

CENTER FOR EFFECTIVE COLLABORATION AND PRACTICE
Improving Services for Children and Youth with Emotional and Behavioral Problems

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ADDRESSING STUDENT PROBLEM BEHAVIOR—PART II:

CONDUCTING A FUNCTIONAL BEHAVIORAL ASSESSMENT

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ADDRESSING STUDENT PROBLEM BEHAVIOR—PART II: CONDUCTING A FUNCTIONAL BEHAVIORAL ASSESSMENT

Today, educators at all grade levels face a growing number of student behaviors that challenge effective classroom instruction. Fortunately, most students respond to standard strategies for addressing potential behavior problems (e.g., classroom rules, verbal praise and reprimands, and loss of privileges). However, for some students—with and without disabilities—these classroom management techniques do not produce the desired outcomes and may even worsen an already difficult situation. In recognition of the growing need to proactively address the problem, the 1997 Amendments to the Individuals with Disabilities Education Act (IDEA) (P.L. 105-17) include provisions that help schools address both the classroom learning and behavior problems of students with disabilities.

The requirement that schools address student behavior problems in their efforts to ensure that schools are safe and conducive to learning for all students signals a fundamental shift in emphasis in Federal legislation. Beginning with P.L. 94-142 (Education for All Handicapped Children Act of 1975), schools were required to ensure students with disabilities a “free, appropriate public education” in the “least restrictive environment.” Now, schools also must ensure that students are able to be involved and progress in the general education curriculum, measure the educational progress of students with disabilities, and take preventive and proactive steps to address the relationship between student behavior and classroom learning. The 1997 Amendments are explicit about what is required of Individualized Education Program (IEP) teams when addressing behaviors of children with disabilities that interfere with their learning or the learning of others.

- ◆ The IEP team must consider, when appropriate, strategies—including positive behavioral interventions, strategies, and supports—to address that behavior through the IEP process (see 614(d)(3)(B)(i)).
- ◆ In response to disciplinary actions by school personnel described in Sec. 615(k)(1)(B), the IEP team must, either before or no later than 10 days after the action, develop a functional behavioral assessment plan to collect information. This information should be used for developing or reviewing and revising an existing behavioral intervention plan to address such behaviors, if necessary.
- ◆ In addition, states are required to address the in-service needs and pre-service preparation of personnel (including professionals and paraprofessionals who provide special education, general education, related services, or early intervention services) to ensure that they have the knowledge and skills necessary to meet the needs of their students with disabilities. This includes enhancing their abilities to use strategies such as behavioral interventions and supports (653(c)(3)(D)(vi)).

This is the second of three guides that address the 1997 Amendments to IDEA as they relate to the issue of functional behavioral assessment and positive behavioral interventions and supports. The first monograph, *Addressing Student Problem Behavior: An IEP Team’s Introduction to Functional Behavioral Assessment and Behavior Intervention Plans*, provided a general overview of these requirements and is available through the Center for Effective Collaboration and Practice’s web site (www.air-dc.org/cecp/) or by calling toll free 1-888-457-1551. This second monograph examines the rationale for

and discusses the process of conducting a functional behavioral assessment and describes the ways schools and IEP teams can translate this new public policy into classroom practice by means of a step-by-step approach to functional behavioral assessment. This guide explains how IEP teams can decide how to collect various kinds of information and how to organize and analyze this information. A third monograph will discuss how to use the information gathered during the functional behavioral assessment process to develop and implement positive behavioral intervention plans that address both the short- and long-term needs of the student.

This monograph covers an integrated, six-step process that has been used by some for conducting that assessment (four additional steps cover the development of a behavior intervention plan, which will be discussed in the third document in this series). Blank forms and sample completed forms that might be used during the functional behavioral assessment process are included. In addition, this guide highlights the role that both professional collaboration and school-wide support can play in addressing student problem behavior. Finally, there is a list of sources for readers interested in obtaining more information on functional behavioral assessment.

RATIONALE FOR USING FUNCTIONAL BEHAVIORAL ASSESSMENTS TO DEVELOP POSITIVE BEHAVIOR INTERVENTIONS

When a student's behavior disrupts classroom instruction, teachers often address the problem by manipulating events that follow the misbehavior (e.g., verbal reprimands, isolation, detention, suspension). Experience has shown that this approach fails to teach the student acceptable *replacement behaviors* (i.e., behaviors that are expected under certain circumstances). Recently,

educators have begun to introduce various programs designed to teach students more acceptable ways to behave. The area of social skills development has been especially popular. However, decisions regarding which behaviors to teach a student are largely subjective and often unrelated to the cause of the problem behavior.

In some instances, what has been absent is a method for determining "why" the student misbehaved in the first place. Today, there is good reason to believe that the success of classroom behavior interventions hinges on identifying the likely causes and purposes of problem behavior and finding ways to teach and promote appropriate replacement behaviors that serve the same "functions" as the inappropriate behaviors. We know that inappropriate student behavior may have the same form (e.g., Charles and James both swear at the teacher) but serve different functions (e.g., Charles is seeking peer approval while James is attempting to escape an aversive teacher-pupil interaction). Functional assessment helps IEP teams to understand what function the problem behavior serves for the students and leads to interventions that reduce or eliminate problem behavior by replacing it with behavior that serves the same purpose or function for the student, but is more socially acceptable (e.g., teaching Charles more acceptable ways to gain peer attention).

The logic behind functional behavioral assessment is that practically all behavior occurs within a particular context and serves a specific purpose. Students learn to behave (or misbehave) in ways that satisfy a need or results in a desired outcome. Students will change their behavior only when it is clear that a different response will more effectively and efficiently result in the same outcome. Identifying the purpose of problem behaviors or more specifically, what the student "gets" or "avoids" through those behaviors) can provide information that is essential to developing instructional strategies and supports to reduce

or eliminate behaviors that interfere with successful classroom performance or participation.

