

Chapter 25

Functional Communication Training



Topics Covered Within This Chapter

Topics
Introduction
Selecting a Functional Communication Response (FCR)
Teaching and Reinforcing the FCR
Response to Challenging Behavior

Functional communication training (FCT) is a robust intervention to reduce challenging behavior. Following a functional behavior assessment (FBA), FCT involves teaching the client a socially appropriate communication response that replaces the challenging behavior (Carr & Durand, 1985; Gerow et al., 2018; Tiger et al., 2008). Effectively, FCT is a differential reinforcement of alternative behavior (DRA) procedure in which the alternative response is a socially appropriate, generally recognizable communication response (see Chap. 24). During FCT, the clinician prompts the selected communication response and reinforces it with the same consequence maintaining challenging behavior. Typically, challenging behavior is placed on extinction, but other consequences, such as punishment, may be used (Gerow et al., 2018; Tiger et al., 2008).

There are four steps to implementing FCT: (a) conduct an FBA, (b) select the functional communication response (FCR), (c) teach and reinforce the FCR, and (d) respond to challenging behavior. The first step is to conduct an FBA. The efficacy of FCT hinges on teaching a mand that serves the same function as the challenging behavior; therefore, an FBA is a critical component.

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Selecting an FCR

The second step of implementing FCT is selecting a mand, referred to as the FCR. While FCT has been demonstrated to be effective across a number of mand topographies (Gerow et al., 2018), there are several considerations to be made when selecting the FCR. First, the FCR should be one that would be recognized and reinforced by the general community. For example, the vocalization “drink, please” is likely to be followed by the delivery of a drink, even by people unfamiliar with the client’s FCT program. On the contrary, an arbitrary behavior, such as the manual sign for the letter *d*, would be unlikely to have any meaning to communication partners outside of those with knowledge of the FCT program. In order for the newly acquired FCR to persist in the naturally setting, it must be reinforced. For it to be reinforced, it has to be generally recognized in all the context(s) in which it will be used (Durand, 1999).

Not only should the FCR be recognizable, it should also require low response effort, particularly relative to the challenging behavior (Horner & Day, 1991; Richman et al., 2001). However, FCRs that require increasingly higher response effort may be introduced after initial successful FCT. For example, the use of mand frames, such as the vocalization “I want the [item],” require more response effort than the item name alone, but promote generalization (Hernandez et al., 2007). Therefore, FCRs may be a low response effort initially, but can eventually be shaped to better suit the needs of the client.

Similarly, the FCR should be within the client’s general repertoire. For example, if the client has little history of emitting vocal verbal behavior, it would be unwise to select a vocal mand to serve as the FCR. While the specific mand (e.g., “drink, please”) may or may not be in the client’s repertoire, at the very least the clinician should have reason to believe the selected FCR will be acquired quickly, based on the client’s current communication repertoire. For example, if the client has a history of emitting two-word vocal mands, then it is reasonable to believe the client can quickly acquire the skill of saying “drink, please,” but it is unreasonable to expect the client to quickly acquire the vocalization “I am thirsty and would like a drink.” Selecting a response that already exists within the client’s repertoire will increase the rate of acquisition. On the other hand, the use of an existing, rather than a novel response, may result an increase in challenging behavior, so clinicians should be careful to watch for this possibility (Derby et al., 1998; Winborn et al., 2002).

A mand topography assessment is useful in identifying mands that meet many of the aforementioned criteria (Ringdahl et al., 2009). To conduct a mand topography assessment, the clinician would identify various mands topographies that could serve as the FCR, typically across a range of modalities (e.g., vocal, card touch, manual sign, speech generating device). During each trial, the clinician manipulates the establishing operation in a way similar to the functional analysis condition associated with the maintaining consequences (e.g., preferred item in sight, but out of reach for FCT to treat tangibly maintained challenging behavior). The clinician then implements least-to-most prompting, recording which prompt evoked the mand.

Regardless of prompt level, the functional reinforcer is delivered and the trials are repeated several times per mand topography. The mand topography which required the least intrusive prompts is considered to be the one with which the client is most proficient, and it is selected to be taught within FCT.

Teaching and Reinforcing the FCR

The third step in implementing FCT is teaching and reinforcing the mand. Sessions begin with manipulating the establishing operations in a similar fashion as manipulated in the functional analysis condition associated with the maintaining consequence. For example, if challenging behavior is maintained by escape from academic tasks, the clinician instructs the client to complete an academic task. However, rather than delivering the putative reinforcer contingent upon challenging behavior, the clinician prompts the selected FCR. The use of a most-to-least or progressive time delay procedure are ideal because they deliver immediate prompts, reducing the likelihood of challenging behavior occurring prior to the controlling prompt being delivered, as could be the case with least-to-most prompting (Fisher et al., 1993; Tiger et al., 2008).

During initial FCT sessions, the FCR should be reinforced on a dense schedule of reinforcement, typically a fixed-ratio 1. After challenging behavior has been reduced, it is often desirable to thin the schedule of reinforcement as a dense schedule of reinforcement is likely impractical in natural settings. For example, a teacher responsible for ten students cannot practically respond to every bid for attention from a single student. In some cases, the dense schedule of reinforcement is counterproductive to other goals. For example, if a young adolescent who recently acquired a socially appropriate mand to access video games is given access to video games upon each request, it would be at the expense of participating in other activities that would build social or academic skills. To address the limitations associated with the FCR contacting a dense schedule of reinforcement, clinicians should implement schedule thinning after challenging behavior is being emitted at low levels and independent FCRs are being emitted at high levels. For a full review of schedule thinning techniques, see Hagopian et al. (2011).

