" etc.	Spontaneous
Greet					
Answer questions					
Request assistance/ attn.					
Request items appropriately					
Request break or time away approp					
TOTAL					

Time and Activity	I followed directions!	I stayed where I was supposed to!	I was friendly to others !	How many? Stops/Help	Time Away How long?	Time Out? How long?
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		

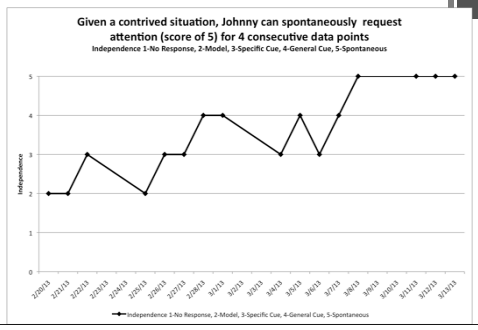
Communication Goal By _____ student will improve his ability to make requests for reinforcing items to improve functional communication and use 12/12 skills on the communication checklist

Skill #	Date	Skill	Notes
1		Physically assisted exchange - Upon seeing and wanting a particular item in reach, pick up picture, reach to person holding the item and release the picture into that person's hand	
2		Independent exchange - Upon seeing and wanting a particular item in reach, pick up picture, reach to person holding the item and release the picture into that person's hand	
3		Independently request for 5 different reinforcers across 3 trainers and 5 activities.	
4		Receptive picture from book - Identify picture for 5 different reinforcers and across 3 trainers.	
5		Travel to communication partner – 5 different trainers	

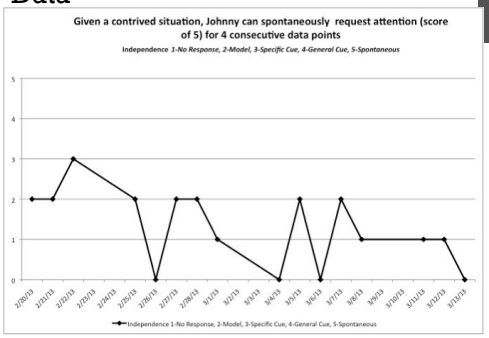
+ Analyzing Progress Monitoring Data



+ Analyzing Progress Monitoring Data



+ Analyzing Progress Monitoring Data



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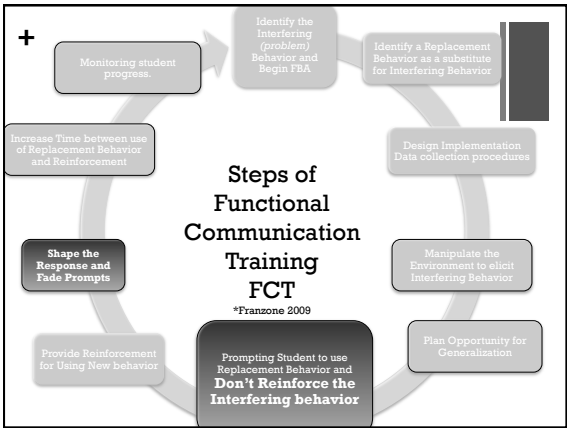


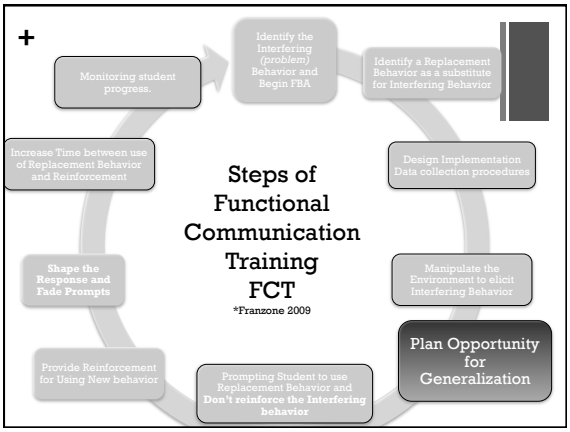
+ Attention Extinction –"Planned Ignoring"

- http://www.youtube.com/watch?v=1IxVt8kQGVM

Behavior Frontiers

Activity-Differential Reinforcement

- Be able to share idea for reinforcing replacement behavior AND put problem behavior on extinction
- Share at table – share with group



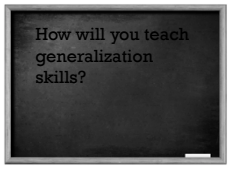
Generalization requires a Plan!

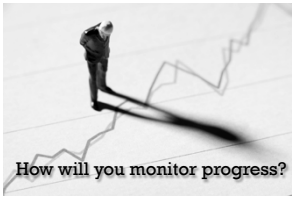
- Multiple communication partners
  - Train all people in environment to respond to replacement behavior
    - parents
    - peers
    - associates
    - specials teachers, etc.
- Multiple environments
- Varied vocabulary

"I want attention" – Generalized

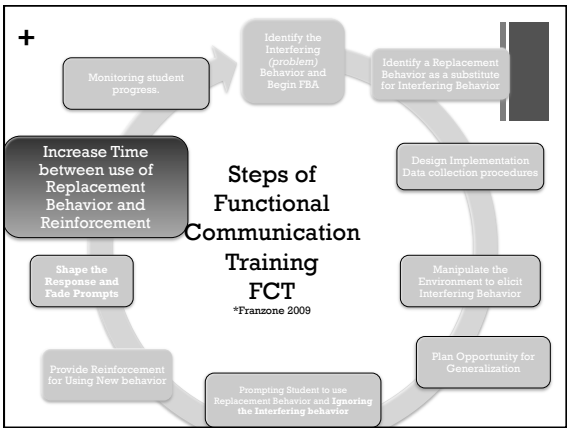
Generalization Example

Generalization -Activity 5

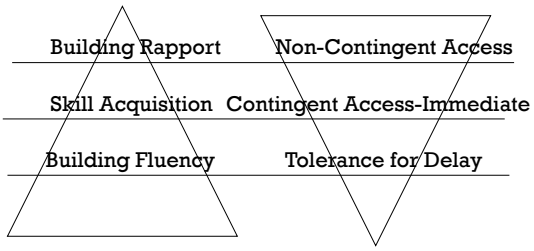




- **Plan how adults will respond to problematic/ interfering behavior?**



How Do we Reinforce?



Tolerance for Delay –

When do I teach?

- Constant manding/requesting gets annoying
- Not socially acceptable way of interacting
- Student who constantly requests gets nothing done
- Important to pair work/demands and reinforcment.

+ Tolerance for Delay –

How do I teach?

- Student mands/requests
- Adult puts demand on student with the promise of R+(reinforcment) following
- Student completes activity with or w/out prompts
- Adult acknowledges the demand completion and reinforces

+ Building Tolerance for Delay (of reinforcement)

- Time delay
- Completing part of task
- Delay cues
- Signaling
- Identifying number of requests that can be made in time period or activity

+ Gain Attention – Tolerance for Delay

- During center time, John runs around classroom and knocks materials over.
- Adult tried to ignore John's running around, but intervenes (for safety) when he begins to thow or knock over bigger items.
  - Function of taking materials, knocking over materias and running around the room is to GAIN Adult Attention
- John was taught replacement behavior of Gaining an adult attention by taking taking a photo of the teacher and giving to her (or to someone).
  - John is very good at this and has not demonstrated problem behviors for the last 5 center times

How would you build John's tolerance of wait time around gaining teachers attention?

Gain Tangible –Tolerance for Delay

- Patty cries and screams after recess and is usually offered an opportunity to play on the computer or other things she has indicated an interest in.
- Function of Patty's crying and screaming was to GAIN ACCESS to the computer (or things she likes to play with)
- Patty was taught to GAIN ACCESS to items by vocally requesting to an adult that she wants…….

How would you build Patty's tolerance in waiting before gaining access?

Escape – tolerance for delay

- Justin hits someone or himself almost every time he has to do work tasks. When he hits, he usually is reprimanded by an adult and then given a short break time.
- Function of behavior is escape or avoid demands
- Justin was taught to use a voice output device to request a break from the task.

How would you increase Justin's tolerance for delay in getting a break from the task?

Teaching Tolerance for Delay Scenarios – *Your turn*

- All tables will be assigned a scenario
- Think through teaching sequence for "tolerance for delay"
- Be ready to:
  - share function of interfering behavior
  - Share what the replacement behavior is
  - role play teaching steps for tolerance for Delay sequence

FCT Isn't Working?

- Instructional Control inadequate?
  - *continue to work at building rapport, reinforcement versus reward*
- Inaccurate Functional Assessment
  - *has function changed over time, different environments, is behavior serving different function in different environments????*
- Is the replacement behavior too difficult, not as efficient?

How to determine which mode?