Functional behavioral assessment is generally considered to be a problem-solving process that relies on a variety of techniques and strategies to identify the purposes of specific behavior and to help IEP teams select interventions to directly address the problem behavior. Functional behavioral assessment should be integrated, as appropriate, throughout the process of developing, reviewing, and, if necessary, revising a student's IEP. A functional behavioral assessment looks beyond the behavior itself. The focus when conducting a functional behavioral assessment is on identifying significant, pupil-specific social, affective, cognitive, and/or environmental factors associated with the occurrence (and non-occurrence) of specific behaviors. This broader perspective offers a better understanding of the function or purpose behind student behavior. Intervention plans based on an understanding of "why" a student misbehaves are extremely useful in addressing a wide range of problem behaviors.

The following sections discuss a multi-step strategy that some have used to carry out a functional behavioral assessment. The ten steps listed below include the development and implementation of behavior intervention plans, which may follow the functional behavioral assessment. Only the first six steps relating to the actual functional behavioral assessment will be discussed in this document. The other four steps will be discussed in the third monograph: *Addressing Student Problem Behavior – Part III: Developing and Implementing Behavioral Intervention Plans*.

A Method for Performing a Functional Behavioral Assessment

1. Describe and verify the seriousness of the problem.
2. Refine the definition of the problem behavior.
3. Collect information on possible functions of the problem behavior.
4. Analyze information using triangulation and/or problem pathway analysis.
5. Generate a hypothesis statement regarding probable function of problem behavior.
6. Test the hypothesis statement regarding the function of the problem behavior.

A Method for Developing, Implementing and Monitoring a Behavior Intervention Plan (to be covered in the third monograph)

7. Develop and implement behavior intervention plan.
8. Monitor faithfulness of implementation of plan.
9. Evaluate effectiveness of behavior intervention plan.
10. Modify behavior intervention plan, if needed.

FUNCTIONAL ASSESSMENT IS A TEAM EFFORT

Before beginning, we want to stress the role that teamwork plays in addressing student behavior problems. In conducting a functional behavioral assessment and developing a behavior intervention plan, education personnel should draw upon a range of communication and interpersonal skills. Like knowledge of assessment itself, IEP team members may need special training in the skills of successful collaboration, such as time management, group problem-solving (including "brainstorming" strategies), active listening, and conflict resolution processes, to mention a few. If team

members are to conduct the assessment, they may also need training in the skills and knowledge required to conduct a functional behavioral assessment and use of behavior intervention techniques. As with other collaborative efforts, building-level administrative and collegial support is essential to a successful outcome.

A METHOD FOR CONDUCTING A FUNCTIONAL BEHAVIORAL ASSESSMENT

1. Describe and Verify the Seriousness of the Problem

Most teachers recognize that many classroom discipline problems can be resolved by consistently applying standard management strategies. Strategies proven to be effective include: teaching students how to comply with well-defined classroom rules, providing students more structure in lessons, making strategic seating assignments, and posting a class schedule, to mention a few. These proactive procedures can sometimes even alleviate the need for more intensive interventions. Today, many teachers learn about other solutions to the problems they face through teacher assistance or intervention assistance teams. Regardless of the source of this information, school personnel generally should introduce one or more standard strategies before seeking to initiate the more complex, and often time-consuming, process of functional behavioral assessment. A formal assessment usually is reserved for serious, recurring problems that do not readily respond to typical discipline strategies, impede a student's learning, or have been ongoing.

In addressing student behavior that impedes learning, IEP teams usually will work with the referring classroom teacher to define, in concrete terms, the exact behavior of concern (e.g., Trish is verbally and physically aggressive toward other students on the

playground.). Using this description of the behavior, the IEP team or other school personnel can conduct initial observations of both the student of concern and 1-2 classmates selected at random. By observing other classmates, the team will be able to determine the seriousness of the problem and the discrepancy between present behavior and what is considered to be an acceptable level of behavior. Finally, initial observations may indicate that many students have similar discipline problems and that the solution may actually rest in changes in classroom practices.

In collecting preliminary information about student behavior, the team should also take into consideration teacher expectations for student academic performance as well as classroom conduct. It might be that teacher expectations for the student exceed or fall below the student's ability to perform. The resulting behavior problems may stem from a sense of frustration, fear of embarrassment, or boredom.

In assessing a student's behavior, it may be important to consider whether a particular response may relate to cultural differences or expectations. For example, in some cultures, making eye contact with adults is considered rude; in others, peer competition is discouraged. Remember that no two students (or their families) are the same, regardless of their gender, cultural or ethnic background. As part of the IEP team, parents can provide valuable information regarding the behaviors their culture values. School personnel should be aware that differences may exist, respect these differences, and work to adopt the family's perspective when considering student behavior. When making judgments about cultural differences or expectations, professionals who are qualified to make such statements may be another resource to the IEP team. Such individuals may be in a good position to assess the impact of cultural differences on learning.

One way for the IEP team to judge the significance of the behavior exhibited by the student of concern is to pose the following questions:

- ◆ Does the student’s behavior significantly differ from that of his/her classmates?
- ◆ Does the student’s behavior lessen the possibility of successful learning for the student and others?
- ◆ Have past efforts to address the student’s behavior using standard interventions been unsuccessful?
- ◆ Does the student’s behavior represent a behavioral deficit or excess, rather than a cultural difference?
- ◆ Is the student’s behavior serious, persistent, chronic, or a threat to the safety of the student or others?
- ◆ If the behavior persists, is some disciplinary action likely to result?