Responding to Challenging Behavior

If challenging behavior occurs, it is common to place it on extinction. However, the current literature base contains many successful FCT applications in which challenging behavior continues to contact reinforcement (e.g., Davis et al., 2018; Peck et al., 1996) or contact punishment (e.g., Fisher et al., 1993; Hagopian et al., 1998). If implementing FCT in which the challenging behavior continues to contact reinforcement, the clinician should differentiate reinforcement for the FCR and the

challenging behavior so that the FCR contacts a much higher quality of reinforcement relative to the challenging behavior. It may sound counterintuitive to continue reinforcing challenging behavior during FCT; however, there may be cases in which withholding the reinforcer is logistically difficult or impossible. For example, if peer-delivered attention maintains a challenging behavior, it is unlikely that peers will implement extinction, or even have a desire to do so. In some cases, it may be dangerous to withhold reinforcement. For example, if challenging is maintained by escape from work tasks, extinction would likely involve physically guiding the client to complete the task in order to prevent a period of escape from the task. If the target challenging behavior is severe aggression, it would be dangerous for the implementer to implement escape extinction.

There are notable drawbacks associated with the use of punishment (see Chap. 26 for a lengthier discussion of drawbacks). Therefore, the consideration to implement punishment within FCT should not be taken lightly. Evidence suggests that, in some cases, punishment may be necessary to reach socially valid levels of challenging behavior reduction with FCT (e.g., Hagopian et al., 1998). It appears that in most cases, extinction is sufficient in decreasing levels of challenging behavior; therefore, it is best practice to first implement FCT with extinction only. If FCT with extinction proves to be ineffective, then the use of punishment may be considered.

Another consideration is whether or not to prompt the FCR after the client engages in challenging behavior. In some applications of FCT, the clinician prompts for the FCR immediately after the client engages in challenging behavior, but in others, the prompt is delayed by a few seconds. The concern with an immediate prompt is that it could strengthen the chain of establishing operation → challenging behavior → prompt → FCR. Landa et al. (2022) systematically evaluated the impact of an immediate or delayed prompt following challenging behavior, finding that for two participants, an immediate prompt had no adverse effects on challenging behavior. For one participant, a delay between challenging behavior and a prompt for the FCR was necessary for FCR acquisition. For another participant, the delay resulted in increased challenging behavior. More work is needed to determine situations in which an immediate or delayed prompt is indicated; however, your supervisees should be aware of the possible effects of immediate and delayed prompts after challenging and be prepared to evaluate the effect of different approaches if needed to reach optimal FCT outcomes.

Group Supervision Meeting

Below is a plan for activities to incorporate into a 1-hour meeting with a small group of supervisees.

Group Supervision Meeting Agenda

Time	Activity
0:00–15:00	Introduction to FCT
15:00–40:00	Article Presentations
40:00–55:00	Mand Topography Assessments
55:00–60:00	Knowledge Check



Materials Needed



- Appendix A: *Selecting a Recognizable Mand*, 1 copy per supervisee or presented via PowerPoint
- Appendix B: *Selecting a Mand that Requires Low Response Effort*, 1 copy per supervisee or presented via PowerPoint
- Appendix C: *Teaching and Reinforcing the FCR*, 1 copy per supervisee or presented via PowerPoint
- Appendix D: *Mand Topography Assessment: Instructions and Data Sheet*, 1 copy per supervisee
- Appendix E: *Mand Topography Assessment: Sample Data Sheets*, 1 copy per supervisee
- Each supervisee needs access to a computer with graphing capabilities, preferably Microsoft Excel
- Supervisor needs access to a computer to demonstrate graphing

Reading Assignments

At least 1 week prior to the group supervision meeting, assign your supervisees to read about the subject. Below is a list of recommended assigned readings.

- Falcomata and Wacker (2013)
- Gerow et al. (2018)
- Ringdahl et al. (2009)

In addition to these readings, assign each supervisee an article for which they will be responsible for summarizing in the group supervision meeting. Encourage all supervisees to read all the remaining articles as well.

There are five articles for supervisees to present. If you have more than five supervisees in your group supervision meeting, pair them to work together on the summary presentation. If you have fewer than five supervisees, you can present the remaining article summaries. Presentations will be 5 minutes each and should

consist of (a) 1-minute summary of the introduction, (b) 1-minute summary of the methods, (c) 1-minute summary of the results, and (d) 2-minute presentation of the discussion, including implications for practice. Encourage supervisees to glean their own implications for practice in addition to those that the article authors may have discussed.

- Landa et al. (2022): Response to challenging behavior
- Richman et al. (2001): Mand response effort
- Ringdahl et al. (2016): Mand preference
- Winborn et al. (2002): Novel versus existing mands
- Matter and Zarcone (2017): Novel versus existing mands

Introduction to FCT

FCT is one of the most prevalent interventions used to reduce challenging behavior; therefore, most of your supervisees will have some familiarity with the procedure. As a result, open the meeting by asking a supervisee to volunteer to describe the defining features of FCT. After confirming that all defining features have been described, ask your supervisees to share their experience with FCT. Provide ample time to allow each supervisee to share. Remind supervisees that the general framework of FCT is identical to DRA. Furthermore, because they just completed field experience activities related to DRA (Chap. 24), this meeting will focus more on considerations and variations specific to FCT rather than the basic FCT framework.