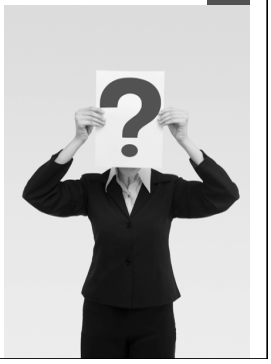
(pro's and con's)

Verbal	Sign	Symbol	Voice Output
Pro's ■ Easily heard and transported ■ specific requests can be made Con's ■ may not be efficient as the problem behavior ■ student might not have much verbal communication	Pro's • Many different requests can be made • Good match for kids who are good imitators Con's • Audience may not know the language, doesn't gain listeners attention	Pro's ■ specific requests can be made ■ easily understandable ■ process to gain listener's attention taught Con's ■ bulky, difficult to transport	Pro's • easy to hear; can more easily be used/heard across distances Con's • might break • difficult to provide lots of choices • expensive, can be difficult to program/use

"We've done this and it's still not working!!!"

Communication Mode Assessment

- Comparing different modes of communication in a systematic format to determine which is the most efficient, effective, appropriate



+ Revisiting Communication Mode Assessment

+

To Summarize…….

- Define communicative intent of the problem behavior
- Identify an alternative, appropriate communication response
- Choose appropriate form
- Provide desired outcomes only for appropriate behavior
- Respond consistently to appropriate communication
- Teach, teach, teach, teach……..

+ How will this help you in your practice?

- Do you feel comfortable in putting all of these steps in place
- Are there steps you need more clarificaton?

Problem Solving On Current Cases?

Any Other Questions?

References

- Carr, Levin, McConnachie, Carlson Kemp, & Smith, (2006). *Communication –Based Intervention for Problem Behavior.* Baltimore, Maryland, *Brookes Publishing Co.*
- Mancil, G. R., Boman, M. (2010) Functional Communication Training in the classroom: A Guide for Success, Preventing School Failure
- NAC (National Autism Center)
- Butterfly Effects Website
- FCT, University of Iowa –Center for Developmental Disabilities
- *Functional Communication Training Module,* (2009). National Professional Development Center on Autism Spectrum Disorders. www.fpg.unc.edu/~autismPDC/resources/resources_public_ebp.cfm

Good Luck Teams!

Appendix

Module: **Functional Communication Training (FCT)**

Implementation Checklist for Functional Communication Training (FCT)

Franzone, E. (2009). *Implementation checklist for functional communication training (FCT).* Madison, WI: The National Professional Development Center on Autism Spectrum Disorders, Waisman Center, University of Wisconsin.

Instructions: The Implementation Checklist includes each step in the process of implementing FCT. Please complete all of the requested information including the site and state, teacher being observed, and the learner's initials. Within the table, record a 2 (implemented), 1 (partially implemented), 0 (did not implement), or NA (not applicable) next to each step observed to indicate to what extent the step was implemented/addressed during your observation. Use the last page of the checklist to record the target skill, your comments, whether others were present, and plans for next steps for each observation.

Site: _____ State: _____

Teacher/practitioner: _____ Learner's Initials: _____

	Observation	1	2	3	4	5	6	7	8
	Date								
	Observer's Initials								
Step 1. Identifying the Interfering Behavior		**Score****							
1. Teachers/practitioners identify an interfering behavior or a subtle communicative form to be the interfering behavior.									
Step 2. Completing a Functional Behavior Assessment (FBA)									
1. Teachers/practitioners complete a high-quality FBA that includes:									
a. indirect assessment (e.g., interviews, record reviews, questionnaires) and									
b. direct assessment (e.g., A-B-C observation).									
2. Teachers/practitioners identify the function of the interfering behavior.									

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

Module: Functional Communication Training (FCT)

	Observation	1	2	3	4	5	6	7	8
	Date								
	Observer's Initials								
Step 3. Identifying a Replacement Behavior as a Substitute for Interfering Behavior		**Score****							
1. Teachers/practitioners select a form of communication that is appropriate to the learner (e.g., signing, verbalizations, pictures).									
2. Teachers/practitioners choose a replacement behavior that:									
a. can be taught in a short amount of time and									
b. allows the learner to quickly learn the behavior and gain access to the reinforcement.									
3. Teachers/practitioners identify a replacement behavior that is acceptable and appropriate for the environment and the learner.									
4. Teachers/practitioners choose a replacement behavior that is recognized by multiple communicative partners.									
5. Teachers/practitioners incorporate attention-getting into the replacement behavior, if necessary (e.g., when using sign language).									
Step 4. Designing Implementation Data Collection Procedures									
1. Teachers/practitioners implement data collection procedures that are functional, meaningful, and available to team members responsible for data collection.									
2. Data are collected:									
a. before FCT is implemented (typically during the FBA process) and									

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

Module: Functional Communication Training (FCT)

	Observation	1	2	3	4	5	6	7	8
	Date								
	Observer's Initials								
Step 4. Designing Implementation Data Collection Procedures (cont.)		**Score****							
b. during the implementation of FCT (e.g., weekly).									
3. Data collection focuses on:									
a. antecedents.									
b. prompts required by learner to produce the replacement behavior.									
c. frequency of the replacement behavior.									
d. frequency of the interfering behavior.									
e. consequences of the replacement/interfering behavior (i.e., what happens right after the replacement/interfering behavior).									
4. Teachers/practitioners use data to monitor FCT effectiveness and whether aspects of FCT need adjustment.									
Step 5. Manipulating the Environment to Elicit the Interfering Behavior									
1. Teachers/practitioners teach the replacement behavior in the environments where the interfering behavior occurs.									
2. Teachers/practitioners manipulate materials or activities to provide opportunities for repeated practice of the replacement behavior.									
Step 6. Planning Opportunities for Generalization									
1. Teachers/practitioners teach the replacement behavior with multiple communication partners.									

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

Module: Functional Communication Training (FCT)

	Observation	1	2	3	4	5	6	7	8
	Date								
	Observer's Initials								
Step 6. Planning Opportunities for Generalization (cont.)		**Score****							
2. Teachers/practitioners teach the replacement behavior across multiple environments.									
3. Teachers/practitioners train communicative partners to respond to the learner's use of the replacement behavior.									
4. Teachers/practitioners introduce varied vocabulary for requesting, if appropriate for learner's developmental level.									
Step 7. Prompting Learners to Use Replacement Behavior(s)									
1. Teachers/practitioners use the least restrictive prompt to elicit the replacement behavior.									
2. Teachers/practitioners use time delay before moving to a more restrictive prompt.									
Step 8. Ignoring the Interfering Behavior									
1. Teachers/practitioners ignore all instances of the interfering behavior, if possible.									
2. Teachers/practitioners intervene as minimally as possible if the interfering behavior is potentially dangerous.									
3. For subtle communicative acts, teachers/ practitioners make the interfering behavior less efficient than the replacement behavior by:									
a. pausing after the learner uses the subtle communicative act.									
b. asking, "What do you want?"									
c. prompting the learner to use the replacement behavior.									

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

Module: Functional Communication Training (FCT)

	Observation	1	2	3	4	5	6	7	8
	Date								
	Observer's Initials								
Step 8. Ignoring the Interfering Behavior (cont.)		**Score****							
d. providing reinforcement for using the replacement behavior.									
Step 9. Providing Reinforcement									
1. All communicative partners consistently provide immediate reinforcement in response to the replacement behavior.									
Step 10. Shaping the Response									
1. Teachers/practitioners initially accept any approximation of the replacement behavior.									
2. Teachers/practitioners shape the production of the replacement behavior by reinforcing closer approximations of the replacement behavior until it more closely resembles the desired production.									
3. Teachers/practitioners change the replacement behavior if it appears that, even with opportunities for shaping, the learner is unable to produce it accurately.									
Step 11. Fading the Use of Prompts									
1. Teachers/practitioners slowly fade prompts using data and time delay.									
Step 12. Increasing Time Between the Replacement Behavior and Reinforcement									
1. Teachers/practitioners talk with team members to determine a reasonable amount of time for learners to wait between production of the replacement behavior and delivery of reinforcement.									
2. Teachers/practitioners slowly increase the length of time between the production of the replacement behavior and the delivery of reinforcement.									

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

	Observation	1	2	3	4	5	6	7	8
	Date								
	Observer's Initials								
Step 13. Monitoring Learner Progress		**Score****							
1. Teachers/practitioners collect progress monitoring data for individual learners to determine:									
a. learners' use of the replacement behavior in different settings, and									
b. the type and intensity of prompts needed by learners to use the replacement behavior correctly.									
2. Teachers/practitioners use progress monitoring data to determine next steps.									