If the answer is yes to any of these questions, then the team should proceed with a functional behavioral assessment. The following vignettes illustrate the fact that problem behavior can vary widely and that various factors can influence student behavior. The vignettes also show that not all problems require complex solutions or a functional behavioral assessment.

Vignette I

Mrs. Gambino, the seventh grade social studies teacher at Havelock Middle School, reported that according to her mid-term progress report, Tommy, a student with a learning disability, was in danger of failing. Together with Mrs. Lofties, the special education teacher, they determined that the problem probably stemmed from Tommy’s not doing his homework every

night, rather than from his not having the knowledge or skills to complete it. Mrs. Gambino explained that although she modifies the homework assignment to help Tommy, whose disability makes it difficult for him to write, he still doesn’t complete the assignments. She explained that the homework assignments were given so that the students have an opportunity to practice using what they learned during class, and it was important for them to spend time doing them so they could keep up with what was being taught.

Mrs. Lofties asked how many other students in her class came without having their homework. Mrs. Gambino explained that she did not take up the homework or grade it. Mrs. Gambino explained that students kept their homework in their notebooks so they could use it to study. “I don’t believe in giving kids grades for homework,” she explained. “I don’t think you should grade ‘practice’ work.” Mrs. Lofties suggested that for the next five days Mrs. Gambino observe Tommy and the other students in his class to see how many had completed homework assignments. Mrs. Gambino said she would watch the students as they were discussing their homework assignments and record (without the students knowing) who did not have their homework. They agreed to meet again after the five days had passed.

During their next meeting, Mrs. Gambino and Mrs. Lofties looked at the homework data. It seemed that on any given day about 25 percent of the students did not have their homework. They decided that the problem was more widespread than just with Tommy and worked together to develop a plan to increase the class’ homework production. They developed a system where Mrs. Gambino could check to see if each student had completed his or her homework. If everyone in the class came with his or her homework, then she would give the class one point. When they accumulated 15 points they would be allowed to bring snacks to class the next day and eat while they worked.

Mrs. Gambino thought it would be a good idea and decided to try it in all of her classes. Mrs. Lofties and Mrs. Gambino decided to meet again in two weeks to see how things were going.

In two weeks, Mrs. Gambino reported that it took the students a couple of days to get into the swing of the “game,” but now most classes were earning points daily. She said that Tommy’s grades were improving, and at this time a functional behavioral assessment was not deemed necessary.

Vignette II

“This is the third time in two weeks Trish has been sent to the office for fighting on the playground! Something has to be done!” Ms. Osuna’s tone showed her exasperation with her student’s behavior. Ms. Frey, the principal, agreed with Ms. Osuna but explained that her options were limited. “We’ve tried keeping her in during recess, but that does not seem to help. We also tried to reward her for playing nicely on the playground, but that didn’t work either. I agree that this is getting out of hand. No other student in this school has had so many office referrals for problems on the playground. I am willing to listen to any suggestions you might have.” Ms. Osuna suggested they include Mr. Church, Trish’s LD resource room teacher, in their discussion.

After speaking with Ms. Osuna and Ms. Frey, Mr. Church realized that Trish’s behavior was significantly different from those of the other third graders on the playground, had been going on for some time, was possibly a danger to other students, and didn’t change when the usual interventions were tried. “I suggest we call a meeting of her IEP team and discuss conducting a functional behavioral assessment to try to determine what might be causing Trish to behave this way. I’ll ask the secretary to call Trish’s parents and set up a meeting time that would be convenient for them.”

At the meeting, Trish’s mother, Mrs. Waldo, explained that Trish was the same way with her brothers when she was at home. “They hit each other a lot. I yell at them, but they don’t listen to me.” Mr. Church explained to the IEP team about functional behavioral assessment and suggested they do an assessment to find out more about why Trish was being physically aggressive. Mrs. Waldo was relieved, “I was so afraid you were going to tell me that she was going to be suspended or sent away to a different school.” Mr. Church explained that Mrs. Waldo could help with the functional behavioral assessment, too. He explained that he would like to talk to her more about Trish’s behavior at home and he could give her some questions that she could ask Trish to help them with the functional behavioral assessment. After deciding what each person could do to contribute to the assessment, everyone agreed to meet again in two weeks to discuss his or her findings. Meanwhile, playground supervision would be increased to make sure that no one got hurt.

The vast majority of classroom challenges can be successfully addressed through the kind of collaborative efforts illustrated in Vignette I. School personnel should try to distinguish between problems that can be eliminated through informal assessment and universal interventions (i.e., interventions designed for use with the entire group) and those that demand functional behavioral assessment and individualized positive behavioral intervention plans and supports.

2. Refine the Definition of the Problem Behavior

Before determining the techniques to use to collect information about student behavior,

school personnel must identify specific characteristics of the behavior that is interfering with learning. This way, it is possible to narrow the definition to make it easier to observe and record the behavior. If descriptions of behaviors are vague (e.g., poor attitude or aggressiveness), it is difficult to measure these behaviors and determine appropriate interventions. Even behavior as unacceptable as aggression may mean different things to different people. For example, some may feel a threatening gesture represents aggression; others may not. A precise definition, one that includes examples (and nonexamples) of the behavior of concern, should eliminate measurement problems stemming from an ambiguous description of behavior.

In collecting information to refine the definition about behavior, it may be necessary to observe the student in various settings (e.g., classroom, cafeteria, playground, and other social settings), during different types of activities (e.g., individual, large group, or cooperative learning), and to discuss the student's behavior with other school personnel or family members. This will help the IEP team to determine the exact nature of the behavior and to narrow its scope of the examination of the problem situation. These multiple observations increase the likelihood that IEP teams will be able to accurately assess relevant dimensions of the behavior, thereby allowing them to write accurate behavior intervention plans.

