

Overview of Step 4: Designing the Intervention

The functional assessment-based intervention model employs a systematic approach to designing, implementing, and evaluating functional assessment based procedures developed by Umbreit, Ferro, Liaupsin, and Lane (2007). As you may recall, the first three steps are as follows: **Step 1: Identifying students who need a FABI**, **Step 2: Conducting the Functional Assessment**, where they have identified a student in need of a FABI and conducted the functional assessment to discover reasons why challenging behaviors occur (the function). **In Step 3: Collecting Baseline Data** the target or replacement behavior was selected for monitoring and appropriate measurement systems and present levels were recorded for ideally around five observations. This video introduces you to **Step 4: Designing the Intervention**. As part of this process, teams begin designing the intervention by working through the Function-based Intervention Decision Model to guide intervention planning. The *Function-Based Intervention Decision Model* includes two questions to guide intervention design. The first question asks, “**Can the student perform the replacement behavior?**” and the second question asks, “**Do antecedent conditions represent effective practice?**” Answers to these two questions help focus interventions that are directly linked to results of the functional behavior assessment (FBA) and employ one of three methods.

Here you see the *Function-Based Intervention Decision Model* and how the answers to two questions correspond to one of the three methods. **Method 1: Teach the Replacement behavior** is suited for when the student cannot perform the replacement behavior and antecedent conditions represent effective practices. **Method 2: Improve the Environment** which is recommended for when the student can perform the replacement behavior and antecedent

conditions do not represent effective practices. It is important when answering this question to consider the extent to which the environment represents effective practices for this student. A classroom teacher may implement outstanding classroom practices in teaching and classroom management that the majority of his or her students are responding well to, but they may not be effective for this specific student. **Method 3: Adjust the Contingencies** is recommended for when the student can perform the replacement behavior and antecedent conditions represent effective practices. Lastly, there is a combination of **Method 1 and Method 2: Teach the Replacement Behavior and Improve the Environment**, and is for when the student cannot perform the replacement behavior and antecedent conditions do not represent effective practices for this student.

Once an intervention method is selected, it is important to develop intervention tactics across three core components to a FABI, referred to as the **ARE Components**. Based on function as identified from the functional assessment in Step 2 and the intervention method identified using the *Function-Based Intervention Decision Model*, **Antecedent adjustments, Reinforcement adjustments, and Extinction procedures** are developed to either teach the replacement behavior, improve the environment, or adjust the contingencies (or a combination of teach the behavior and improve the environment).

Once the intervention method is selected and A-R-E components are drafted and linked to the hypothesized function identified during the functional assessment, a draft **Treatment Integrity Form** specifying the intervention is made and shared with stakeholders. Social validity surveys are used to make sure the teacher, parents, and students have consensus on the goals, are comfortable with the procedures, and believe the intervention is likely to achieve the desired

outcomes. If there are serious concerns for any one of the parties (e.g., student embarrassed or teacher does not feel they are feasible), procedures are revisited and modified accordingly.

Once finalized, the teacher and student are trained in the procedures and implementation materials are prepared. When the procedures are taught to the key stakeholders involved in implementing the intervention, be certain to conduct a check for understanding to make certain each person is entirely clear on how to put the intervention in place. Often, Baseline data collection will continue during this phase, along with IOA as necessary. Additional baseline data should be collected before or after a break in school before introducing the intervention in Step 5: Testing the Intervention as it is important not to conduct phase changes over a break.

In the last step, we will focus on **Step 5: Testing the Intervention** which will focus on answering three questions to draw accurate conclusions regarding the effectiveness of the FABI. To learn more about these processes, you may explore our video on the *Function-Based Intervention Decision Model*.

You may also review *Applied Behavior Analysis (2nd edition)* by Cooper, Heron and Heward (2007) and *Functional Behavior Assessment and Function-Based Intervention: An Effective, Practical Approach* by Umbreit, Ferro, Liaupsin, and Lane (2007).