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

Critical Functional Communication Skills Checklist©

Name:		Date:	

Skill	Example	Appro-priate?
1. Request reinforcers		
edibles		
toys		
activities		
2. Request help/assistance		
3. Request break		
4. Reject		
5. Affirm/Accept		
6. Respond to "Wait"		
7. Transition b/w activities		
8. Respond to directions		
Visual Directions		
Orient to name being signaled		
"Come here"		
"Stop"		
"Sit down"		
"Give it to me"		
"Go get…" (familiar item)		
"Go to…" (familiar location)		
"Put it back/down"		
"Let's go/ Come with me."		
ORAL DIRECTIONS		
Orient to name being shown		
"Come here"		
"Stop"		
"Sit down"		
"Give it to me"		
"Go get…" (familiar item)		
"Go to…" (familiar location)		
"Put it back/down"		
"Let's go/ Come with me."		
9. Follow visual schedule		

Useful Functional Communication Skills Checklist ©

Name:_____ Date_____

Skill	Example	Appro-priate?
Request 2 or more items at once		
Request with 1attribute		
Request with 2 or more attributes		
Request- given choice of 2 or more items		
Request items for specific/known routine		
Request work/job		
Request additional work materials		
Request information- where		
Request information- what		
Request information-who		
Request information--when		
Request-clarification of directions		
Request-permission		
“I don’t know”		
“Leave me alone”		
“Stop”		
Comment– on items		
Comment-on actions		
Comment with attribute		
Comment on immediate past		
Comment on remote past		
Comment on internal state		
Initiate eye contact		
Respond to query for eye contact		
Initiate greetings		
Respond to greetings		
Initiate conversation		
Maintain conversation		
End conversation		

FUNCTIONS OF COMMUNICATION

STUDENT_____Age/Grade_____Teacher_____Date_____

1. **Acquisition: Not demonstrated, skill has not been taught**
2. **Performance: Cues or prompts needed**
3. **Fluency: Demonstrated across multiple settings**

	1	2	3
Requesting: (wants/needs)			
Rejecting/Refusing: no, pushing away, stop, shake head			
Getting Attention			
Negotiating: skills to negotiate game, activity, (choice or elimination)			
Volume: (too loud or soft)			
Initiation			
Greetings			
Giving Information			
Seeking Information			
Commenting			
Responding to Conversation: appropriate responses, nodding head, umm			
Ending Conversation			
Topic Maintenance			
Topic Choice			
Ability to change topics			
Response to clarification requests			
Request for clarification			
Turn take for at least _____ turns @ age, _____turns @ age			
Sequencing: verbally sequence in logical manner to get message across			

Comments:

Communication Goal By _____ student will improve his ability to make requests for reinforcing items to improve functional communication and use 12/12 skills on the communication checklist.

Skill #	Date	Skill	Notes
1		Physically assisted exchange - Upon seeing and wanting a particular item in reach, pick up picture, reach to person holding the item and release the picture into that person's hand	
2		Independent exchange – Upon seeing and wanting a particular item in reach, pick up picture, reach to person holding the item and release the picture into that person's hand	
3		Independently request for 5 different reinforcers across 3 trainers and 3 activities.	
4		Remove picture from book independently across 5 different reinforcers and across 3 trainers	
5		Travel to communication partner – 3 different trainers	
6		Travel to book – up to 5 feet away	
7		Discriminate between high preferred and non-preferred item.- give correct picture on 80% of trials	
8		Discriminate two reinforcing items when told "go ahead take it" on 80% of trials.	
9		Discriminate 3 preferred	
10		Discriminate 4 preferred	
11		Discriminate 5 preferred	
12		Looks inside book to make request on 80% of trials.	

Name: Student School year: _____ GOAL: In 36 weeks, _____will spontaneously use functional communication in a variety of settings _____% of opportunities.

Date: Environment:	No response	Model imitation, hand over hand, role playing	Specific cue It is _____, touch, point, visual, hand out,	General Cue What do you say, want, etc.? point in general area	Spontaneous
Greet					
Answer questions					
Request assistance/attn.					
Request items appropriately					
Request break or time away approp					
TOTAL					

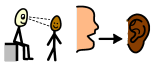
Comments:

Name: Student Year: _____ GOAL: In 36 weeks, _____ will use total communication (voice, sign, picture exchange, and /or voice output) to communicate target language functions so that he scores 19 of 28 for 2 activities.
Baseline: 5 of 28

Date: Activity:	No response--0	Model—1 imitation, hand over hand	Specific cue—2 It is __, touch, point, visual, Someone said ____	General Cue—3 What do you say, want, etc.? point in general area	Spontaneous—4
Greet					
Request break/ item/activity					
Request help					
Comment					
answer who					
answer what					
answer what doing?					

Comments:

Date: Arrived: Leave:

Time and Activity	 **I followed directions!**	 **I stayed where I was supposed to!**	 **I was friendly to others !**	 FCT – How many? Stop/Help	 Time Away How long?	 Time Out? How long?
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
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Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Work_____ Free Time Transition				Stop Help		
Totals Total Daily Compliance %	How Many ?	How many?	How Many ?	How many total?	How Many and How Long?	How Many and How Long?

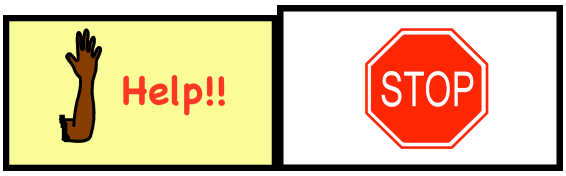
To Determine Compliance with each Criteria- Divide Total Possible Smiles for that criteria into Earned Smiles
To Determine Total Compliance for Day – Divide Total possible smiles for day into Earned Daily Smiles

Definitions:
Follow Directions – do what is asked with 1 or fewer verbal prompts within 10 seconds.
Stay Where I was Supposed To – remaining in learning area (learning area defined as within 1 foot of desk/table.
Friendly to Others – Hands and Feet to self
FCT (Functional Communication Training) – must be initiated by Mary to be recorded.

Target Behaviors:

- Verbal Aggression – (swearing, threatening others)
- Aggression – (throws objects, hits objects)
- Yelling at Peers and Adults
- Stomping Feet
- Elopement
- Work Refusal
- Teaching Replacement Behavior/Thinning Reinforcement Schedule

Replacement Behavior: Mary will ask for assistance by raising hand/presenting help card to gain adult attention and/or will ask to "stop" to escape demands with 1 or fewer incidents of problem behavior for 5 consecutive days.



Stage 1 – Use FCT (stop and/or help) independently with 1 or fewer incidents of problem behavior for 5 consecutive days.

- Help – gains **automatic/immediate assistance** (positive reinforcement)
- Stop – **automatic/immediate removal of demand** (negative reinforcement)

Stage 2 – Use FCT (stop and/or help) independently with 1 or fewer incidents of problem behavior for 5 consecutive days.

- Help – gains automatic/immediate assistance (positive reinforcement)
- Stop – ***removal of demand after 1 part*** of demand is completed (negative reinforcement)
    - Examples: one more problem, walk to door of place she doesn't want to go

Stage 3 – Use FCT (stop and/or help) independently with 1 or fewer incidents of problem behavior for 5 consecutive days.

- Help – ***gains immediate assistance after 30 sec.*** for raising hand/presentation of request (positive reinforcement)
- Stop – removal of demand after 1 part of demand is completed (negative reinforcement)
    - Examples: one more problem, walk to door of place she doesn't want to go

Stage 4 – Use FCT (stop and/or help) independently with 1 or fewer incidents of problem behavior for 5 consecutive days.

- Help – gains immediate assistance after 30 sec. for raising hand/presentation of request (positive reinforcement)
- Stop – ***removal of demand after 2 parts*** of demand is completed (negative reinforcement)
    - Examples: one more problem, walk to door of place she doesn't want to go

Stage 5 – Use FCT (stop and/or help) independently with 1 or fewer incidents of problem behavior for 5 consecutive days.

- Help – ***gains immediate assistance after 1 min.*** for raising hand/presentation of request (positive reinforcement)
- Stop – removal of demand after 2 parts of demand is completed (negative reinforcement)

Stage 6 – Use FCT (stop and/or help) independently with 1 or fewer incidents of problem behavior for 5 consecutive days.

- Help – gains immediate assistance after 1 min**.** for raising hand/presentation of request (positive reinforcement)
- Stop – ***removal of demand after 3 parts*** of demand is completed (negative reinforcement)
    - Examples: two more problems, 2 more sentences walk in door of place she doesn't want to go

Mary Singer – Functional Requests Date:

Schedule	Appropriate Behavior	Done- teacher requested	Done – Mary requested	Help – teacher requested	Help –Mary requested	Break – teacher requested	Break – Mary requested
Totals							

Appropriate Behavior - Non-Aggressive Behavior (Aggressive Behavior defined as: Throwing is defined as taking a work/leisure object and throwing, Hitting Others includes poking, slapping, pushing others, Hitting Self is defined as using hands/fists to hit self., Kicking is defined as using foot to kick object or person, Scratching is defined as sliding fingernails across another's skin, Elopement is defined as leaving the building

without permission. Non-examples include sitting on floor during work/play with permission, hitting leg as communication of "NO" or high five, kicking a soccer ball during activities, putting fingers in ears during a loud siren or bell.