Information should be collected on:

- ◆ times when the behavior does/does not occur (e.g., just prior to lunch, during a particular subject or activity);
- ◆ location of the behavior (e.g., classroom, playground);
- ◆ conditions when the behavior does/does not occur (e.g., when working in small groups, structured or unstructured time);
- ◆ individuals present when the problem behavior is most/least likely to occur (e.g., when there is a substitute teacher or with certain other students);
- ◆ events or conditions that typically occur before the behavior (e.g., assignment to a particular reading group);
- ◆ events or conditions that typically occur after the behavior (e.g., student is sent out of the room);
- ◆ common setting events (e.g., during bad weather); and
- ◆ other behaviors that are associated with the problem behavior (e.g., a series of negative peer interactions).

Once the behavior of concern has been identified, it is important to complete the definition of the behavior. For example, initial observations enable the IEP team to more accurately define Trish's aggression as, "Trish hits, kicks, or uses threatening language (e.g., "I'm going to kill you!") with other students during recess when she does not get her way." Other examples of well-defined behavior include defining verbal off-task behavior as: "Charles makes irrelevant and inappropriate comments during reading class (e.g., "This is dumb." or "Anyone could do that."); and hyperactivity as: "Jan leaves her assigned area without permission (e.g., walks around class, goes to reward area of class), completes only small portions of her independent work (e.g., 3 of 10 problems), and blurts out answers without raising her hand.

Since students often evidence multiple rather than single behavior problems, when defining problem behavior, IEP teams may group multiple problem behaviors together. For example, Charles' "call-outs," "put-downs of classmates," and "vulgar comments made about a lesson" might be defined as disruptive acts. However, if an intervention plan fails to

change these behaviors, it may be necessary for the team to separate, individually define, and assess each of these behaviors. Also, it may be necessary to prioritize the behaviors and decide which to address first (e.g., the most disruptive behavior, the easiest behavior to modify).

3. Collect Information on Possible Functions of the Problem Behavior

By collecting and analyzing various kinds of information about behavior that significantly disrupts the teaching and learning process, school personnel are better able to select the most appropriate interventions. Information on the social/environmental context, antecedent and consequent events (i.e., events preceding or following the behavior, respectively), and past events that may influence present behavior, assists teams in predicting when, where, with whom, and under what conditions certain behavior is most/least likely to occur. While the Amendments to the IDEA call for a functional behavioral assessment approach to determine the specific factors that contribute to problem behavior, they do not recommend specific assessment techniques or strategies.

Information from a variety of assessment techniques should lead the IEP team to better understand the problem behavior. Depending on the nature of the behavior of concern, it is crucial that multiple means be used to collect information about the behavior. This might include a review of the student's records (educational and medical), along with an evaluation of a sample of the student's academic products (e.g., in-class assignments, tests, homework). In addition, the use of various observation procedures; questionnaires; interviews with parents, teachers, and other school personnel (e.g., bus driver, cafeteria workers, playground monitors), as well as interviews with the student; and perhaps medical consultation should allow data collection tailored to produce information that

will help the IEP team to better understand the causes of the specific problem behavior.

Ways to Categorize Student Behavior

There are several ways the IEP team can categorize student behavior for purposes of behavioral intervention planning. One way is to characterize student behavior according to its function, separating actions which “get something” that is positively reinforcing for the student (e.g., peer attention or adult approval) from behavior intended to “avoid (or escape) something” that is aversive to the student (e.g., academic assignments that are too demanding, interactions with specific peers). For example, the IEP team may determine that Mandy makes wisecracks during class lectures because she finds the laughter of her peers very rewarding. On the other hand, Bill, who is not prepared to participate in class discussion, may make wisecracks to be sent out of the room and thereby avoid being called upon to answer questions. Many times, the student's misbehavior stems from multiple sources rather than a single source. Mandy's wisecracks, while resulting in peer attention, may also serve to draw attention away from the fact that she does not know the answer.

In addition to categorizing behavior by function, the team should attempt to distinguish between behaviors that stem from a *skill deficit* versus those that result from a *performance deficit*. Skill deficits involve an inability to perform the appropriate behavior. For example, Bill does not have the sight word vocabulary necessary to read his social studies text aloud; Trish does not have the social problem-solving skills to interact appropriately with her peers on the playground.

Behavior that is linked to a performance deficit reflects the fact that the student is able to engage in the desired behavior but fails to do so when specific conditions are present. Performance deficits are manifested in various ways. For example, Jeff generally is able to

control his temper when confronted by a peer (“What’s your problem, jerk?”). In some instances, however, outside factors influence his behavior, as when hunger, fatigue, or extreme frustration override self-control. In contrast, Juan may not be able to discriminate exactly what behavior is expected of him within a particular social context; Juan may not see any relationship between what is expected of him and what he wants to get out of the situation (e.g., to be verbally supportive of a classmate he really dislikes). Or, Juan may be unable to deal with competing emotional responses (e.g., anger or frustration). In Figure 1, we have combined several classification options to account for the fact that problem behavior may stem from multiple sources. Figure 2 gives a specific example, of how Trish’s behavior might be categorized using this form. While categorizing behavior by function is integral to functional behavioral assessment, recognition that problems can also relate to either skill or performance deficits, or both, can contribute significantly to development of a sound behavioral intervention plan. Finally, it is also important to remember that one behavior may have an impact on other behaviors the student may engage in.

