Planning Intensive (Tier 3) Function-Based Interventions

In the school setting, a functional behavior assessment (FBA) is conducted when teachers are faced with serious and/or chronic challenging behavior. A basic assumption of an FBA is that behavior serves a purpose: It is performed to obtain a desired outcome or goal. The outcome could be access to attention, tangibles, a preferred activity, or sensory stimulation (positive reinforcement), or to avoid a task, specific environment or situation, social interaction, or unpleasant sensory stimulation.

FBA is a process of identifying the environmental events that predict and maintain patterns of problem behavior in order to alter those variables that promote skills that are more adaptive and acceptable to access desired outcomes.

Many tools and protocols exist to guide the process of conducting an FBA. The process is comprised of five steps:

1. Gather indirect and direct data

2. Analyze the data

3. Formulate a hypothesis about the function of the behavior

4. Develop a Positive Behavioral Support Plan (PBSP)

5. Monitor and adjust the plan as needed

The intention of this document is to provide information and tools that can be used by collaborative student behavior support teams as a resource to supplement your existing process, or in its entirety to complete an FBA. The document is divided into the following four components.

Part 1: The FBA Process. This section provides information on the basic steps to complete an FBA. In addition, there are questions that can be used to evaluate your current FBA process.

Part 2: Functional Assessment Interview. The National Center on Intensive Intervention (NCII) Functional Assessment Interview (FAI) can be used to conduct indirect informant interviews (i.e., with teachers, school personnel) and develop a hypothesis regarding the function of behavior. The FAI also includes information on conducting a direct observation and the development of a function-based PBSP.

Part 3: Function-Based Positive Behavior Support Plan Worksheet. This worksheet is designed to be used by the Behavior Support Team as a way to link the components of the PBSP to the information derived through the FBA process.

Part 4: Function-Based Interventions. This chart provides evidence-based intervention strategies that can be integrated into a support plan based on the identified function of the problem behavior.

The Functional Behavior Assessment Process

The FBA process can be broken into five basic steps:

1. Gather indirect and direct data
2. Analyze the data
3. Formulate a hypothesis about the function of the behavior
4. Develop a Positive Behavior Support Plan (PBSP)
5. Monitor and adjust the plan as needed

The following provides a brief outline of the process. The questions provided in the boxes can be used by the collaborative Behavior Support Team to determine if the process currently in use should be supplemented by additional procedures or tools.

Step 1: Gather Indirect and Direct Data

The purpose of gathering information is to identify any contextual setting events, antecedents, and consequences that influence the occurrence of behavior. Two methods are used to gather relevant information about the student and the behavior; (1) direct observation strategies and (2) indirect informant assessment.

Indirect assessment procedures are used to gather information from individuals who know the student well or who work with the student. Rating scales and structured interviews are frequently used for indirect informant assessment.

Does your Behavior Support Team currently have a structured informant interview that is used to identify:
❒ The challenging behavior?
❒ The frequency and intensity of the behavior?
❒ Possible setting events that contribute to the behavior?
❒ Antecedents that predict when the behavior will occur?
❒ Maintaining consequences and perceived function of the behavior?

❒ If No, use Parts A, B, C, and D of the Functional Assessment Interview, pages 7–11.

The challenging behavior should be operationally defined so that it is observable and measurable. The interview also should obtain information about how often the behavior occurs (frequency) and the intensity (e.g., description of severity of self-injury), when possible. It also should identify events that occur at an earlier time and influence the occurrence of problem behavior (e.g., hunger, difficulty sleeping). In addition, the interview should solicit information about events that occur immediately prior to the behavior (antecedents) and immediately after (consequences), and the assumed function of the behavior problem.

Direct data collection involves observing the student in situations and settings associated with occurrences of challenging behaviors, and is a critical component of functional assessment. Information gathered from the interviews can guide decisions on the best times to conduct observations. Observation data are used to determine the conditions under which the behaviors do and do not occur. Many formats for structuring observations exist. Two frequently used methods are the A-B-C Descriptive Reporting Format and the scatterplot.

> Does your Behavior Support Team currently use a structured observation format that can place behavior within the context (e.g., what happens just before the behavior and what happens just after the behavior) as part of the FBA process?
> ❏ Yes
> ❏ If No, use the A-B-C Report Form, as explained in Part E of the Functional Assessment Interview, pages 11 and 14.