Compliance Data Sheet Date:

	Antecedent ***(What was Student asked to do or doing?)***	***Complied***	***Aggression***	***FC***
1	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
2	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
3	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
4	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
5	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
6	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
7	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
8	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
9	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
10	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
11	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
12	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
13	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
14	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
15	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
16	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
17	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
18	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
19	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
20	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
21	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
22	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
23	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
24	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
25	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
26	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
27	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
28	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
29	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
30	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
31	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
32	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
33	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
34	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
35	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
36	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
37	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
38	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*

39	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*
40	**Work Play Break Transition Bathroom Lunch Snack Recess Other:**	*Y N*	*Y N*	*Y N*

Susie Sunshine

Teaching replacement skills

Asking for a break
At the beginning of each work session, Susie Sunshine will be reminded that she can have a break. Break must be offered to her prior to the beginning of the chain of behaviors (e.g. loud and low yelling, hitting table with elbow, fidgeting in chair). Staff should prompt her to take a break ("Susie Sunshine do you need a break?") when they observe her fidgeting in her chair, staring off in space, or making noises indicating that she is tired of the activity (e.g., repeatedly saying "oh no" in a loud tone).

Phase 1: Prior to giving Susie Sunshine a task, say "**Susie Sunshine, remember if you want to take a small break** just ask me for a **break."** (show visual reminder-break card) During an adult initiated or student initiated break, set the timer for 1 minute and provide no adult attention. She is allowed to select an activity to engage in that is in her break tub. After the end of 1 minute, the adult says, "**Do you need more break or are you ready to first sit in your chair and work, then _____(state highly preferred reinforcer)**?" Susie Sunshine may take as many break opportunities as she requests. It is important to remember that break is preferable to an escalated behavior. Susie Sunshine's most highly preferred activities will only be available to her after she is willing to work, not during break.

When Susie Sunshine is self-initiating a break consistently for **two consecutive school weeks with 85% or above daily appropriate behavior**, begin to teach a tolerance for delay.

Phase 2: The adult will initiate a wait time by saying, "Just a second Susie Sunshine, then you can take a break**."** The adult will count out loud to three. **Determine decision-making rule for moving to phase 3.**

Phase 3: The adult will initiate a wait time by saying, "Just a second Susie Sunshine, then you can take a break." The adult counts out loud to 3 and then asks Susie Sunshine to follow a simple and easy gross motor direction such as touching her head, touching her knees, or pointing to her belly. Then Susie Sunshine earns her break. **Determine decision-making rule for moving to phase 4.**

Phase 4: The adult will initiate a wait time by saying, "Just a second Susie Sunshine, then you can take a break." The adult counts out loud to 10 and then asks Susie Sunshine to follow a simple and easy gross motor direction such as touching her head, touching her knees, or pointing to her belly. Then Susie Sunshine earns her break. **Determine decision-making rule for adding more delay time.**

**** If Susie Sunshine has 4 consecutive days of below 80% appropriate behavior for the day, then go back to the previous phase.**

Observation Date and Time: _____ Observer: _____

Integrity Checklist/

Before School:	1. Schedule icons ready and in book. Each area is scheduled even if the area is used in a variety of ways. (play, locker, lunch, snack, bathroom, recess, bus, group table, music/work is the same area, etc.)	Not Observed	Yes	No
	2. Voice output device is charged, recorded, etc. for Student to request attention.	Not Observed	Yes	No
	3. Reinforcements are available in work area.	Not Observed	Yes	No
	4. Reinforcement choices are available at door for arrival (ie: bike, scooter, etc)	Not Observed	Yes	No
	5. Work is structured with specific number of items (tray with containers and materials velcroed for stability).	Not Observed	Yes	No
	6. Extra items/pieces are available (velcroed to front of desk/wall) if materials are thrown.	Not Observed	Yes	No
In classroom:	1. Each transition is considered a demand/work and followed by reinforcement. (I.E.: Let's walk. Do you want the bike or the scooter? Hang up your bag and then immediate R+ such as tickles/singing a song/jumping together)	Not Observed	Yes	No
	2. Student is asked to check/preview schedule for day at his work area. (Consider a half day schedule to preview)	Not Observed	Yes	No
	3. Work cycle will start with break, job 1, break, job 2, break, job 3, break and then check schedule - transition to play.	Not Observed	Yes	No
	4. Break is accompanied with positive adult attention. Break will last 30 - 60 seconds. (This time will also allow the adult to pull off next tray/job and give Student attention)	Not Observed	Yes	No
	5. Inappropriate behavior (non-compliance such as throwing items, self-injury, and aggression) is ignored and/or blocked. **NO** verbal attention, reprimands, or reminders are given.	Not Observed	Yes	No
	6. If Student throws items, when the item has been replaced on the Velcro, re-give instruction.	Not Observed	Yes	No
	7. During transitions, give Student positive adult attention. This may mean asking which toy he wants to play on, singing and touching him, etc. Bring voice output switch for Student to wear.	Not Observed	Yes	No
	8. Lunch will consist of same routine as work (break – food – break – food – break – food – break – play). Two complete eating cycles will occur, if needed.	Not Observed	Yes	No
Outside classroom:	1. Adult wears walkie-talkie for assistance in crisis.	Not Observed	Yes	No
	2. Play will be scheduled for 15 minutes.	Not Observed	Yes	No
	3. Give Student choices for play: large motor, computer, music, etc.	Not	Yes	No

		Observed		
	4. Play (FUN!!) for a short time and then stop and withdraw attention. Prompt Student to activate switch, give positive attention and then play for another 1 minute before repeating cycle.	Not Observed	Yes	No
End of Day	1. Summarize data/chart	Not Observed	Yes	No

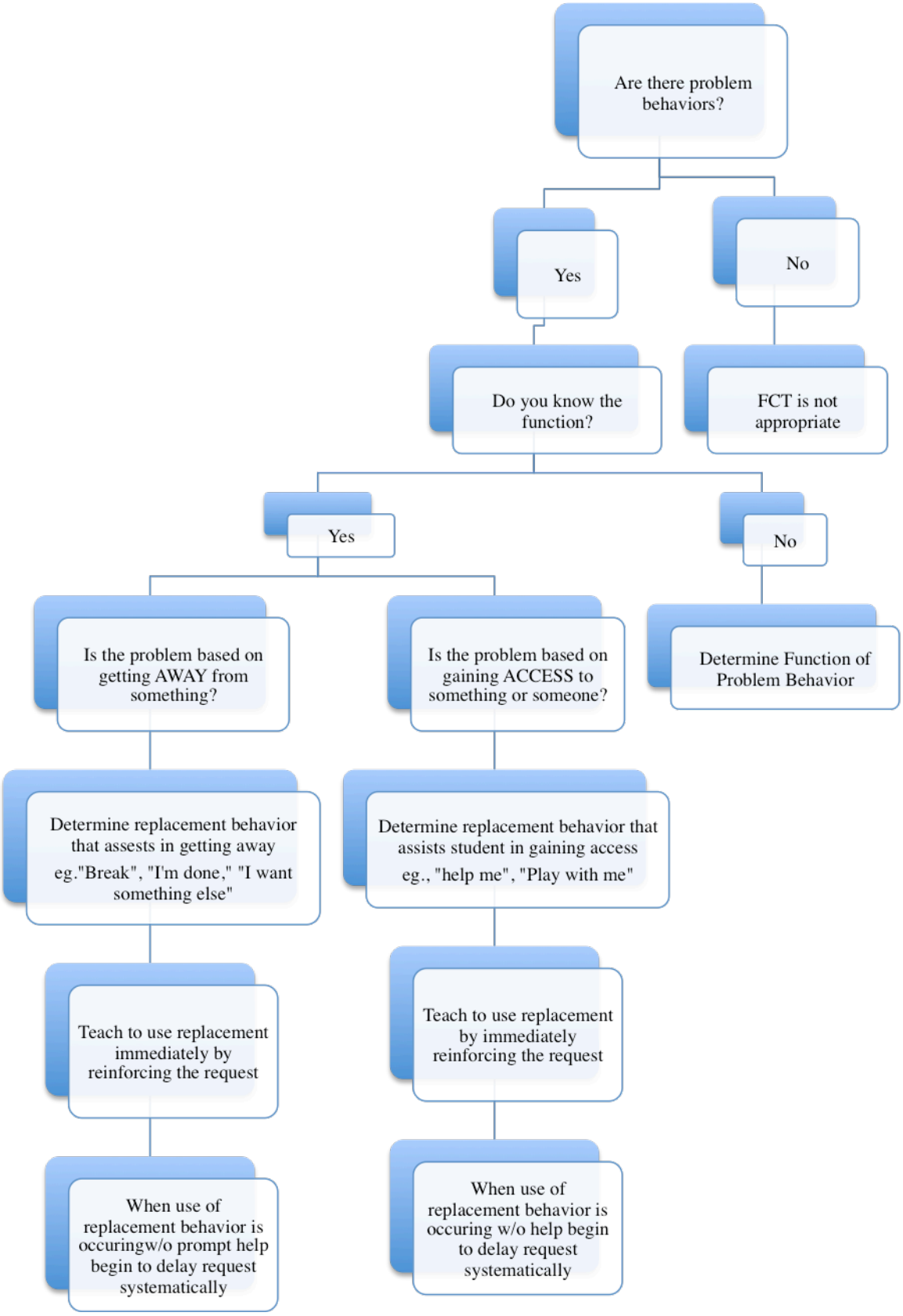
Observation Date and Time: _____ Observer: _____