DIRECT AND INDIRECT MEASURES OF STUDENT BEHAVIOR

Functional behavioral assessment can be a time-consuming process, one that usually is best accomplished in stages. As discussed in Step 2, the functional behavioral assessment process may begin with a series of initial direct and indirect observations (e.g., using a scatterplot) and/or discussions with adults or students who have witnessed the behavior (e.g., functional interviews). An examination of the information from these observations and interviews may suggest specific times and settings in which to conduct more thorough observations (e.g., during a specific academic subject or class period). These subsequent observations would lead the IEP team to develop an hypothesis statement regarding the

factors that are most predictive of the student’s behavior (e.g., a science lesson that requires lengthy silent reading of technical material). Both direct and indirect measures of student behavior are described more thoroughly in this section.

Direct Assessment

Direct assessment consists of actually observing the problem behavior and describing the conditions that surround the behavior (its context). This context includes events that are *antecedent* (i.e., that occur before) and *consequent* (i.e., that occur after) to student behaviors of interest. There are several tools to select from in recording direct assessment data. Each has its particular strength. IEP teams should consider what they want or need to know about the presenting behavior and select direct observation strategies and recording tools accordingly. A description of the most commonly used tools and the kinds of data they can help gather follows.

Scatterplots. Often, initial observations can be accomplished through the use of a scatterplot (see Appendix A for sample scatterplot forms). The purpose of a scatterplot is to identify patterns of behavior that relate to specific contextual conditions. A scatterplot is a chart or grid on which an observer records single events (e.g., number of student call-outs) or a series of events (e.g., teacher requests and student responses) that occur within a given

Categorizing Student Problem Behavior

Student: Mike

Grade: 4th

Sch

Behavior of concern: non-compliant with teacher directions/swears at teacher

	Skill Problem	Performance Problem
Get Something	<i>uses inappropriate attention-seeking behavior to get peer approval</i>	<i>inappropriate behavior more rewarding than appropriate behavior</i>
Avoid Something	<i>lacks skills necessary to comprehend assignment</i>	<i>inconsistently asks for assistance with difficult material</i>

Figure 1

Categorizing Student Problem Behavior

Student: *Trish*

Grade: *4th*

Sch

Behavior of concern: *aggression toward peers on the playground*

	Skill Problem	Performance Problem
Get Something	<i>Trish hits, kicks, or uses threatening language (e.g., “I’m going to kill you!”) with other students during recess when she does not get her way.</i>	
Avoid Something		

Figure 2

context (e.g., during teacher-led reading instruction, at lunch, on the playground). Scatterplots take various forms, depending on the behavior of interest and its social/physical context. Some require observers to sequentially record (by category) various events (e.g., format of instruction, teacher behavior, student/peer responses, likely purpose of student reaction).

ABC charts. Another way to observe student behavior is with an Antecedent-Behavior-Consequence (ABC) chart (also referred to as an Antecedent-Response-Consequence or ARC chart) (see Appendix B for examples of ABC charts). This approach allows an observer to organize anecdotal or descriptive information on the student's interactions with other students and adults in such a way that patterns of behavior often become clear. A modified ABC chart might be individualized to contain several predetermined categories of teacher or peer antecedent behavior, student responses, and consequent events, along with space for narrative recording of classroom observations.

Using scatterplots and ABC charts together. By using the ABC procedure, the student may be observed in settings and under conditions where the behavior is most likely and least likely to occur. A scatterplot to chart the relationship between specific types of instruction and the student's appropriate/inappropriate responses may also be developed.

A scatterplot can be developed to observe and record the relationship between a specific set of classroom variables (e.g., teacher lecture and student off-task behavior) or playground behaviors and to analyze a particular situation. For instance, out-of-seat behavior might be measured in increments of 1-5 minutes, while fights on the school bus may be recorded daily (e.g., critical incident reports). Furthermore, student behavior may be a function of specific teacher-pupil interactions (e.g., there may be a relationship between teacher reprimands and student outbursts). Observing and recording

teacher-pupil interactions may lead to a better understanding of the relationship between these factors of classroom interactions. Both the ABC and scatterplot procedures are useful in identifying environmental factors (e.g., seating arrangements), activities (e.g., independent work), or times of the day (e.g., mornings) that may influence student behavior.

Both ABC and scatterplot recording procedures are useful not only in identifying problem behavior, but also in identifying the classroom conditions that may trigger or maintain the student's behavior. It is also important to observe situations in which the student performs successfully so that IEP teams can compare conditions and identify situations that may evoke and maintain appropriate rather than inappropriate behavior (e.g., in science class as opposed to language arts class). In this way, it is possible to get a clearer picture of the problem behavior, determine the critical dimensions of the behavior, write a precise definition of the behavior, select the most appropriate assessment tools, and develop an effective intervention plan for changing the behavior.

As we already mentioned, multiple measures of student behavior and its social/ environmental contexts usually produce more accurate information than a single measure. This is especially true if the problem behavior serves several functions or purposes that may vary according to circumstance. In our previous example of Mandy's wisecracks, making inappropriate comments during lectures may serve in some instances to get her something (e.g., peer attention). In another classroom, the same behavior may help her to avoid something (e.g., being called on by the teacher). Information gathered through repeated observations of Mandy across settings will enable the IEP team to distinguish among the various purposes for her inappropriate remarks.

Amount versus quality of behavior. Different types of behavior may require different data

collection techniques. For example, it is important to know how often a behavior occurs (e.g., call-outs); in this case, a system that yields the number of behaviors, or *frequency measure*, is appropriate. At other times, knowing how long the behavior occurs is more relevant (e.g., out-of-seat), so that a *duration measure* becomes more useful. Furthermore, the usefulness of documenting the severity or intensity of a behavior is evident when the IEP team tries to measure other disruptive behaviors. To say that Charles was upset two times yesterday may not reflect the fact that he succeeded in disrupting instruction in the entire middle school wing for a total of 45 minutes.