Step 2: Analyze the Data

The next step is to analyze all data (indirect and direct methods) to identify consistent patterns of when problem behaviors occur (antecedents and/or setting events for behaviors) and consequences that follow the behaviors (indicating functions of behavior). First, review the indirect data sources (interviews and checklists) to identify any common responses or observations. Second, review all direct data sources (observations) to identify patterns in how the student responds to different antecedents, and what happens after each occurrence of inappropriate behavior as well as appropriate behavior. Look for patterns in ways the adults and peers in the environment respond. Also, look for similar patterns in antecedents and consequences across observations. Third, compare direct observation data with indirect data assessments. When the information is in agreement, the data suggest a strong explanation for the student's behavior. If the observations do not corroborate the information gathered through indirect assessments, further observations under targeted conditions should be conducted.

Step 3: Formulate a Hypothesis About the Function of the Behavior

The team develops a four-part summary statement (hypothesis) based on the results from the FBA. These parts are: (1) setting events (slow triggers) relevant to the occurrence of problem behaviors (2) predictor events (antecedents/fast triggers) for problem behaviors, (3) the problem behavior, and (4) maintaining consequences (perceived function) of the problem behavior.

> Upon completing an FBA, can your team consistently develop a specific hypothesis statement using the following format: *Given the circumstances when (fill in setting events / slow trigger), and when (fill in antecedents/fast triggers) occurs, the student does (fill in problem behaviors) in order to (fill in perceived function).*
> ❏ Yes
> ❏ If no, use the Functional Assessment Interview to conduct the functional assessment (pages 7–11).

Step 4: Develop a PBSP

The hypothesis statement is used to guide the development of the PBSP. The plan should directly address the function that was identified by the FBA process and include strategies adults will implement that (a) address antecedents for problem behavior, (b) teach new skills and

replacement behaviors, and (c) allow the student to access the consequences that are maintaining the problem behavior in a more appropriate way.

> ❒ Use the Function-Based Intervention and Positive Behavior Support Plan Worksheet (pages 15–18) to guide the development of a plan that adequately and accurately addresses the identified function of the behavior.
> ❒ Use the Function Related Interventions Chart (pages 19–20) to identify evidence-based strategies that can be used to manipulate antecedent conditions or maintain desired behaviors based on the identified function of the behavior.

A support plan should contain the following components:

a. Clearly defined target and replacement behaviors

b. Function of the behavior taken directly from the work completed during the FBA

c. Strategies for prevention, including antecedent strategies and modifications that will be made to the environment, curriculum, instructional delivery, schedule, and other modifications to reduce the probability that the target behavior will occur. Antecedent conditions should represent effective practice (e.g., established and taught classroom rules, clear transition routines, high rates of opportunity to respond) and be directly linked to the assessment information.

d. Instructional strategies that teach functional replacement behaviors and adaptive skills, and build general competencies. These should serve the same purpose as problem behavior.

e. Extinction strategies that ensure the target behavior is no longer reinforced. In other words, what must happen so that the target behavior is no longer an effective means to access the desired reinforcer? Also, identify any reductive procedures, based on the function of the behavior, which will reduce the occurrence of the target behavior.

f. Fading and generalization procedures

g. Data to be collected and the frequency with which the measures will be collected

h. Program review date to determine effectiveness

i. Personnel and roles for implementing and evaluating the plan

j. Crisis management procedures, if needed

Step 5: Monitor and Adjust the PBSP as Needed

Target behaviors are monitored on an ongoing basis to track the effectiveness of the intervention. Methods of measurement can be grouped into uniform (event-based) or non-uniform (time-based) behaviors. Uniform behaviors are those in which every performance takes about the same length of time as every other (e.g., hitting) and are usually measured by event-based methods. Non-uniform behaviors are those that vary in length (e.g., off-task) and are usually measured by time-based methods.

To determine which data collection system is appropriate for a particular target behavior, ask yourself a series of questions:

1. Is the target behavior uniform or non-uniform?

2. If it is uniform:

    a. Is it discrete or continuous?

    b. Is the behavior expected to occur at a high, moderate, or low frequency?

    c. Will you be able to collect the data during intervention or instruction, or will you need a third party to collect the data?

3. If it is non-uniform, do you want to measure the time before initiation of the behavior or the time elapsed during performance of the behavior?

There are five observational recording systems that can be used:

1. *Event Recording* (Behavior Count) involves observing for a predetermined amount of time and recording each time the behavior of interest occurs. At the end of the observation period, the number of times that the behavior occurred during the observation is totaled. In order to be able to record each time that the behavior occurs, you need to be able to tell exactly when the behavior begins and when it ends. In addition, this behavior should not occur at such a high rate that it is too difficult to keep count of it.