Integrity Checklist

Before School:	1. Written schedule ready and on desk	Not Observed	Yes	No
	2. Break card available to Student at table/in pocket/on desk.	Not Observed	Yes	No
	3. Reinforcement card on desk.	Not Observed	Yes	No
	4. Adults have pokemon balls/extra break cue card/timer.	Not Observed	Yes	No
In Classroom:	1. Day is started with brief mini social skills lesson on how to access help, how to access break, red/green behaviors, comic strip, etc. Both positive and negative behaviors should be targeted weekly.	Not Observed	Yes	No
	2. Student is asked to check/preview morning/afternoon schedule and then move to appropriate area of classroom.	Not Observed	Yes	No
	3. Adult set timer for 6 minutes for consistency of reinforcement delivery. (Timer will not be set during outside recess and lunch period)	Not Observed	Yes	No
	4. When Student earns 5 tokens, reinforcement (earned) is delivered for 5 minutes.	Not Observed	Yes	No
	5. Student may request a break at any time. If the break request is appropriate (ie: sitting on floor or at desk, eyes to teacher, quiet, hand up) it is immediately honored.	Not Observed	Yes	No
	6. Student may request 2 breaks back to back. At that time he needs to follow a simple demand (ie: go sit at your desk and ask for a break – sit, quiet, raise hand) prior to accessing another set of breaks.	Not Observed	Yes	No
	7. If Student displays inappropriate behavior during break request (lying on floor, whining, etc) he is visually/physically/verbally cued towards appropriate behavior prior to honoring. He should display appropriate behavior at least 3 seconds	Not Observed	Yes	No

	prior to honoring break request.			
	8. Aggression is immediate timeout	Not Observed	Yes	No
Outside classroom:	1. Prior to leaving classroom, remind Student of appropriate behaviors of walking in halls (no hands on walls)	Not Observed	Yes	No
	2. Adult wears walkie-talkie for crisis.	Not Observed	Yes	No
Crisis:	1. Aggression = immediate timeout	Not Observed	Yes	No
	2. Physical assistance may be needed on way to special education room.	Not Observed	Yes	No
	3. Timeout will be 6 minutes long (minimum) with no verbal and as little visual attention as possible. Eye on him to check for safety.	Not Observed	Yes	No
	4. At end of timeout, Student will be required to put area back in order (ie: wipe mucous off walls) prior to mini social skills lesson.	Not Observed	Yes	No
	5. Teacher/associate may complete a comic strip conversation on wipe board prior to offering break/class.	Not Observed	Yes	No
	6. Timeout data kept	Not Observed	Yes	No
End of Day	1. Summarize TO data, copy and send home.	Not Observed	Yes	No

Functional Communication Training Flowchart



Evidence-Based Practice and Autism in the Schools: A Guide to Providing Appropriate Interventions to Students with Autism Spectrum Disorders
National Autism Center (2009) – www.nationalautismcenter.org

Established Treatments – An extensive review of treatment literature indicated that there was sufficient evidence to determine that these 11 treatments are effective.

1. **Antecedent Package:** Modifying the events that happen before the target behavior occurs. These modifications are intended to increase the likelihood the student will be successful and / or decrease the occurrence of problem behavior. Treatments that fit into this category include applied behavior analysis (ABA) and positive behavior supports. *Some examples include: behavioral momentum, prompting / prompt fading, environmental modification of task demands,* inter-*trial interval, seating, errorless learning, non-contingent reinforcement, and stimulus variation.*

2. **Behavioral Package:** The goal is to use behavior change principles to reduce problem behavior and to teach a more appropriate replacement behavior. Treatments that fit into this category ABA and positive behavior supports. *Some examples include: chaining, differential reinforcement strategies, discrete trial teaching, functional communication training, mand training, reinforcement, shaping, successive approximation, task analysis, and token economy.*

3. **Comprehensive Behavioral Treatment for Young Children:** This treatment reflects programs that include a combination of ABA procedures, which are delivered to children typically 8 years old or younger in a variety of locations (e.g., home, self-contained classroom, inclusive classroom, community). These programs usually involve a low student-to-teacher ratio (e.g., 1:1). *You may also hear these programs referred to as ABA programs.*

4. **Joint Attention Intervention:** This involves teaching a child to respond to the nonverbal social bids of others or to initiate joint attention interactions. *Examples include pointing to objects, showing items / activities to another person, and following eye gaze.*

5. **Modeling:** These interventions rely on an adult or peer providing a demonstration of the target behavior that should result in an imitation of the target behavior by the individual with ASD. Modeling can include simple and complex behaviors. This intervention is often combined with other strategies such as prompting and reinforcement. *Examples include live modeling and video modeling.*

6. **Naturalistic Teaching Strategies:** These interventions involve using primarily child-directed interactions to teach functional skills in the natural environment. These interventions often involve providing a stimulating environment, modeling how to play, encouraging conversation, providing choices and direct / natural reinforcers, and rewarding reasonable attempts. *Examples of this type of approach include but are not limited to focused stimulation, incidental teaching, milieu teaching, embedded teaching, and responsive education and prelinguistic milieu teaching.*

7. **Peer Training Package:** These interventions involve teaching children without disabilities strategies for facilitating play and social interactions with children on the autism spectrum. Peers may often include classmates or siblings. *Common names for intervention strategies include peer networks, circle of friends, buddy skills package, Integrated Play Groups, peer initiation training, and peer-mediated social interactions.*

8. **Pivotal Response Treatment:** This treatment is also referred to as PRT, Pivotal Response Teaching, and Pivotal Response Training. PRT focuses on targeting "pivotal" behavioral areas – such as motivation to engage in social communication, self-initiation, and self-management, and responsiveness to multiple cues, with the development of these areas having the goal of very widespread and fluently integrated collateral improvements. Key aspects of PRT intervention delivery also focus on parent involvement in the intervention delivery, and on intervention in the natural environment such as homes and schools with the goal of producing naturalized behavioral improvements. *This treatment is an expansion of Natural Language Paradigm, which is also included in this category.*

9. **Schedules:** These interventions involve the presentation of a task list that communicates a series of activities or steps required to complete a specific activity. Schedules are often supplemented by other interventions such as reinforcement. *Schedules can take several forms including written words, pictures or photographs, or work stations.*

10. **Self-management:** These interventions involve promoting independence by teaching individuals with ASD to regulate their behavior by recording the occurrence/non-occurrence of the target behavior, and securing reinforcement for doing so. Initial skills development may involve other strategies and may include the task of setting one's own goals. In addition, reinforcement is a component of this intervention with the individual with ASD independently seeking and / or delivering reinforcers. *Examples include the use of checklists (using checks, smiley/frowning faces), wrist counters, visual prompts, and tokens.*

11. **Story-based Intervention Package:** Treatments that involve a written description of the situations under which specific behaviors are expected to occur. Stories may be supplemented with additional components (e.g., prompting, reinforcement, discussion, etc.). *Social Stories are the most well-known story-based interventions and they seek to answer the "who," "what," "when," "where," and "why" in order to improve perspective-taking.*

Antecedent(s) (exactly what happened prior to the behavior)	**Behavior of Concern**	**Consequence(s)**	**Final Consequences**
☐ group instruction ☐ independent work ☐ given a request/instruction ☐ getting no attention ☐ ☐		☐ attention from peer ☐ attention from teacher ☐ didn't finish work ☐ left room ☐	☐ time out ☐ loss of recess ☐ sent to office ☐ ☐ ☐
☐ group instruction ☐ independent work ☐ given a request/instruction ☐ getting no attention ☐ ☐		☐ attention from peer ☐ attention from teacher ☐ didn't finish work ☐ left room ☐	☐ time out ☐ loss of recess ☐ sent to office ☐ ☐ ☐
☐ group instruction ☐ independent work ☐ given a request/instruction ☐ getting no attention ☐ ☐		☐ attention from peer ☐ attention from teacher ☐ didn't finish work ☐ left room ☐	☐ time out ☐ loss of recess ☐ sent to office ☐ ☐ ☐
☐ group instruction ☐ independent work ☐ given a request/instruction ☐ getting no attention ☐ ☐		☐ attention from peer ☐ attention from teacher ☐ didn't finish work ☐ left room ☐ ☐	☐ time out ☐ loss of recess ☐ sent to office ☐ ☐ ☐
☐ group instruction ☐ independent work ☐ given a request/instruction ☐ getting no attention ☐ ☐		☐ attention from peer ☐ attention from teacher ☐ didn't finish work ☐ left room ☐ ☐	☐ time out ☐ loss of recess ☐ sent to office ☐ ☐ ☐
☐ group instruction ☐ independent work ☐ given a request/instruction ☐ getting no attention ☐ ☐		☐ attention from peer ☐ attention from teacher ☐ didn't finish work ☐ left room ☐ ☐	☐ time out ☐ loss of recess ☐ sent to office ☐ ☐ ☐
☐ group instruction ☐ independent work ☐ given a request/instruction ☐ getting no attention ☐ ☐		☐ attention from peer ☐ attention from teacher ☐ didn't finish work ☐ left room ☐ ☐	☐ time out ☐ loss of recess ☐ sent to office ☐ ☐ ☐

A ⇨ B ⇨ C
Antecedent-Behavior-Consequence
Observation

Student: _____ Date: _____

Class: _____ Time: _____

Antecedents What occurred immediately before target behavior?	Behavior What did the problem behavior look like?	Consequences What occurred in the environment immediately after the target behavior?