Introduce the four steps of FCT: (a) conduct an FBA, (b) select the FCR, (c) teach and reinforce the FCR, and (d) respond to challenging behavior. In regards to Step 1, ask your supervisees why conducting an FBA is the first step. If they need a little more guidance, follow this by asking them what are the possible outcomes of implementing FCT without FBA results?

Selecting the FCR

Transition the conversation to the discussion of FCR selection by pointing out that FCT has been effective with many mand topographies. Encourage your supervisees to share the FCR selected among FCT programs with which they have experience implementing. Inform your supervisees that FCRs should meet the following criteria: (a) recognized by the general community, (b) require low response effort, and (c) be within the client's general repertoire. Ask your supervisees to explain the first criteria. What does it mean to be recognized by the general community? Next, distribute one copy of *Selecting a Recognized Mand* (Appendix A) to your supervisees. This information is also contained in the PowerPoint slides. Read the first scenario aloud for your supervisees and invite them to volunteer at least two mand topographies that would likely be recognized by the general community and two that would

not. Complete as many scenarios as a group that is necessary to confirm that your supervisees understand the task and then ask them to work in pairs to complete any remaining scenarios. When completed, ask them to briefly share their responses to each scenario as a group.

Next, discuss the consideration of response effort. Again, ask your supervisees to explain this criterion and ask them to give examples and nonexamples of FCR that are low response effort. Distribute *Selecting a Mand That Requires Low Response Effort* (Appendix B), or present via the PowerPoint slides. Similar to the last activity, read the first scenario aloud and guide your supervisees in selecting a mand topography that is low response effort and one that is high response effort. Complete as many scenarios in the large group as necessary and then assign them to work in pairs to complete the activity. Return to the large group and share responses to the scenarios. Before transitioning to the final criterion, briefly discuss the importance of eventually shaping mands that may require a higher response effort, but have improved recognizability. This would be an ideal time to discuss the concept of framed mands and how they may be best used within FCT.

Discuss the final criterion for the mand: to be within the client's general repertoire. Again, ask supervisees to explain this criterion and then provide examples using scenarios from the previous activity they just completed. For example, "In your examples, Rashid communicated with a speech-generating device that has a static display of four icons. We would not teach Rashid a one-word vocalization within FCT because one-word vocalizations are not in his repertoire. On the contrary, we may place a photograph of his mom and dad with the accompanying speech output, 'look here!' as one of the four icons on his device." Invite supervisees to provide a similar explanation for Marcella and Stella.

To close the discussion about selecting a mand to serve as an FCR, introduce the concept of a mand topography assessment. Your supervisees read Ringdahl et al. (2009) to prepare for this meeting; therefore, ask supervisees to describe how the mand topography assessment was conducted in this study. As always, praise correct descriptions, correct inaccuracies, and add any additional information they may have omitted. Later in this meeting, they will complete a mand topography assessment activity to get additional experience on this topic.

Teaching and Reinforcing the FCR

Begin by describing the basic framework of FCT: establishing operation → prompt → FCR → reinforce with the consequence maintaining challenging behavior on a dense schedule of reinforcement. First, ask your supervisee what it means to manipulate the establishing operation and to describe how they would determine how to do this. If they have difficulty with this, it may be helpful to ask them how establishing operations were manipulated within each condition of a functional analysis. Second, explain why most-to-least prompting or progressive time delay is recommended over a least-to-most prompting procedure. Next, explain why reinforcing the FCR on a FR1 schedule is generally recommended for initial FCT. Finally, briefly discuss the benefits of schedule thinning.

Distribute one copy of *Teaching and Reinforcing the FCR* ([Appendix C](#)) to each supervisee. This information is also available on the PowerPoint slides. Demonstrate for your supervisees how to complete the table for scenario one, Rashid. You may wish to complete the remaining four scenarios as a group if your supervisees need more support, or you may wish to have them complete the remaining scenarios in pairs and then discuss their decisions as a large group.

Responding to Challenging Behavior

Explain that, despite the efficacy of FCT, challenging behavior is likely to occur during some sessions, particularly initial sessions. Most applications of FCR use extinction for challenging behavior, but in some cases, it may be wise for the challenging behavior to contact reinforcement or punishment. Ask your supervisees to give examples of when reinforcement may be indicated. If necessary, add your own examples. Follow this by soliciting examples of when punishment may be indicated and also add your own examples if necessary. Be sure to recognize the many drawbacks of punishment in your discussion.

Supervisee Article Presentations

Your supervisees should have taken time to prepare for the presentation prior to this meeting. However, you may need to allot a few minutes to make final preparations for their presentations. It is important that each presentation stays within the 5 minutes allotted. Use a watch or timer to facilitate timeliness. We recommend sitting behind all your supervisees during the presentations so that you can signal to the presenter(s) without distracting the audience. A good approach is to use signal cards or paper, such as a yellow card that indicates there are 2 minutes remaining and a red card that indicates that there are 30 seconds remaining. At the end of each presentation, provide praise and correct errors as needed. Be sure that each presentation includes all information you deem relevant to your supervisees' work. If any relevant information was omitted during the presentation, share that information with the group.