2. *Interval Recording* involves dividing your observation time into intervals and recording if the behavior did or did not occur during each interval. At the end of the observation period, the number of intervals in which the behavior occurred is totaled. Interval recording is usually used when it is difficult to tell when the behavior begins or ends and/or it occurs at a very high rate.

3. *Momentary Time Sampling* allows for only one observation per interval. Similar to interval recording, the observer selects a time period in which to observe the behavior and divides this period into equal intervals; however, intervals for time sampling are usually minutes rather than seconds. The observer notes whether or not the behavior was occurring at the end of each interval. When using time sampling, the data collector observes the student only at the end of the interval and records whether or not the behavior is occurring at that particular time.

4. *Duration Recording* is used when the primary concern is the length of time that a student engages in a particular behavior. It is suitable for behaviors that have a discrete beginning and end. Duration can be recorded as either average duration or total duration. Average duration is used when the student performs the behavior with some regularity. Total duration recording measures how long a student engages in a behavior in a limited time period, such as being "on-task" during a 20-minute interval. An advantage of time sampling is that it can measure behaviors that occur at extremely high rates and/or extended periods of time.

5. *Latency Recording* (Time to Respond) is used when the time that it takes from the onset of an instruction to the time when the behavior occurs is important. Latency recording involves

observing each time that the behavior is expected, recording the time when the instruction to engage in this behavior is given, and recording the time when the behavior actually begins. At the end of the observation, the time that it took for the behavior to actually begin is calculated.

Graphing Data

In addition to measuring the behavior, it is important to graph the measurements as this you to have a visual image of the status of the behavior at any point in time. A graph allows you to determine, on average, how often the behavior occurs, times when the behavior is lower, and times when the behavior is higher. By looking at a graph, you can tell if the behavior is increasing or decreasing. The information can be used to assess the adequacy and effectiveness of the support plan.

Functional Assessment Interview

Student Name: _____ Date: _____

School: _____ Grade: _____ DOB: _____

Person(s) Completing Assessment _____

Tertiary Prevention interventions are implemented through a flexible, but systematic, process of functional behavior assessment and behavioral intervention and support planning. This worksheet presents the general steps of the process. The following sections are to be completed by the Behavior Support Team to guide the Functional Behavior Assessment and Positive Behavior Support planning process. Parts A through D can be completed by the team or used to interview teachers and other school personnel who work with and have knowledge about the student.

Part A: Identify goals and desired outcomes.

1. What skills and/or strengths does the student display?

2. What are the goals or desired outcomes of the intervention?

Part B: Operationally define the typical target behavior(s).

	Behavior #1	Behavior #2
What does the behavior look and sound like?		
How frequently does the behavior occur?		
How long does the behavior last?		
How intense/dangerous is the behavior?		
What typically brings an end to the behavior?		

Part C: Identify typical antecedent and consequent events. Answer each of the following questions. For each "Yes" response, provide a full description or additional information that is important.

Identify Antecedents: *Setting events (slow triggers)*

1. Are there any life stressors that could be contributing to the problem?
   ☐ No

☐ Yes_____
_____
_____

2. Are there any health or physical conditions that could be contributing to the problem?
   ☐ No
   ☐ Yes_____
_____
_____

Triggering Antecedents (fast triggers)

1. Are there times when the behavior ALWAYS occurs?
   ☐ No
   ☐ Yes_____
_____
_____

2. Are there times when the behavior NEVER occurs?
   ☐ No
   ☐ Yes_____
_____
_____

3. Does the behavior occur more predictability during particular activities or academic subjects?
   ☐ No
   ☐ Yes_____
_____
_____

4. Does the behavior occur more predictably around a specific adult, peer, or a group of specific peers?
   ☐ No
   ☐ Yes_____
_____
_____

5. Are there problems with transitions?
   ☐ No
   ☐ Yes_____
_____
_____

6. Does the student have any skill deficits that could contribute to the occurrence of the problem behavior?
   ☐ No
   ☐ *Academic Skills*: Task requirements as presented are not at the student's instructional level in the core areas of reading, math, or writing.
   ☐ *Participation Skills:* The student has difficulty with participating in non-directed, semi-directed, teacher-directed, or peer-directed activities. The student has difficulty in small- or large-group instruction.
   ☐ *Social Skills*: The student has difficulty acquiring and/or maintaining peer friendships. The student often withdraws from social interaction. The student is often verbally and/or physically aggressive in social interactions.
   ☐ *Communication Skills*: The student has difficulty requesting what he/she needs, including items, activities, attention, information, changes in the environment, or help. He/she has difficulties with conversational skills and answering questions, understanding non-verbal or verbal language, or following directions.
   ☐ *Organizational Skills:* The student has difficulty organizing school supplies, study area, time, projects, or class notes, or dividing assignments into tasks.