Research Article – Activity 2

Preventing School Failure, 54(4), 238–246, 2010

ISSN: 1045-988X print
DOI: 1080/10459881003745195

Routledge
Taylor & Francis Group

Functional Communication Training in the Classroom: A Guide for Success

G. Richmond Mancil and Marty Boman

ABSTRACT: Researchers have consistently shown the effectiveness of functional communication training (FCT) to address both the communication and behavioral needs of children on the autism spectrum. The three steps of FCT include completing a functional behavior assessment, identifying a communication response, and developing a treatment plan. In addition, 10 support components aid in the successful implementation of FCT, which enhance the maintenance and generalization of learned skills. Although the authors introduced this approach in a therapeutic setting, the research has extended to natural environments including the home and school with considerable success. FCT consistently reduces challenging behavior and increases communication, therefore improving the quality of life for the child and parents.

KEYWORDS: *autism spectrum disorder, classroom training, functional communication training, functional behavior assessment, treatment plan*

AS BOYD AND SHAW OUTLINE in the present issue, the essential features of autism include a significant impairment in social interaction and communication and a highly restricted area of activities and interests (American Psychiatric Association, 2000). Concurrent with these features, children with autism may exhibit high levels of challenging behaviors such as screaming, hitting, and biting (Mancil, 2006), thus creating substantial obstacles for individuals charged with their education and well-being (Durand & Merges, 2001; Sigafoos, 2000). When children with autism engage in tantrum-related behaviors, parents and teachers often cannot determine the reason for the outburst because of the child's deficits in communication.

Researchers have responded to the aforementioned concerns by examining the relation between challenging behaviors and communication abilities (Bott, Farmer, & Rhode, 1997; Chung, Jenner, Chamberlain, & Corbett, 1995; Mancil, Conroy, & Haydon, 2009; Sigafoos, 2000). Chung et al. found an inverse relation between communication ability and the display of challenging behaviors such as self-injury and aggression. Similarly, Bott et al. discovered that individuals with more developed speech skills had a lower frequency of challenging behaviors than those with impaired speech. Further, Sigafoos hypothesized in a more recent study that impaired communication development causes challenging behaviors.

To address both communication and behavioral needs of children with autism, several researchers have used functional communication training (FCT; Carr & Durand, 1985; Mancil, Conroy, Alter, & Nakeo, 2006; Wacker et al., 1990). Developed in the mid-1980s, FCT involves assessing the function (i.e., outcome and consequence) of a behavior (e.g., attention, escape, tangible, sensory) through analogue assessment methodology, referred to as functional analysis, and then replacing the challenging behavior by teaching a communicative response that serves the same function (Durand & Carr, 1987).

Researchers have consistently shown the effectiveness of FCT with children on the autism spectrum. As researchers developed FCT, they provided interventions in clinical settings removed from natural environments (e.g., children's classrooms, homes), which is typical for the initial stages of procedural development (Mancil, 2006). When implementing the procedures during initial development stages, research teams produced positive behavioral and communication results across the age ranges of toddlers to adults. For example, Durand and Carr (1987) indicated an increase in communication and a decrease in challenging behaviors.

These positive results have been shown across behavioral topographies and language level. The behavioral categories FCT has helped ameliorate include aggression (e.g., hitting, hair pulling), self-injurious behavior (e.g., hand biting),

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property destruction, tantrums (e.g., yelling), body rocking, hand flapping, oppositional behavior (e.g., refusing to do work), and walking away (Mancil, 2006; O'Neill & Sweetland-Baker, 2001). Similarly, results have been shown across children with various language levels. Participants in several research studies have spoken in complete sentences; however, their sentences were not always functional (Mancil, 2006). For example, some of the complete sentences were echolalic (i.e., repeated phrase over and over), whereas others were bizarre (e.g., The cat flew on a broom.). Also, of the individuals who spoke in complete sentences, only one (10%) was reported to speak spontaneously. In addition, FCT has been successful with nonverbal children who did not communicate with signs or gestures.

In more recent years, researchers have shown the usefulness of FCT in natural environments such as the home and school (Dunlap, Ester, Langhans, & Fox, 2006; Mancil et al., 2006). Mancil et al. conducted a study in the home of a child with autism. In Mancil et al.'s study, the child's communication increased and challenging behavior dissipated. In addition, the communication skill generalized from the researcher to the mother over an extended time period. Similarly, Dunlap et al. conducted a study with mothers whose toddlers had serious challenging behaviors. This data showed that mothers used the procedures correctly, and interventions produced reductions in the children's challenging behaviors as well as increases in their use of communicative replacement skills. In another study, researchers showed the efficacy of using a voice output communication aid (VOCA) as the communication response for functional communication training (Olive, Lang, & Davis, 2008). Olive et al. showed that FCT with a VOCA successfully decreased the child's challenging behavior and increased VOCA use and the use of correct pronouns. Across these studies, the mothers implemented the intervention with high levels of fidelity.

FCT Description

FCT researchers and practitioners follow a similar three-step process, which has resulted in improved outcomes such as those previously described. First, they conduct an assessment of the function of a behavior (e.g., attention, escape, tangible, sensory) through a functional behavior assessment (FBA). Next, they identify a communicative response that matches the function. Last, a behavior that is specified in the intervention plan replaces the challenging behavior with a communicative response that serves the same function (see Figure 1).

Three FCT Steps

Step 1: FBA

To identify the function, researchers typically complete a functional assessment (FA) by manipulating consequences, such as escape from demands, obtaining attention, and obtaining preferred tangible items, contingent on the challenging behavior to conclusively determine the function of the behavior. However, many researchers agree that an FA is not feasible for a teacher to complete (for other ways to complete an FBA in general education settings, see Scott, Anderson, & Pauling, 2008). Thus, indirect assessments and direct observations may be used to hypothesize a behavioral function and be sufficient for teachers as long as data are collected on the intervention (Brady & Halle, 1997).

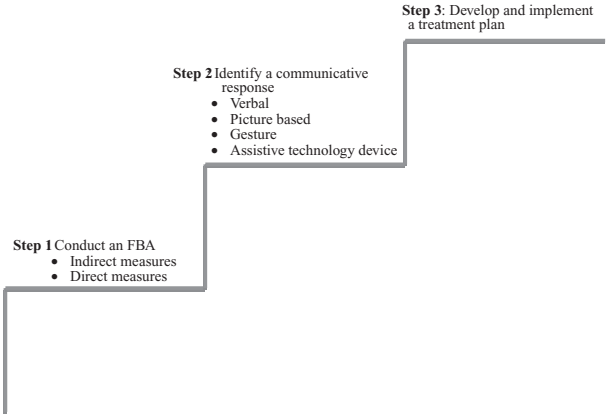

FIGURE 1. Functional communication training three-step process.

Indirect assessments. Indirect assessment instruments can be categorized into three formats: (a) checklists, (b) questionnaires, and (c) interviews. Checklists typically comprise items related to functions of challenging behavior that requires an adult (e.g., parent, teacher) who is familiar with the child's behavior to respond on a Likert-type scale. The parent or teacher must then score the instrument, leading to a hypothesis of the function of the challenging behavior. The Motivation Assessment Scale (MAS; Durand & Crimmons, 1996) is a checklist that teachers and other professionals commonly complete. Items on this 16-question checklist are rated on a seven-point Likert-type scale ranging from 0 (*never*) to 6 (*always*). Four questions related to each possible function (i.e., sensory, escape, attention, and tangible), which are randomly grouped. The points are totaled for each function and the one with the greatest number of points and highest relative ranking is the hypothesized function. Many questionnaires contain similar content, but usually consist of open-ended questions. For example, a question may be presented as "When does the child engage in the behavior?" Then, there may be some additional stipulated follow-up questions about the context in which the challenging behavior occurs (e.g.,

"Does the child engage in the behavior during an academic task or mostly during transitions?").

In contrast, interviews generally involve initial questions that are vague and set the occasion for the interviewer to probe for more detail and guide the process with specific follow-up questions. The interviewer may ask, "How often does the behavior occur?" If the respondent answers, "The child screams all morning." the interviewer may follow-up by asking, "Does he screams often or for extended periods?" The interview provides more room for a detailed assessment but also requires both additional time and skill level of the interviewer. After the interview is complete, the interviewer compiles the provided answers and hypothesizes a function.

Direct observations. Unlike indirect assessments that are designed to gain information from a third party (teacher, parent), direct observations comprise directly observing the behavioral and communicative behaviors of the children in various settings such as the clinic, classroom, or playground. For example, a researcher may observe a child and record what occurs before (antecedent) and after (consequence) the challenging behaviors. Both indirect assessments (checklists, questionnaires, interviews) and direct observations aid in developing a hypothesis of the behavior's function (i.e., the interview and direct observation may suggest that attention is the function because every time the challenging behavior was observed, the teacher or parent gives the child attention).