Mand Topography Assessments

Distribute one copy of the *Mand Topography Assessment: Instructions and Data Sheet* ([Appendix D](#)) to each supervisee. Describe how to use this form and solicit questions. Next, distribute one copy of *Mand Topography Assessment: Sample Data Sheets* ([Appendix E](#)). Demonstrate how to graph the first data set. An Excel template is available to use. Ask your supervisees to independently graph the remaining

two data sets. Once they complete their graphs, check their work to ensure the graph is both an accurate representation of the data and contains all the necessary graph components (see Chap. 6 for a complete list). Close this activity by asking your supervisees to select the appropriate mand for C.J., Reece, and Eli, using the data they have available. Do point out that in reality, they will use more than the mand assessment results to determine the best FCR, such as caregiver input and client preference.

Inform your supervisees that they will be identifying a client for whom FCT is indicated. They will conduct a mand topography assessment prior to their individual supervision meeting without a client. Allow them to ask questions and gain any clarification before closing this meeting so that they are prepared to conduct this assessment.



Knowledge Check

1. Is FCT a type of DRA, DRO, DRL, or none of the above?
2. What are the four steps to FCT?
3. What are three qualities to be considered when selecting a mand to serve as the FCR?
4. Why is most-to-least prompting recommended over least-to-most prompting for teaching the FCR?
5. What is one reason to continue reinforcing a challenging behavior during FCT?



Homework for Individual Supervision without a Client

1. Identify a client for whom a behavior reduction program is indicated.
2. Retrieve and review this client's FBA. At least 48 hours prior to your supervision meeting, share the FBA results with your supervisor.
3. Conduct a mand topography assessment with the client and graph the results. At least 48 hours prior to your meeting, share the data sheet and graphed data with your supervisor.

Individual Supervision Meeting Without a Client

Below is a plan for activities to incorporate into a 55-minute meeting with an individual supervisee.

Individual Supervision Meeting Without a Client Agenda

Time	Activity
0:00–15:00	Review FBA Results, Review Mand Topography Assessment Results & Select a Mand
15:00–40:00	Develop FCT Procedural Fidelity Checklist
40:00–55:00	Role-Play



Materials Needed



- FBA Report for Client (send to supervisor 48 hours prior to meeting).
- Mand Topography Assessment Results (send to supervisor 48 hours prior to meeting)
- Appendix F: *FCT Planning Guide*, 1 copy
- Appendix G: *FCT Procedural Fidelity Checklist Template*, electronic copy
- Appendix H: *FCT Role Play Data Collection*, 2 copies
- Computer in order to edit the *FCT Procedural Fidelity Checklist Template*
- Materials Necessary to Role-Play FCT

Review Mand Topography

During the first 15 minutes of your meeting, review the functional analysis and mand topography assessment results. You should have received these prior to the meeting. Use that time to note what could be praised and should be corrected in regard to the mand topography assessment. The next portion of the field experience cannot be conducted without the FBA results or a properly selected mand topography. If you determine one or both of these items are insufficient, reschedule this meeting until you have the necessary tools to proceed.

First, review the FBA results. Ask your supervisee to identify the function of challenging behavior. Discuss any relevant information that may have been gathered from this report. Next, review the mand assessment results. Collaboratively, use these results to determine an appropriate mand topography to serve as the FCR. In addition to the mand assessment results, discuss if the mand topography would be recognized (and reinforced) by the general community in which the client lives and if the mand topography requires lower response effort than other topographies being considered as well as lower response effort than the challenging behavior topography. Once all considerations have been made, select the mand topography.

Develop FCT Procedural Fidelity Checklist

Now that all data have been collected and reviewed, you will guide your supervisee through developing an FCT protocol for their client. Together, walk through the *FCT Planning Guide* (Appendix F). Encourage your supervisee to complete the guide independently, but offer support, praise accurate use, and correct errors as necessary. Once the planning process is complete, use the *FCT Procedural Checklist Template* (Appendix G) to develop the specific steps of FCT for this client. The template provides suggestions for steps to include (e.g., how to manipulate the establishing operation and prompt the FCR); however, this is a template that needs to be edited to meet the needs of your supervisee and client. Feel free to edit, omit, and add to the steps. Regardless, the final product should at least include the following: (a) how to manipulate the establishing operation, (b) how to prompt the FCR, (c) how to respond to the FCR, and (d) how to respond to the challenging behavior.

Role-Play

We have allotted 15 minutes for FCT role-play. We suggest doing two 5-minute role-plays with about 2.5 minutes after each to discuss feedback. You will role-play as the client and your supervisee will implement FCT. For ease, provide your supervisee with the partial-interval and frequency recording data sheets (Appendix H) to collect data on the challenging behavior and FCR, respectively.

As with other role-play activities, you want to role-play as an authentic client, while keeping in mind that for at least the first role-play that your supervisee will build better foundational skills without *curveballs* (e.g., engaging in nontarget challenging behavior, simultaneously engaging in challenging behavior while emitting the FCR, failing to engage with the functional reinforcer). While these are possible outcomes for which your supervisee does need to be prepared, we suggest withholding these curveballs until your supervisee has demonstrated the ability to implement FCT with fidelity without them.

As you role-play as the client, simultaneously record procedural fidelity on your supervisee's implementation using the newly created checklist. Attempt to collect data as discretely as possible. After each 5-minute session, pause to provide performance feedback. As always, praise accurate implementation and provide a rationale when correcting inaccurate implementation. After both role-plays, give your supervisee sufficient time to ask questions or seek clarification.