❑ *Self-Regulation Skills*: The student has difficulties staying on task; completing work assignments; handling stressful situations; calming self when agitated; following rules; or transitioning between activities, places, or people. The student has difficulty with problem solving.

❑ *Study Skills:* The student has difficulty studying for tests, taking tests, taking notes on lectures, or using studying techniques.

Identify Consequences of Problem Behaviors:

1. What do you do when the problem behavior occurs?

2. What happens immediately after the problem behavior occurs?

3. What else has been done to the student as a result of doing the problem behavior?

Identifying the Perceived Function:

Typical Perceived Functions:	
To obtain:	*To avoid:*
o Attention (peer or adult)	o Attention or interactions
o Desired objects/activities	o Tasks or activities
o Sensory stimulation	o Physical discomfort

1. What do you think the student gets or avoids by doing the problem behavior?

2. What do you think student gets or avoids by doing the problem behavior that is so important to him/her that he/she is willing to pay these consequences in order to have it?

3. What does the student get out of or avoid?

4. Is there anything else does the student gets or avoids?

Part D: Conduct schedule review.

List the student's daily schedule and the academic area or activity presented during that time. Then, rate the probability that the behavior will occur during the indicated time or activity.

Time, Period and Activity	Typical Problem Behavior(s) (#1 or# 2 from above)	Typical Triggering Antecedent(s)	Typical Maintaining Consequence(s)	Probability of Problem Behavior (low [L], medium [M], high [H])
				L M H
				L M H
				L M H
				L M H
				L M H
				L M H
				L M H
				L M H
				L M H

Summary: Complete the chart below by transferring information gathered in parts A, B, C, and D.

Setting Events (Slow Triggers)	
Antecedents (Fast Triggers)	
Problem Behavior	
Maintaining Consequence(s) (Function)	

Specific hypothesis formation: Use the information above to answer the questions below to develop a specific hypothesis about the function of the behavior:

Given the circumstances when (slow triggers) _____ and

when (fast triggers) _____

occur, the student does (problem behavior) _____ _____ in

order to (maintaining function)_____.

How confident are you that you have accurately identified the setting events, antecedents, and function of the problem behavior?

Not very confident				*Very Confident*
1	2	3	4	5

Part E: Conduct an observation.

Conduct an observation in the classroom or an environment where a student experiences the most problems, using an A-B-C anecdotal report form (page 14). An anecdotal report is a simple data recording method in which the observer maintains a written description of events during an observation period using an antecedent-behavior-consequence (A-B-C) format. The report provides a written description of everything that happens concerning the student during a specific period. When completing the form, the A column is used to record the antecedents observed, the B column is used to record the target student's observable behaviors, and the C column is used to record the consequences, or events, that follow the behavior. It is generally recommended that a minimum of three observations be conducted, with an opportunity to observe 15–20 occurrences of the behavior.

Part F: Summarize the information.

After conducting an observation, analyze all data (interviews and observations), looking for consistent patterns in terms of when problem behaviors occur and consequences that follow the behaviors that may indicate function.

