Monitoring Social Validity, Treatment Integrity, and Student Outcome Data

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). In this video, we discuss the importance of monitoring social validity, treatment integrity, and student outcome data in tandem throughout this process.

As part of the FABI process, we begin monitoring student outcome data in **Step 3: Collecting Baseline Data.** For an introduction to behavior measurement, you are encouraged to watch our Step 3 video as well as our video on **Behavior Dimensions and Measurement Systems**. In most single case designs that are used to demonstrate the effectiveness of an intervention, it is important to get an accurate measure of present levels of student performance by collecting **student outcome data** before the intervention is introduced, we call this baseline data.

Graphing data provides a means of organizing data collected and creates a picture allowing you and your team to determine the effect of the intervention on the behavior of interest. Graphed data are also easily shared with educators, students, and parents and show the student's progress in each phase pictorially, rather than only describing observed changes in words or numbers.

Phases or conditions, such as baseline or intervention are labeled and separated by phase change lines. Notice how data points are not connected by a line between phases, as you see in this example.

In an A-B-A-B or withdrawal design, the behavior of interest is measured without the intervention in place. In this illustration A_1 represents baseline (current practices are in place), B_1 illustrates the introduction of the intervention, A_2 represents a withdrawal of the intervention (such as return to those same baseline practices) and B_2 represents the reintroduction of the intervention.

Using visual analysis, we can determine the occurrence of the behavior of interest when the intervention is and is not in place.

This is how we determine if a functional relation exists between the introduction of the intervention and changes in student behavior. In other words, do changes in behavior only occur when the intervention is in place and not when the intervention is absent or removed?

In **Step 4: Designing the Intervention,** an intervention is designed using The *Function-Based Intervention Decision Model* and intervention tactics across three core components: antecedent adjustments, reinforcement adjustments, and extinction procedures, (referred to as **ARE Components**). **Treatment integrity procedures** are planned, such as monitoring the implementation of the intervention using a component checklist to monitor by the teacher or implementer as well as by an outside observer. This information tells us the extent to which each intervention tactic was implemented as designed across ARE components. We cannot draw accurate conclusions about student performance unless treatment integrity data are also collected. It cannot simply be assumed that all the intervention components are in place. Treatment integrity data needs to be collected to be able to make the most accurate conclusions.

In Step 4, a plan is developed to monitor **Social Validity** prior to the start of the intervention and before training to make sure the teacher, parents, and student have consensus on the goals, are comfortable with the procedures, and believe the intervention is likely to achieve

the desired outcomes. The teacher and student are introduced to the intervention and complete the social validity forms after learning how to conduct the intervention component and checking for understanding. If there are any serious concerns, such as the student feels the intervention would be embarrassing or the teacher does not feel it is feasible, procedures are revisited and modified accordingly.

In **Step 5: Testing the Intervention**, we examine the effects and monitor the intervention to answer how well is it working? For this, teams are encouraged to ask and answer three questions: (1) *Was the intervention implemented as planned* (which is looking at treatment integrity)? (2) *Was a functional relation established between the introduction of the intervention and changes in student behavior and did these outcomes generalize or maintain* in other words, were student outcomes monitored to determine a functional relation)?* and (3) *What did stakeholders (e.g., teachers, parents, and students) think about the social significance of the intervention goals, the social acceptability of the intervention procedures, and (anticipated) effects of the intervention after concluding the intervention*?

By monitoring social validity, treatment integrity, and student outcome data in tandem teams can design, implement and evaluate functional-assessment based interventions before, during, and after an intervention. Treatment integrity data are monitored regularly throughout implementation to guide implementation efforts and inform coaching, re-training, and adjustments to the intervention. Social validity data are examined before and after the intervention to assess the degree to which the intervention met or exceeded expectations. Finally, student outcome data are monitored to determine if the behavior of interest changed as intended. To learn more about treatment integrity, social validity, and behavioral measurement of student outcome data, 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).