Homework for Individual Supervision with a Client

1. If revisions were made after the last meeting, send your supervisor an electronic version of the revised FCT procedural fidelity checklist at least 48 hours prior to the next supervision meeting.
2. Develop a data sheet for measuring challenging behavior and the FCR when implementing FCT.
3. At least 48 hours before the supervision meeting, send the data sheet to your supervisor for approval.

Individual Supervision Meeting with a Client

Below is a plan for activities to incorporate into a 55-minute supervision session in which you observe your supervisee with a client.

Individual Supervision Meeting with a Client Agenda

Time	Activity
0:00–10:00	Provide Feedback Regarding FCT Plan and Data Collection
10:00–40:00	Observe FCT Implementation
40:00–55:00	Performance Feedback



Materials Needed

- FCT Procedure Fidelity Checklist, developed by supervisee, multiple copies
- FCT Data Sheet, developed by supervisee, multiple copies
- Clipboard
- Pen/Pencil

Provide Feedback Regarding Instructional Plan and Data Collection

Your supervisee should have provided you with two items: (a) procedural fidelity checklist and (b) a data sheet for collecting data on both challenging behavior and the FCR. Review these documents prior to the individual supervision meeting with a client. Note items to praise and correct. For the first 10 minutes of this session, meet with your supervisee to discuss your feedback. We recommend meeting without a client present to decrease distractions. If significant changes must be made, the supervision meeting with a client will need to be postponed to allow time for revisions to be made.

Observe FCT Implementation

You will observe your supervisee implementing FCT for at least 30 minutes. It is likely that FCT will be implemented in several sessions, much shorter than 30 minutes. Divide this 30-minute observation into as many observations as you see fit. Also feel free to extend the duration of the observation beyond 30 minutes.

During the observation, measure procedural fidelity and collect data on the challenging behavior and FCR. Because you will most likely observe multiple FCT sessions, be prepared with multiple copies of each data sheet. If it is difficult to measure both supervisee and client behaviors simultaneously, measure one during the first session and another during the second and continue switching between the types of data you are collecting across the 30 minutes of observation.

Performance Feedback

During your final 15 minutes you will provide performance feedback. We recommend holding this discussion with no clients present in order to minimize distractions. Begin by praising correct implementation and then correct any observed errors. Solicit clarifying questions and encourage your supervisee to role-play any steps in which they implemented with poor fidelity. End by comparing the data you and your supervisee collected on client behavior. Provide your supervisee with your data sheet so they can calculate IOA. Discuss discrepancies and any possible steps to improving data collection if concerns are identified.

Mastery Criteria

In order to progress from this lesson, your supervisee must do the following when implementing FCT: (a) accurately collect data with at least 80% agreement and (b) implement FCT with at least 80% fidelity. If either of these are not met, a second individual meeting without a client with intensive role-play and feedback should be scheduled.



Future Growth

- ☐ Evaluate your supervisee's ability to conduct a mand topography assessment with a different client.
- ☐ Evaluate your supervisee's ability to implement FCT with a different client.
- ☐ Evaluate your supervisee's ability to teach another individual (e.g., parent, teacher, other clinician) how to implement FCT with this client.

Appendix A: Selecting a Recognized Mand

Scenario One: Rashid's FBA concluded that his challenging behavior is maintained by access to attention from his mom and dad. Rashid communicates with a speech-generating device with a static display of four icons.

Recognizable FCR 1: _____

Recognizable FCR 2: _____

Unrecognizable FCR 1: _____

Unrecognizable FCR 2: _____

Scenario Two: Marcella's FBA concluded that her challenging behavior is maintained by access to her My Little Ponies. Marcella communicates with two- and three-word vocalizations.

Recognizable FCR 1: _____

Recognizable FCR 2: _____

Unrecognizable FCR 1: _____

Unrecognizable FCR 2: _____

Scenario Three: Stella's FBA concluded that her challenging behavior is maintained by escaping chores in her group home, including washing dishes and taking out the trash. Stella communicates with one-word vocal approximations and two-word phrases on a speech generating application on her tablet computer.

Recognizable FCR 1: _____

Recognizable FCR 2: _____

Unrecognizable FCR 1: _____

Unrecognizable FCR 2: _____

Scenario Four: Dominic's FBA concluded that his challenging behavior is maintained by access to his preferred snacks, including a yogurt cup. Dominic communicates with a picture exchange system and is currently able to communicate by placing two cards on a sentence strip.

Recognizable FCR 1: _____

Recognizable FCR 2: _____

Unrecognizable FCR 1: _____

Unrecognizable FCR 2: _____

Scenario Five: Abby's FBA concluded that her challenging behavior is maintained by access to attention from a paraprofessional in her classroom, Ms. Robins. Abby communicates with a picture exchange system and is currently able to select a single picture from an array of 10 and hand it to her communication partner.

Recognizable FCR 1: _____

Recognizable FCR 2: _____

Unrecognizable FCR 1: _____

Unrecognizable FCR 2: _____

Appendix B: Selecting a Mand That Requires Low Response Effort

Scenario One: Rashid's FBA concluded that his challenging behavior is maintained by access to attention from his mom and dad. Rashid communicates with a speech-generating device with a static display of four icons.

Low Response Effort: _____

High Response Effort: _____

Scenario Two: Marcella's FBA concluded that her challenging behavior is maintained by access to her My Little Ponies. Marcella communicates with two- and three-word vocalizations.