Severity of Disruptive Behavior Rating Rubric

1. Behavior is confined only to the observed student. May include such behaviors as: refusal to follow directions, scowling, crossing arms, pouting, or muttering under his/her breath.
2. Behavior disrupts others in the student's immediate area. May include: slamming textbook closed, dropping book on the floor, name calling, or using inappropriate language.
3. Behavior disrupts everyone in the class. May include: throwing objects, yelling, open defiance of teacher directions, or leaving the classroom.
4. Behavior disrupts other classrooms or common areas of the school. May include: throwing objects, yelling, open defiance of school personnel's directions, or leaving the school campus.
5. Behavior causes or threatens to cause physical injury to student or others. May include: display of weapons, assault on others.

In some cases, it is useful to report the *severity* and *measure* of a behavior using a rubric to capture the magnitude and/or amount of variation in the behavior. This is true with regard to both student and adult behavior. That is, a student tantrum may be minor or extreme and of short or long duration. Teacher reprimands might be insignificant except when they are repeatedly and loudly delivered to the

student for an extended amount of time. The following rubric could be used to observe and record the severity of a student's disruptive behavior.

Indirect Assessment

We know that student behavior usually is related to the context in which it occurs. However, the IEP team will not always be able to directly observe all the events that bring about or maintain specific student behavior. So-called "setting events" (sometimes referred to as slow triggers) can exist within the classroom (e.g., Charles is asked to join a new reading group), or be far removed from it but still exert a powerful influence over student behavior (e.g., Charles has an argument with another student at the bus stop before school). External events of this nature may increase the likelihood of conflict in the classroom, especially if the student is struggling academically and/or dislikes the subject matter. These setting events (or specific antecedents for the behavior) often may not be directly observable. In other cases, the behavior may be serious but not occur frequently enough in settings accessible to adults to be readily observed (e.g., verbal or physical aggression). In these instances, the behavior must be assessed by using indirect measures.

Methods of indirect assessment. *Indirect* or, as it is sometimes called, *informant assessment*, relies heavily on the use of interviews with teachers and other adults (e.g., bus drivers, cafeteria workers, office staff) who have direct contact with the student. (See Appendix C for a sample interview form.) In addition, a semi-structured interview with the student, himself, could provide insight into the student's perspective of the situation and yield a more complete understanding of the reasons behind the inappropriate behavior. It may be useful to follow the same interview format with both the student and significant adults (e.g., special and regular classroom teachers, support personnel) and to compare these two sources of

information. Even elementary aged students can be credible informants, capable of sharing accurate information about contextual factors that influence their behavior. Indirect measures can yield valuable information, but they usually are not as reliable as direct observation measures. For this reason, IEP teams must be careful not to put too much faith in information derived from informant accounts alone. Examples of interviews conducted with teachers and students to help determine the likely function of a student's behavior are included in Appendix D.

Surveys or questionnaires are another source of indirect information. For example, a Problem Behavior Questionnaire can be administered to one or more teachers who have day-to-day contact with a student of concern (see Appendix E for sample Problem Behavior Questionnaire forms). Recalling a typical behavioral episode, teachers read 15 statements and circle a number on the questionnaire that corresponds to the percent of time each statement is true for that student. A second form is used for recording and interpreting the responses from everyone who completed a questionnaire for that student. Any item marked with a three or above on this profile form suggests the potential function of the problem behavior. If there are two or more statements scored as three or above (i.e., 50% of the time) under a particular sub-column (e.g., escape under peers or attention under adults), then it may indicate a possible primary function of the behavior.

In collecting information regarding the context of a behavior problem, it is important to understand that contextual factors may include certain affective or cognitive behaviors, as well. For instance, Juan repeatedly acts out and is verbally threatening during instruction when given lengthy and difficult assignments. Even so, it may not be the assignment itself that triggers the acting-out behavior. Rather, it may be the fact that he knows he doesn't have the skills necessary to complete the work that prompts an anticipation of failure or ridicule.

Or, he may have a family member who is critically ill; therefore, he finds it difficult to concentrate.

Accuracy of Behavior Measurement

There are a number of ways that accuracy in observing and recording student behavior and the social/environmental conditions that surround it can be jeopardized. Common problems include:

- ◆ a vague definition of the behavior (e.g., Charles sometimes gets upset);
- ◆ untrained or inexperienced observers;
- ◆ difficulty observing multiple student behaviors (e.g., out of seat, off task, and rude gestures);
- ◆ potential observer bias regarding the student's behavior (e.g., the observer is subjected to repeated teacher complaints about the severity of the student's classroom conduct); or
- ◆ difficulty precisely capturing classroom interactions (e.g., observing a group learning activity in which students move about the classroom).

In the end, the usefulness of functional behavioral assessment depends on the skills and objectivity of the persons collecting the information. Accordingly, if the information is to be helpful to IEP teams, it must be reliable and complete information about the behavior. Those conducting the functional behavioral assessment must: a) clearly define the behavior of concern and regularly review that definition; b) have sufficient training and practice to collect observation and interview data; c) select the most appropriate assessment procedure(s) for both the behavior and the context; d) collect information across time and settings using multiple strategies and individuals; and, e) conduct routine checks of the accuracy of observer scoring/recording procedures.

4. Analyze Information Using Triangulation and/or Problem Pathway Analysis

Once the team is satisfied that enough information has been collected, the next step is to compare and analyze all the compiled information. Such an analysis helps to determine which specific social, affective, and/or environmental conditions are associated with student behavior. For example, in recalling Vignette II, an analysis of Trish's behavior might lead the team to conclude that whenever Trish does not get her way she reacts by hitting someone. Analysis of the information gathered can be accomplished through techniques called *data triangulation* and *problem pathway analysis*.