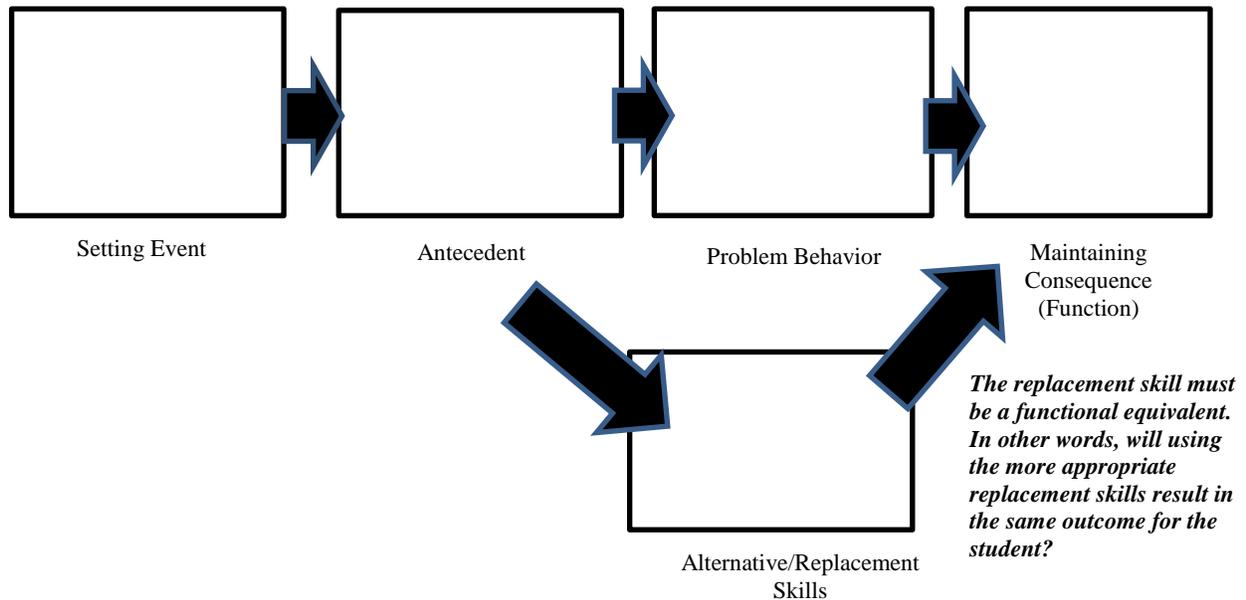**Data Review and Analysis**   **Summary Notes:**

❑   Review the indirect data sources (interviews) to identify any common responses or observations. Agreement across different sources is an indication of valid data.

❑   Review the observation data to identify patterns in how the student responds to different antecedents and what happens after each occurrence of inappropriate behavior as well as appropriate behavior.

❑   Look for patterns in ways that the adults and peers in the environment respond to the behavior.

❑   Look for similar patterns in antecedents and consequences across observations.

❑   Compare direct observation data with indirect data assessments. Do data from the observations support the information gathered through the indirect assessments?

When the information is in agreement, the data suggests a strong explanation for the student's behavior. If the observations do not corroborate the information gathered through indirect assessments, further observations under targeted conditions should be conducted.

Based on the data review and analysis, summarize the results of the assessment:

Setting Event	Antecedent	Problem Behavior	Maintaining Consequence (Function)

Alternative/Replacement Skills

The replacement skill must be a functional equivalent. In other words, will using the more appropriate replacement skills result in the same outcome for the student?

Part G: Generate a function-based behavioral support plan.

Develop a function-based plan, based on the hypothesis statements, to address the behavioral concerns and fit within the environments in which it will be used. The Positive Behavior Support Plan includes:

   A. Confirmation that the environment represents best practice (e.g., classroom structure, instructional management, behavior management, classroom climate).

   B. Strategies for prevention: Identify adjustments to the environment that reduce the likelihood of problem behaviors by decreasing the effectiveness of antecedent events that trigger problem behaviors and increasing the effectiveness of antecedent events that trigger replacement behaviors (e.g., modify activity schedule, adapt curriculum, modify design of instruction, adapt instructional procedures, provide prompts for appropriate behavior, provide precorrects). These adjustments should be directly linked to the assessment information.

   C. Instructional strategies: Teach functional replacement/acceptable alternative behaviors, demonstrate adaptive social skills, and build general competencies.

   D. Extinction strategies: Deter problem behaviors by minimizing positive and negative reinforcement that is maintaining problem behaviors.

   E. Reinforcement strategies: Increase the effectiveness of appropriate behaviors by delivering a rich range of effective reinforcement.

   F. Crisis management (if needed)

* Use the Function-Based Intervention and Positive Behavior Worksheet (pp. 15–18) and the Function Related Interventions Chart (pp. 19–20) to develop the support plan.

A-B-C Report Form

Name _____ Date/time of observation _____
Place observation occurred _____ Environmental conditions (e.g., number of students,
arrangement, number of adults) _____
Activities observed during observation _____
Unusual or potentially influential conditions _____

Time	Antecedent	Behavior	Consequence

Function-Based Intervention and Positive Behavior Support Plan Worksheet

The functional assessment serves as the basis for the development of a Positive Behavior Support Plan (PBSP) that changes environmental conditions (i.e., antecedents and consequences) while providing instruction in the acquisition of new, more appropriate behaviors. Complete each section of the PBSP Worksheet using the information gathered through the functional assessment.