Low Response Effort: _____

High Response Effort: _____

Scenario Three: Stella's FBA concluded that her challenging behavior is maintained by escaping chores in her group home, including washing dishes and taking out the trash. Stella communicates with one-word vocal approximations and two-word phrases on a speech generating application on her tablet computer.

Low Response Effort: _____

High Response Effort: _____

Scenario Four: Dominic's FBA concluded that his challenging behavior is maintained by access to his preferred snacks, including a yogurt cup. Dominic communicates with a picture exchange system and is currently able to communicate by placing two cards on a sentence strip.

Low Response Effort: _____

High Response Effort: _____

Scenario Five: Abby's FBA concluded that her challenging behavior is maintained by access to attention from a paraprofessional in her classroom, Ms. Robins. Abby communicates with a picture exchange system and is currently able to select a single picture from an array of 10 and hand it to her communication partner.

Low Response Effort: _____

High Response Effort: _____

Appendix C: Teaching and Reinforcing the FCR

Scenario One: Rashid’s FBA concluded that his challenging behavior is maintained by access to attention from his mom and dad. Rashid communicates with a speech-generating device with a static display of four icons.

Establishing Operation	Prompt Technique & Controlling Prompt	Schedule of Reinforcement

Scenario Two: Marcella’s FBA concluded that her challenging behavior is maintained by access to her My Little Ponies. Marcella communicates with two- and three-word vocalizations.

Establishing Operation	Prompt Technique & Controlling Prompt	Schedule of Reinforcement

Scenario Three: Stella’s FBA concluded that her challenging behavior is maintained by escaping chores in her group home, including washing dishes and taking out the trash. Stella communicates with one-word vocal approximations and two-word phrases on a speech generating application on her tablet computer.

Establishing Operation	Prompt Technique & Controlling Prompt	Schedule of Reinforcement

Scenario Four: Dominic’s FBA concluded that his challenging behavior is maintained by access to his preferred snacks, including a yogurt cup. Dominic communicates with a picture exchange system and is currently able to communicate by placing two cards on a sentence strip.

Establishing Operation	Prompt Technique & Controlling Prompt	Schedule of Reinforcement

Scenario Five: Abby’s FBA concluded that her challenging behavior is maintained by access to attention from a paraprofessional in her classroom, Ms. Robins. Abby communicates with a picture exchange system and is currently able to select a single picture from an array of 10 and hand it to her communication partner.

Establishing Operation	Prompt Technique & Controlling Prompt	Schedule of Reinforcement

Appendix D: Mand Topography Assessment: Instructions and Data Sheet

Supervisee: _____ Supervisor: _____

Client: _____ Assessment Date(s): _____

Instructions (for mand for tangible): Place the preferred item in sight, but out of reach. Use least-to-most prompting with a 5-s delay to prompt the mand. Contingent upon the mand emitted, prompted or unprompted, provide 30-s access to preferred item. Conduct 10 trials per mand, recording which prompt evoked the mand. Prompt hierarchy:

1. Vocal: Implementer states, “If you want [item], [describe mand].”
2. Model: Implementer states, “If you want [item], do/say this” and then models the mand.
3. Physical Guidance (n/a for vocal mands): Implementer states, “If you want [item], do this” and then physically guides the response.

[Insert Mand Description]				
	Prompt Level			
Trial 1	Vocal	Model	Physical	
Trial 2	Vocal	Model	Physical	
Trial 3	Vocal	Model	Physical	
Trial 4	Vocal	Model	Physical	
Trial 5	Vocal	Model	Physical	
Trial 6	Vocal	Model	Physical	
Trial 7	Vocal	Model	Physical	
Trial 8	Vocal	Model	Physical	
Trial 9	Vocal	Model	Physical	
Trial 10	Vocal	Model	Physical	
Totals				

[Insert Mand Description]				
	Prompt Level			
Trial 1	Vocal	Model	Physical	
Trial 2	Vocal	Model	Physical	
Trial 3	Vocal	Model	Physical	
Trial 4	Vocal	Model	Physical	
Trial 5	Vocal	Model	Physical	
Trial 6	Vocal	Model	Physical	
Trial 7	Vocal	Model	Physical	
Trial 8	Vocal	Model	Physical	
Trial 9	Vocal	Model	Physical	
Trial 10	Vocal	Model	Physical	
Totals				

[Insert Mand Description]				
	Prompt Level			
Trial 1	Vocal	Model	Physical	
Trial 2	Vocal	Model	Physical	
Trial 3	Vocal	Model	Physical	
Trial 4	Vocal	Model	Physical	
Trial 5	Vocal	Model	Physical	
Trial 6	Vocal	Model	Physical	
Trial 7	Vocal	Model	Physical	
Trial 8	Vocal	Model	Physical	
Trial 9	Vocal	Model	Physical	
Trial 10	Vocal	Model	Physical	
Totals				

[Insert Mand Description]				
	Prompt Level			
Trial 1	Vocal	Model	Physical	
Trial 2	Vocal	Model	Physical	
Trial 3	Vocal	Model	Physical	
Trial 4	Vocal	Model	Physical	
Trial 5	Vocal	Model	Physical	
Trial 6	Vocal	Model	Physical	
Trial 7	Vocal	Model	Physical	
Trial 8	Vocal	Model	Physical	
Trial 9	Vocal	Model	Physical	
Trial 10	Vocal	Model	Physical	
Totals				

Appendix E: Mand Topography Assessment: Sample Data Sheets

Supervisee: Shannon

Supervisor: MacKenzie

Client: C.J.