Step 2: Identifying a Communicative Response

After determining the behavioral function, the next step in the FCT process involves identifying a communicative response that matches the identified function of the challenging behavior (for a flowchart of Step 2, see Figure 2). This replacement communicative response may be in the form of one of the following categories: verbal language, picture communication, gestures, or assistive technology devices (Brady & Halle, 1997). The selection of this response is based on four criteria (Dunlap & Duda, 2005; Horner & Day, 1991). First, change agents (researchers, teachers, parents) should consider the child's capability of completing the response. For example, if the child lacks the verbal abilities to request a desired tangible item, the change agent may choose picture communication or a gestural response to teach the child to use in replacement of the challenging behavior. Second, change agents should consider the ease of teaching the response. If a child is nonverbal, it may be difficult and time consuming to teach a verbal response; thus, another response such as picture communication or gesture is more efficient. Third, change agents should consider whether others are able to understand and acknowledge the response. If no individuals in the child's life know sign language, the researcher should choose a response people could easily understand and acknowledge such as a picture or an assistive technology device. Last, change agents should further consider how efficient and effective the response serves its function in the community at large. For example, if other individuals in the child's environment (e.g., store) are unable to understand the response or the child has difficulty completing the communicative response, it may not necessarily serve the desired function.

Step 3: Development of Treatment Plan

After the functional communication response is selected, an intervention plan is designed to teach the targeted

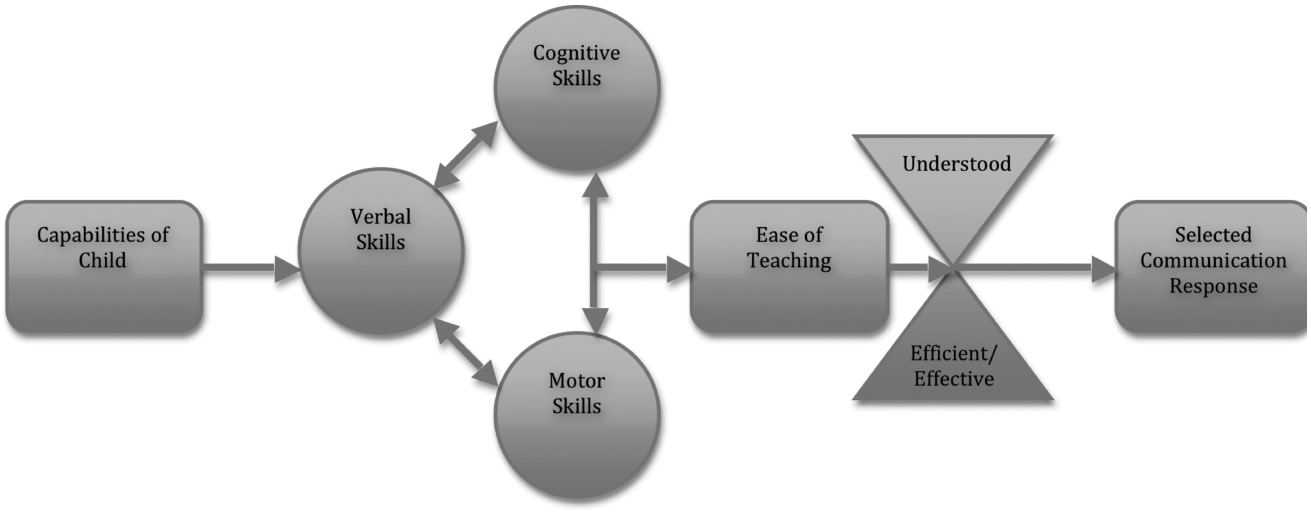

FIGURE 2. Functional communication training Step 2 flowchart.

response to the child (Lalli, Casey, & Kates, 1995). Typically, discrete trial procedures have been used to teach the child a communicative replacement response. Discrete trial procedures involve removing the target child from the natural routine and providing direct and repeated trials, therefore requiring the child to respond to the change agent's request with the trained communicative response until mastery criterion is met. In research literature, this criterion typically involves the child providing a correct response ten consecutive times. For example, a child may be taught to say "Help" or perform a gesture that represents the word help to replace screaming as the method for obtaining attention. For another child who is nonverbal, he may be taught to hand a picture of a desired item to the teacher to replace challenging behaviors, such as hitting someone, to gain the tangible item. The final component in FCT involves placing the challenging behavior on extinction (i.e., withholding reinforcement for the behavior) and prompting and reinforcing the child's use of the functional communicative response that replaces the challenging behavior (Lalli et al., 1995). If the target child engages in a tantrum to obtain a desired tangible item, the change agent ignores the tantrum, prompts the child to ask for the tangible item using the functional communicative response, and provides the child access to the tangible item following the appropriate communicative response.

Implementing the Treatment Plan

In addition to the preceding main steps, there are 10 components that should be addressed when implementing a treatment plan (for a top 10 checklist, see Figure 3).

Data-Collection Procedures

Collecting data helps guide decisions about the progress of FCT with the students. Types of data to collect include antecedents, prompts, and frequency of communication and challenging behavior (for an example, see Figure 4). This data helps the change agent to determine the effectiveness of the intervention. In addition, it allows change agents to monitor the prompting needed and when unprompted communication begins to occur.

Seizing the Environment

When capitalizing on the environment, there are two areas to consider: natural opportunities and arranging the environment.

Natural opportunities. During the school day, opportunities to teach communication skills abound (see, e.g., Figure 5). One period of particular interest is lunchtime because of the numerous communicative interactions naturally within the lunch routine. As the students progress through the lunch line, they choose a drink. Change agents may use this as an opportunity to teach students with autism to request milk or water. Similarly, change agents may use routines in the classroom to teach communication. During coloring activities, the students may ask for markers or other desired tangibles.

Arranging the environment. Addition to teaching communication responses during natural routines, change agents may arrange the classroom environment to encourage communication (for examples, see Figure 6). For example, a change agent may place a desired object on shelves in view of, but out of reach of, the child with autism, therefore creating a situation in which a child makes a request for an object. Further, change agents may consider the interests of a child in classroom activities and subsequently teach him or her to request objects that are interesting, thus enhancing communication.

Plan for Generalization

Generalization is particularly difficult for children with autism because they often remember tasks specific to the situation (Siegel, 1996). Grandin (1995) described her experience as a young child and her insistence on routine. When

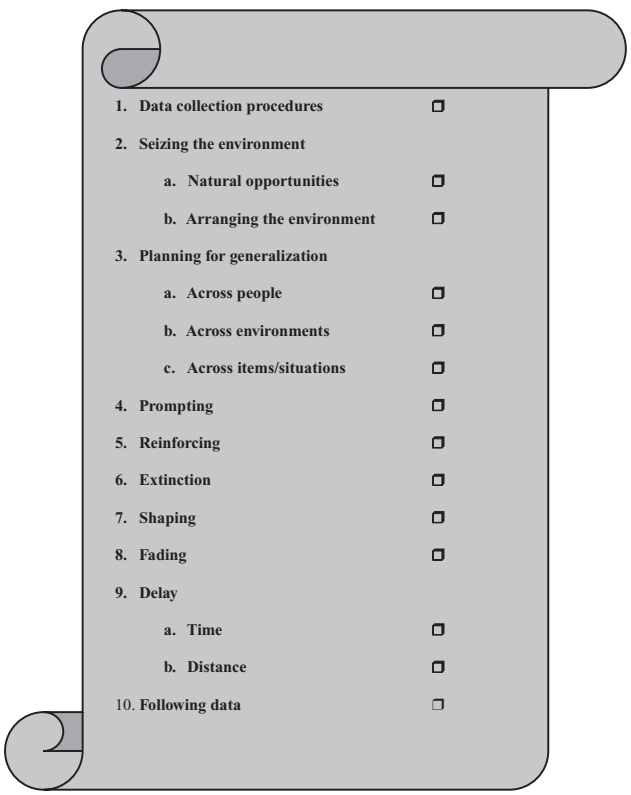

FIGURE 3. Functional communication training top-10 checklist.

a therapist taught her a task, she assumed the task applied to sessions with her therapist, thus, Grandin continued to engage in challenging behaviors in other settings. In addition, children with autism frequently develop communication that only one other person recognizes (Schuler, 1995). A mother of a child with autism, for example, described a scenario in which her son depended on her for a glass of water because she interpreted his grunting as a request (Maurice, 1993). When the child attended school, he screamed and hit himself when other individuals did not know he was thirsty. If researchers planned for generalization, children with autism likely would not exhibit such outbursts. Three key factors help promote generalization: teaching the individual to use the communication response across people, environments, and items or situations.

Across people. One of the greatest factors for increasing generalization is practicing across people. Particular attention should be applied to having the children use the communication response with peers as well as adults. When considering the peers, it is important to train them and other communicative partners to respond appropriately. If a child has been taught to say, "Leave me alone" rather than hitting a peer, the peers should be taught to move away. In addition, all communicative partners (assistants, teachers, parents, and peers) should be taught to provide the appropriate, natural reinforcer consistently. When the child asks for a drink, give the child a drink. However, after communication develops, it is imperative to teach the child there are times he or she will have to wait for the reinforcement or that it will not occur. For example, if all the lasagna

Communicative response (CR):					
Target behavior (TB):					
Date	**Location**	**Antecedent**	**CA or TB?**	**Prompts required**	**Notes**

FIGURE 4. Data collection.