Use of a *data triangulation chart* (see Appendix F) allows IEP teams to pull together and visually compare information collected from various sources (e.g., functional interviews, observations using a scatterplot, student questionnaires). Using a data triangulation chart, team members attempt to identify possible patterns of behavior, conditions that trigger the behavior, consequences that maintain or continue the behavior, and, finally, the likely functions the problem behaviors serve for the student.

Problem behavior pathway charts also allow the team to organize information by recording it under the following columns: a) setting events, b) antecedents, c) the behavior itself, and d) likely maintaining consequences for the behavior of concern (see Appendix G). In analyzing information using these techniques, the IEP team can develop an hypothesis statement about the probable function of the behavior and identify one or more variables that may be starting or continuing the behavior.

5. Generate a Hypothesis Statement Regarding Probable Function of Problem Behavior

Using the information that emerges from data triangulation and/or pathway analysis, the team can develop an *hypothesis statement* regarding the likely function(s) of the student behavior. The hypothesis statement can then be used to predict the social/environmental conditions (the context) within which the behavior is most likely to occur. For instance, should a teacher report that Charles swears during reading class, the reason for the behavior might be to: (a) gain attention, (b) avoid instruction, (c) seek stimulation, or (d) some combination of these functions.

Only when the function(s) of the behavior is (are) known is it possible for the IEP team to establish an effective behavioral intervention and support plan that addresses Charles' needs. Following are several examples of hypothesis statements written in such a way that IEP teams can draw specific information from the statement to develop an individualized behavior intervention plan.

- ◆ Charles disrupts reading class by swearing at the teacher when he is asked to read aloud. He is most likely to disrupt the class if he has not had breakfast or if there was a problem at the bus stop. Charles stops swearing when he is told to leave the group.
- ◆ When she does not get what she wants from her peers, Trish calls them names and hits them until they give in to her demands.
- ◆ Juan verbally threatens the teacher when he is given a math assignment that he sees as too lengthy and too difficult, but stops when he is told to find something else to do.

The hypothesis statement is a concise summary of information collected during the assessment phase, a statement that explains or represents a

“best guess” regarding the reason(s) for the behavior. A well-written hypothesis statement gives clear direction to IEP members, who are responsible for developing a behavior intervention plan. It allows the IEP team to spell out a three-fold contingency—when *X* occurs, the student does *Y*, in order to achieve *Z*—and to translate that knowledge into an individualized behavior intervention plan.

6. Test the Hypothesis Statement Regarding the Function of the Problem Behavior

Because of the obvious difficulties associated with problem behavior in the school and classroom, school personnel may be tempted to proceed immediately to designing a behavioral intervention plan. However, in most cases, it is important that the team take the time to make sure that the hypothesis is accurate. To do so, IEP team members should “experimentally manipulate” certain variables to see if the team’s assumptions regarding the likely function of the behavior are accurate. For instance, after collecting data, the team working with Charles may hypothesize that, during reading class, Charles swears at the teacher to escape an aversive academic situation. Thus, the teacher might change aspects of instruction to ensure that Charles gets work that is within his capability and is of interest to him. If these accommodations produce a positive change in Charles’ behavior, then the team can assume its hypothesis was correct and a behavioral intervention plan can be fully implemented. However, if Charles’ behavior remains the same following this change in classroom conditions, a new hypothesis should be formulated.

As a general rule, IEP teams will stay with a plan for at least 5-7 lessons, to distinguish between behavior changes stemming from the novelty of any change in classroom conditions and those changes related specifically to the intervention. It is important to remember that the inappropriate behavior has probably served

the student well for some time and that it will be resistant to change. For this reason, the team will need to be patient when testing its hypothesis regarding the function(s) of the misbehavior.

A procedure known as *analogue assessment* is one way to verify the IEP team’s assumptions regarding the function of a student’s behavior. Analogue assessment involves a contrived set of conditions to test the accuracy of the hypothesis. This procedure allows school personnel to substantiate that a relationship exists between specific classroom events (e.g., an aversive task) and the student’s behavior (e.g., disruptive behavior). This can be accomplished through teacher manipulation of specific instructional variables (e.g., complexity of learning tasks, oral or written student responses), introduction or withdrawal of variables (e.g., teacher attention, physical proximity), or other changes in conditions assumed to trigger the occurrence of problem behavior (e.g., student seating arrangement, desk placement). In this way, the IEP team may be able to determine precisely the conditions under which the student is most (and least) likely to behave appropriately. Finally, similar to an “allergy test,” teachers can briefly sample student responses to a succession of changes in classroom conditions to determine the accuracy of the hypothesis statement.

There are times when it may not be feasible to make changes to classroom variables and to observe their effects on student behavior. A prime example is when a student begins to engage in acting-out or aggressive behavior. In these instances, the IEP team should immediately develop and implement a behavioral intervention plan (before any disciplinary action is required). Then, they should directly and continuously evaluate its impact against any available information about the level or severity of the behavior prior to the intervention. IEP teams can, however, continue to consider information collected through a combination of interviews and direct observation.

Finally, there may be instances when the IEP team may not be able to identify the exact mix of variables that cause the student to misbehave (e.g., composition of the learning group, the academic subject area, teacher expectations) or the exact amount of a specific setting or antecedent variable that serves to trigger the behavior (e.g., repeated peer criticism). Since problem behavior can have multiple sources which can change across time, IEP teams should continue to evaluate and modify a student's behavior—even after an initial intervention plan has been implemented. The nature and severity of the behavior will determine the necessary frequency and rigor of this ongoing process.