Assessment Date(s): September 1 & 2

Instructions (for mand for tangible): Place the preferred item in sight, but out of reach. Use least-to-most prompting with a 5-s delay to prompt the mand. Contingent upon the mand emitted, prompted or unprompted, provide 30-s access to preferred item. Conduct 10 trials per mand, recording which prompt evoked the mand. Prompt hierarchy:

1. Vocal: Implementer states, “If you want [item], [describe mand].”
2. Model: Implementer states, “If you want [item], do/say this” and then models the mand.
3. Physical Guidance (n/a for vocal mands): Implementer states, “If you want [item], do this” and then physically guides the response.

Speech Generating Device				
Touching puzzle icon in array of 4 on page				
	Prompt Level			
Trial 1	Vocal	Model	Physical	
Trial 2	Vocal	Model	Physical	
Trial 3	Vocal	Model	Physical	
Trial 4	Vocal	Model	Physical	
Trial 5	Vocal	Model	Physical	
Trial 6	Vocal	Model	Physical	
Trial 7	Vocal	Model	Physical	
Trial 8	Vocal	Model	Physical	
Trial 9	Vocal	Model	Physical	
Trial 10	Vocal	Model	Physical	
Totals	6	4	0	

Manual Sign				
Manual Sign for puzzle				
	Prompt Level			
Trial 1	Vocal	Model	Physical	
Trial 2	Vocal	Model	Physical	
Trial 3	Vocal	Model	Physical	
Trial 4	Vocal	Model	Physical	
Trial 5	Vocal	Model	Physical	
Trial 6	Vocal	Model	Physical	
Trial 7	Vocal	Model	Physical	
Trial 8	Vocal	Model	Physical	
Trial 9	Vocal	Model	Physical	
Trial 10	Vocal	Model	Physical	
Totals	0	2	8	

Touching Card				
Touching puzzle card in array of 4 on board				
	Prompt Level			
Trial 1	Vocal	Model	Physical	
Trial 2	Vocal	Model	Physical	
Trial 3	Vocal	Model	Physical	
Trial 4	Vocal	Model	Physical	
Trial 5	Vocal	Model	Physical	
Trial 6	Vocal	Model	Physical	
Trial 7	Vocal	Model	Physical	
Trial 8	Vocal	Model	Physical	
Trial 9	Vocal	Model	Physical	
Trial 10	Vocal	Model	Physical	
Totals	8	2	0	

One-word Vocalization				
Puzzle				
	Prompt Level			
Trial 1	Vocal	Model		
Trial 2	Vocal	Model		
Trial 3	Vocal	Model		
Trial 4	Vocal	Model		
Trial 5	Vocal	Model		
Trial 6	Vocal	Model		
Trial 7	Vocal	Model		
Trial 8	Vocal	Model		
Trial 9	Vocal	Model		
Trial 10	Vocal	Model		
Totals	0	10		

Supervisee: Jackie

Supervisor: Tom

Client: Reece

Assessment Date(s): October 13 & 14

Instructions (for mand for tangible): Place the preferred item in sight, but out of reach. Use least-to-most prompting with a 5-s delay to prompt the mand. Contingent upon the mand emitted, prompted or unprompted, provide 30-s access to preferred item. Conduct 10 trials per mand, recording which prompt evoked the mand. Prompt hierarchy:

1. Vocal: Implementer states, “If you want [item], [describe mand].”
2. Model: Implementer states, “If you want [item], do/say this” and then models the mand.
3. Physical Guidance (n/a for vocal mands): Implementer states, “If you want [item], do this” and then physically guides the response.

Speech Generating Device Touching crayon icon from array of two			
	Prompt Level		
Trial 1	Vocal	Model	Physical
Trial 2	Vocal	Model	Physical
Trial 3	Vocal	Model	Physical
Trial 4	Vocal	Model	Physical
Trial 5	Vocal	Model	Physical
Trial 6	Vocal	Model	Physical
Trial 7	Vocal	Model	Physical
Trial 8	Vocal	Model	Physical
Trial 9	Vocal	Model	Physical
Trial 10	Vocal	Model	Physical
Totals	3	4	3

Manual Sign Manual Sign for crayon			
	Prompt Level		
Trial 1	Vocal	Model	Physical
Trial 2	Vocal	Model	Physical
Trial 3	Vocal	Model	Physical
Trial 4	Vocal	Model	Physical
Trial 5	Vocal	Model	Physical
Trial 6	Vocal	Model	Physical
Trial 7	Vocal	Model	Physical
Trial 8	Vocal	Model	Physical
Trial 9	Vocal	Model	Physical
Trial 10	Vocal	Model	Physical
Totals	8	2	0

Touching Card Touching crayon card in array of 2on board			
	Prompt Level		
Trial 1	Vocal	Model	Physical
Trial 2	Vocal	Model	Physical
Trial 3	Vocal	Model	Physical
Trial 4	Vocal	Model	Physical
Trial 5	Vocal	Model	Physical
Trial 6	Vocal	Model	Physical
Trial 7	Vocal	Model	Physical
Trial 8	Vocal	Model	Physical
Trial 9	Vocal	Model	Physical
Trial 10	Vocal	Model	Physical
Totals	2	4	4