Place	**Activity**	**Opportunity**
Lunch room	Lunch	Choosing a drink, choosing food items, asking for more
Center time	Art	Choosing markers or crayons, asking for more papers
Playground	Swinging	Requesting to be pushed
Classroom	Snack	Asking for a drink and cookie
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

FIGURE 5. Natural opportunities.

Place	Arrangement	Activity Connection
Classroom	Put favorite markers out of reach	Art
Living room	Put favorite movies out of reach	Watching movies
Bedroom	Toys out of reach	Play with favorite toy
Playground	Put balls out of reach	Bouncing on the "hippity-hop"
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

FIGURE 6. Arranging the environment.

has been eaten at dinnertime, the child could not possibly receive more lasagna.

Across environments. Programming across environments increases the chance of generalization. Various environments included different areas in the school, job sites, before- and after-school care facilities, and the home. Furthermore, environments that encourage choice-making result in improved FCT outcomes (Durand & Merges, 2001). If a child has to choose an activity or item often in an environment, his or her opportunities to respond increases greatly, and he or she will learn the skills more quickly. Also, home programs have proven effective at increasing generalization of skills (Mancil, Conroy, Alter, & Nakao, 2006). One example of programming across environments involves having the child request a drink for meal times in the school cafeteria, in the home, and in the restaurant.

Across items or situations. When teaching communication responses, change agents should train the students to use the responses across items and situations. A change agent should instruct students to request bubbles, Legos, and cars, rather than only practicing a request for Legos. If the student is to ask for a break from an activity, this response should be practiced across settings, such as mathematics time, group play, or other situations.

Prompting

Prompts vary depending on the functioning level of the individual. The change agent should use the least intrusive prompt necessary. One student may only need an explanation and example, such as a middle school student with high-functioning autism who whistles to get attention. A change agent may explain to the student that he or she will be given a card with the words, "I need a break" to use when he or she wants a break. This student may only require a verbal prompt a couple of times. In contrast, a child with lower skills, who bites to escape task demands, may require physical prompts (i.e., hand over hand assistance) to give the card to the teacher (for examples of each type of prompt, see Table 1). Prompts should be faded as soon as possible in order for the student to become independent and included into everyday activities.

Reinforcing

As previously mentioned, it is important to respond consistently and quickly to the communication response; otherwise, the child may not associate the communication (i.e., behavior) with receiving the requested item (i.e., consequence). That is, the child should receive the reinforcer immediately and every time when he or she asks. However, also recall that waiting should be taught after communication is firmly established, which can be observed in the data

collection. The waiting can be accomplished through time and distance delays (see Component 8).

Extinction

Related to reinforcement of the desired communication response is the concept of extinction. When implementing an FCT program, the change agent should place the challenging behavior on extinction. That is, the behavior should be ignored while the communication response is reinforced. However, there are times that this may not be possible as care should be taken not to be too intrusive (Durand and Merges, 2001). For example, if a child begins hitting himself or others, response blocking (block the hitting) may need to occur as the teacher prompts the child to use the communication response instead.

Shaping

Communication often needs to be shaped in children with autism. For example, a child may be taught to request, "I want a snack." However, he or she may only be able to say, "snack." In this case, the shortened response should be allowed. As the FCT progresses, more complete approximations to the desired response should be required. Another point to consider is choosing the correct communication response. If the child is not able to perform the desired communication response even with shaping, it may be appropriate to choose a different communication response. For example, a student may be taught to produce the sign for the bathroom, but his motor skills do not allow him or her to perform the act. In this case, it may be an appropriate time to teach a communication response such as picture exchange.

Fading

When the change agent uses prompts, they should be faded and replaced with less intrusive prompts and phased out completely over time. Although a student may need a physical prompt to give a picture card, the physical prompt later should be replaced with a verbal or gestural prompt. Two ways to accomplish fading is through pairing and time delay. Pairing involves the combination of two of the prompt types. For example, if a child requires physical prompts, these may be paired with a verbal prompt before completely removing the physical prompts. Time delay also helps in fading prompts. When you move to a less intrusive prompt, provide a wait time before giving the prompt. Wait long enough for the child to provide the communication response before intervening with a more intrusive prompt (for FCT fading procedures, see Figure 7).

Delay

Two delay types help ensure the communication response learned continues to be used.

Time. As previously mentioned, it is not realistic for reinforcement to always be given immediately upon the request. Thus, it is important to slowly increase the time between the request and delivery of the reinforcer. For example, a child may be taught to ask for a break from work. At first, this may be given immediately. Over time, the change agent may lengthen the time before receiving the break from 5 s or eventually several minutes. There is no precise formula for determining the time delay. Change agent experience and child developmental levels should guide this decision.

Distance. Using distance between the child who is requesting and the change agent is another effective method that requires students to increase their ability to deal with delayed gratification (Mancil, 2009). When initially teaching a child to request an item, it is essential to be in close proximity so that prompts may be applied and reinforcement occur consistently and quickly. However, as the child gains consistent use of the communication response, the change agent may increase the distance between them. The change agent may move across the room, and the child may

TABLE 1. Prompt Examples

Prompt	Example	Nonexample
Verbal	The teacher says, "tell me what you want."	The teacher points to an object and then holds her hand out.
Gestural	The parent holds her hand out with palm up in anticipation of receiving the card. The parent holds her hand out and points to the object.	The parent says, "What do you want?" The teacher touches the student's hand.
Physical	The parent grasps the child's hand and assists in picking up the card.	The teacher holds her hand out for the picture card. The parent says, "Give me the card."

Note. Prompts are listed from least-to-most intrusive.

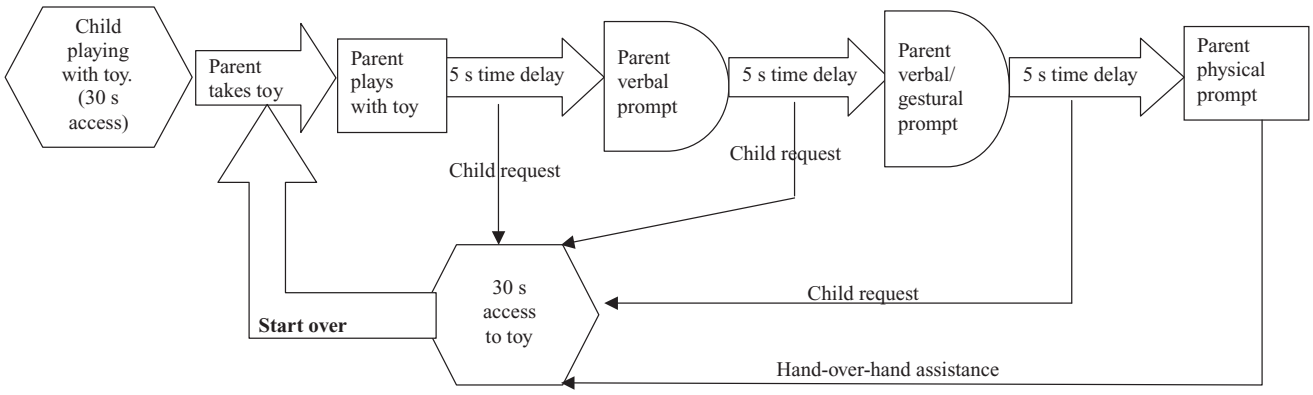

FIGURE 7. Functional communication training fading procedures (using system of least prompts).

be required to walk to the change agent to make a request. Then, the change agent may move out of sight so the child is required to search for the change agent when requesting an item.

Following Data

FCT has been successful when the child uses the communication request consistently without prompt or engaging in challenging behaviors. If these factors have not been met, then the change agent should look at the data and procedures to identify what may need to change. It may be helpful to ask the following questions:

- Is the correct behavioral function identified?
- Is the communication response efficient, appropriate, and recognizable?
- Was teaching applied across people, environments, and item or situations?
- Was reinforcement applied consistently and quickly?
- Was the challenging behavior placed on extinction? That is, was it less efficient for the child to engage in the challenging behavior than to use the communication response?
- Did I ignore, or otherwise make less efficient, the target behavior?

Conclusion

A significant impairment in communication is one of the defining characteristics of autism, subsequently causing problems with behavior. FCT is one approach researchers employed to address the communication and behavioral needs of children with autism. Spanning the past 23 years, research teams have slowly moved from the clinical setting to natural environments in an attempt to have the children associate the components of FCT with teachers, parents, classrooms, and home (i.e., generalization). Further, natural environments pose sensory issues (e.g., background noises, various lighting, other visual stimuli) for children with autism to overcome that is not present in clinical settings. Over these last 2 decades, researchers have refined the required steps and FCT strategies, resulting in increased communication, decreased challenging behaviors, and improved maintenance and generalization of learned skills.

AUTHOR NOTES

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