1. Does the classroom environment represent best practice in the areas of classroom structure, instructional management, behavior management, and classroom climate?

   ❐ If yes, go to item 2.

   ❐ If no, develop a plan to improve the classroom environment.

2. Is the curriculum appropriate?

   ❐ If yes, go to item 3.

   ❐ If no, develop a plan for curriculum and instructional revisions.

3. Write the hypothesis you developed as a result of the FBA.

   Given the circumstances when (slow

   triggers)_____

   and/or when (fast

   triggers)_____

   _____ occur, the student does (problem behavior)

   _____ in

   order to (maintaining

   function):_____

   _____

4. **Based on the function** listed in item 3, what can you change (antecedent manipulation) that will make it less likely that the behavior will occur? *Review Appendix A for function-related interventions.*

Antecedent Manipulation	Implementation Steps *(list specific steps to be taken to implement intervention in the environment)*	Person(s) Responsible

5. **Based on the identified skill deficit(s)**, what instruction will take place to teach the appropriate skills?

Skill	Instructional Procedures *(list specific steps to be taken to teach the new skills and generalization procedures)*	Person(s) Responsible

6. **Based on the function**, how will you provide appropriate reinforcement (maintaining consequence) for the replacement behavior/skill?

Reinforcement Procedures	Person(s) Responsible

7. **Based on the function**, how will you prevent the target behavior from being reinforced?

Procedures to Withhold Reinforcement	Person(s) Responsible

8. Crisis management procedures provide a script for what adults will do when a behavior is potentially dangerous to oneself or others. These procedures are strategies that keep students' safe; they do not change behavior.

Crisis Management Procedures	Person Responsible

9. How will you monitor progress and effectiveness of the plan?

Data Collection	Person Responsible
How will progress be monitored? How will data be collected?	

Appendix A. Function-Related Interventions

The chart below provides possible intervention strategies to incorporate into a comprehensive behavior intervention plan based on the function of the problem behavior.

Function	Intervention Strategy	Example
Gain Attention	Schedule adult attention	• Have adult work with student • Have adult periodically provide attention • Increase positive interactions with student • Provide increased specific praise for appropriate behavior
	Schedule peer attention	• Pair student with a peer • Use peer tutoring
	Increase proximity to student	• Move seating arrangement • Periodically move about classroom
	Provide preferred activity	• When adult is occupied and unable to provide attention, assign a more preferred activity
Escape Task or Environment	Adjust demand difficulty	• Provide easier work • Decrease amount of work

	Offer choice	• Allow student to choose:
		  o Task to complete
		  o Sequence of tasks to be completed
		  o Materials to use
		  o Where to complete task
		  o When to complete task
		  o With whom to complete task

Function	Intervention Strategy	Example
	Increase student preference/interest in activity	• Incorporate student hobbies/interests into activities
	Assure that activities have function or relevance for the student	• Provide activities with valued outcome
	Alter length of task	• Shorten activity • Provide frequent breaks
	Modify mode of task completion	• Change medium/materials • Replace pencil and paper with computer
Escape Task or Environment	Use behavioral momentum, task dispersal	• Present easy requests prior to difficult request
	Increase predictability	• Provide cues for upcoming or change in activities (e.g., instructional, visual, auditory)
	Modify instructional delivery	• Use pleasant tone of voice
	Differential negative reinforcement of alternative behavior (DNRA)	• Allow a break from instruction based on an alternative appropriate response (e.g., compliance) while placing problem behavior on extinction
	Differential negative reinforcement of zero rates of responding (DNRO)	• Allow a break when the problem behavior has not occurred for a specific period of time and place the problem behavior on extinction
	Extinction	• Ignore problem behavior and continue presenting the task regardless of problem behavior
	Non-contingent escape (NCE)	• Provide breaks from work on a time-based schedule, irrespective of problem behavior
Tangible	Provide a warning	• Indicate that activity is about to end
	Schedule a transitional activity	• Schedule a moderately preferred activity between highly preferred and highly non-preferred activities
	Increase accessibility	• Put highly preferred items within students' reach
Sensory	Provide alternative sensory reinforcement	• Offer a radio to a student seeking auditory reinforcement or visual stimuli to a student seeking visual reinforcement

Function	Intervention Strategy	Example
	Enrich environment	• Fill environment with interesting and stimulating activities

Resources

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