SUMMARY OF STEPS TO CONDUCT A FUNCTIONAL BEHAVIORAL ASSESSMENT

To review, in conducting a functional behavioral assessment, the IEP team identifies and defines the problem behavior first in broad and then specific terms (Steps 1 and 2). The team reviews information from various sources (e.g., questionnaires; semi-structured interviews with students, teachers, and others; or observations of students in various settings) and in various forms (e.g., scatterplots or ABC charts) (Step 3). Next, the team carefully examines what they have learned about the behavior and its context in order to determine its function(s) and decides what to do next (Step 4). In some cases, both the purpose of the misbehavior and an appropriate intervention will quickly become apparent, as when a student repeatedly acts up when asked to complete too demanding an assignment in reading. In other instances, the IEP team will need to collect and analyze different types of information and look for multiple clues regarding the source(s) of the problem behavior, such as antecedents that trigger or consequences that maintain acting-out behavior (Step 5).

As we have suggested, no two problems are likely to stem from the exact same source, and

information collected on different students will likely vary in kind and amount. In the end, the team must work to develop a probable explanation of why the student is not behaving appropriately, test the hypothesis (Step 6), and develop a behavior intervention plan accordingly.

THE BEHAVIOR INTERVENTION PLAN

After collecting sufficient information about a student's behavior to determine the likely function of that behavior, the IEP team must develop (or revise) the student's behavior intervention plan. The process of identifying possible behavioral supports and developing and implementing a behavioral intervention plan will be discussed in more detail in the third and final monograph in this series. This plan should include positive strategies, program modifications, and the supplementary aids and supports required to address the disruptive behaviors and allow the student to be educated in the least restrictive environment. It also should contain strategies to teach the student "functionally equivalent" replacement behaviors (i.e., behavior that serves the same purpose but is more acceptable). This is accomplished by drawing upon the information collected during the functional behavioral assessment to determine the most effective and practical intervention(s) and supports to address the student's behavior.

CONCLUSION

According to the 1997 Amendments to the IDEA, the IEP team is required under certain circumstances to develop a functional behavioral assessment plan and a behavior intervention plan to address a student's behaviors that interfere with learning or require disciplinary action. Schools are seeking to better understand the exact conditions under which to implement this provision of IDEA. The persons responsible for conducting the

functional behavioral assessment likely will vary from state to state, district to district. Some functional behavioral assessment procedures will require persons with specific training (e.g., a behavior specialist or a school psychologist). With specialized training and experience, an adjusted job assignment, and ongoing technical support, various IEP team members (e.g., special or general educators, counselors, parents) can conduct different parts of the assessment.

on an accurate assessment of their individual needs. This goal is best accomplished before student behavior becomes so severe that formal disciplinary action is necessary.

Regardless of who is charged with the responsibility to conduct a functional behavioral assessment, emphasis should be on developing both a short- and long-term plan to enhance the student's ability to benefit as much as possible from classroom instruction. Students can be helped to accomplish this goal through positive behavior interventions based

ADDITIONAL INFORMATION ON FUNCTIONAL BEHAVIORAL ASSESSMENT

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OTHER AVAILABLE RESOURCES

The Center for Effective Collaboration and Practice has produced additional materials on improving services for children and youth with emotional and behavioral problems. Most of our products are free of charge and available by contacting the Center, except where otherwise indicated. These and other related Center documents are also available on our web site, and we encourage you to download them and make and distribute copies.

- *Addressing Student Problem Behavior—Part I: An IEP Team’s Introduction to Functional Behavioral Assessment and Behavior Intervention Plans.* Written with some of the country’s leading experts, this document serves as a useful tool for educators to understand the requirements of IDEA 97 with regard to addressing behavior problems and implement the fundamental principals and techniques of functional behavioral assessment and positive behavioral supports with students with behavior problems.

The third document in this series – *Addressing Student Problem Behavior—Part III: Creating and Implementing Behavior Intervention Plans*—is forthcoming.

- *Functional assessment and behavioral intervention plans: Part 1* is a two-hour video workshop on functional behavioral assessment. Produced as a cooperative effort between the Center for Effective Collaboration and Practice and Old Dominion University as part of ODU’s state-funded technical assistance project, it covers the definitions and origins of functional behavioral assessment, what is involved in conducting a functional behavioral assessment and the criteria for determining when one is needed, and other relevant issues surrounding this technique. It is available from Training and Technical Assistance Center, Old Dominion University, 1401 West 49th Street, Norfolk, VA 23529-0146.
 - *The National Agenda for Achieving Better Results for Children and Youth with Serious Emotional Disturbance (SED).* Prepared for the U.S. Department of Education, the National Agenda offers a blueprint for change and presents seven strategic targets and cross-cutting themes for achieving better results for children and youth with SED.
 - *Early Warning, Timely Response: A Guide to Safe Schools.* This document was produced in collaboration with the National Association of School Psychologists in response to the President’s call for the development of an early warning guide to help “adults reach out to troubled children quickly and effectively.” This guide has been distributed to every district in the nation to help them identify children in need of intervention into potentially violent emotions and behaviors. It can be acquired through the U.S. Department of Education by calling toll-free 1-877-4ED-PUBS or via the Center’s web site.
 - *Safe, Drug-Free, and Effective Schools for ALL Students: What Works!* This report came out of a collaborative effort between the Office of Special Education Programs and the Safe and Drug-Free Schools Program, both of the U.S. Department of Education. It profiles six different approaches in three different communities or districts to addressing schoolwide prevention and reduction of violent and aggressive behavior by all students. The report is the result of a literature review and focus groups with students, families, administrators, teachers, and community change agents from local agencies.
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