One-word Vocalization “Colors”			
	Prompt Level		
Trial 1	Vocal	Model	
Trial 2	Vocal	Model	
Trial 3	Vocal	Model	
Trial 4	Vocal	Model	
Trial 5	Vocal	Model	
Trial 6	Vocal	Model	
Trial 7	Vocal	Model	
Trial 8	Vocal	Model	
Trial 9	Vocal	Model	
Trial 10	Vocal	Model	
Totals	4	6	

Supervisee: Brent

Supervisor: Shelley

Client: Eli

Assessment Date(s): May 5 & 7

Instructions (for mand for tangible): Place the preferred item in sight, but out of reach. Use least-to-most prompting with a 5-s delay to prompt the mand. Contingent upon the mand emitted, prompted or unprompted, provide 30-s access to preferred item. Conduct 10 trials per mand, recording which prompt evoked the mand. Prompt hierarchy:

- 1. Vocal: Implementer states, “If you want [item], [describe mand].”
- 2. Model: Implementer states, “If you want [item], do/say this” and then models the mand.
- 3. Physical Guidance (n/a for vocal mands): Implementer states, “If you want [item], do this” and then physically guides the response.

Speech Generating Device Touching Potato Head icon from array of ten			
	Prompt Level		
Trial 1	Vocal	Model	Physical
Trial 2	Vocal	Model	Physical
Trial 3	Vocal	Model	Physical
Trial 4	Vocal	Model	Physical
Trial 5	Vocal	Model	Physical
Trial 6	Vocal	Model	Physical
Trial 7	Vocal	Model	Physical
Trial 8	Vocal	Model	Physical
Trial 9	Vocal	Model	Physical
Trial 10	Vocal	Model	Physical
Totals	5	5	0

Manual Sign Manual Sign for potato head			
	Prompt Level		
Trial 1	Vocal	Model	Physical
Trial 2	Vocal	Model	Physical
Trial 3	Vocal	Model	Physical
Trial 4	Vocal	Model	Physical
Trial 5	Vocal	Model	Physical
Trial 6	Vocal	Model	Physical
Trial 7	Vocal	Model	Physical
Trial 8	Vocal	Model	Physical
Trial 9	Vocal	Model	Physical
Trial 10	Vocal	Model	Physical
Totals	5	4	1

Touching Card Touching potato head card in array of 20 on board			
	Prompt Level		
Trial 1	Vocal	Model	Physical
Trial 2	Vocal	Model	Physical
Trial 3	Vocal	Model	Physical
Trial 4	Vocal	Model	Physical
Trial 5	Vocal	Model	Physical
Trial 6	Vocal	Model	Physical
Trial 7	Vocal	Model	Physical
Trial 8	Vocal	Model	Physical
Trial 9	Vocal	Model	Physical
Trial 10	Vocal	Model	Physical
Totals	8	2	0

One-word Vocalization “I want Mr. Potato Head”			
	Prompt Level		
Trial 1	Vocal	Model	
Trial 2	Vocal	Model	
Trial 3	Vocal	Model	
Trial 4	Vocal	Model	
Trial 5	Vocal	Model	
Trial 6	Vocal	Model	
Trial 7	Vocal	Model	
Trial 8	Vocal	Model	
Trial 9	Vocal	Model	
Trial 10	Vocal	Model	
Totals	8	2	

Appendix F: FCT Planning Guide

Client: _____

Topography of Challenging Behavior: _____

Function of Challenging Behavior: _____

FCR: _____

Describe the establishing operations that evoked challenging behavior in the FA: _____

Describe the establishing operations likely to evoke FCR: _____

Identify the prompt hierarchy for the FCR: _____

Is the controlling prompt included in the hierarchy?	Yes	No
--	-----	----

Circle the response to challenging behavior: Extinction Reinforcement Punishment

If reinforcement or punishment, justify here: _____

Will you prompt the FCR after challenging behavior?	Yes	No
---	-----	----

If yes, will it be immediate or delayed?	Immediate	Delayed
--	-----------	---------

Justify here: _____

Summarize an FCT trial here:

Establishing Operation	Prompt Technique & Controlling Prompt	Schedule of Reinforcement

Appendix G: FCT: Procedural Fidelity Checklist Template

Supervisee: _____ Supervisor: _____

Client: _____ Date & Time: _____

Operational Definitions:
 Challenging Behavior: _____

FCR: _____

Step		Implemented Correctly? + = Yes - = No
1	[Insert description of establishing operation.]	
2	[Insert description of prompting procedure]. Be sure to include delay between EO and prompt as well as prompt fading procedures.	
3	When the client [FCR], the supervisee [insert reinforcement]. Be sure to describe the duration, dimensions, and schedule of reinforcement.	
4	If the client [insert challenging behavior], the supervisee [insert response to challenging behavior].	
5	If the client [insert challenging behavior], the supervisee [insert instructions for prompting FCR].	
6		
7		
8		
9		
10		

_____ / _____ * 100 = _____ % of steps completed correctly
Steps Completed Correctly. Total Number of Steps

Appendix H: FCT Role-Play Data Collection

Client: _____

Date & Time: _____

Supervisee: _____

Supervisor: _____

Date: _____

Time: _____

Partial Interval Recording-Challenging Behavior:

Challenging Behavior Operational Definition: _____

	0:00–0:10	0:11–0:20	0:21–0:30	0:31–0:40	0:41–0:50	0:51–0:60
0:00–1:00						
1:01–2:00						
2:01–3:00						
3:01–4:00						
4:01–5:00						

Frequency Count-FCR

FCR Operational Definition: _____

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