

**VIRGINIA DEPARTMENT OF EDUCATION
DIVISION OF SPECIAL EDUCATION AND STUDENT SERVICES**



**GUIDELINES FOR CONDUCTING FUNCTIONAL
BEHAVIORAL ASSESSMENT AND DEVELOPING POSITIVE
BEHAVIOR INTERVENTION AND SUPPORTS/STRATEGIES**

The intent of these guidelines is to provide readers with general information regarding the functional behavioral assessment (FBA) process. The guidelines are not intended to serve as an alternative to the in-depth training required to conduct an FBA and develop a quality behavior intervention plan (BIP).

The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, sexual orientation, gender identity, age, political affiliation, or against otherwise qualified persons with disabilities. The policy permits appropriate employment preferences for veterans and specifically prohibits discrimination against veterans.

© 2015 Commonwealth of Virginia Department of Education

This document may be reproduced and distributed for educational purposes. No commercial use of this document is permitted. Contact the Division of Special Education and Student Services prior to adapting or modifying this document for noncommercial purposes.

Virginia Department of Education
Division of Special Education and Student Services
Web site: www.doe.virginia.gov/special_ed

Acknowledgements

Internal Reviewers

John Eisenberg, Assistant Superintendent, Special Education & Student Services, Virginia Department of Education

Dr. Patricia C. Abrams, Director, Special Education Instructional Services, Virginia Department of Education

Andrew Greenidge, Monitoring Specialist, Special Education Program Improvement, Virginia Department of Education

Ellen Harrison, Specialist – Emotional Disabilities, Special Education Instructional Services, Virginia Department of Education

Patricia Haymes, Director, Office of Dispute Resolution & Administrative Services, Virginia Department of Education

Deborah Johnson, Specialist – Intellectual Disabilities, Special Education Instructional Services, Virginia Department of Education

Dr. Teresa Lee, Specialist – Learning Disabilities/Attention Disorders, Special Education Instructional Services, Virginia Department of Education

Erin Smydra, Specialist – Autism/Intellectual Disabilities/Assistive Technology, Special Education Instructional Services, Virginia Department of Education

External Reviewers

Julie Baker, Supervisor of Special Education, Botetourt County Public Schools

Linda S. Bradford, Education Director, VCU Medical Center, Virginia Treatment Center for Children

Carroll Butler, Professor, Old Dominion University

Tammy Childress, Teacher-Liaison, Intensive Day Programs, Special Education, Chesterfield County Public Schools

Doug Cox, Consultant

Brookie Fowler, Coordinator of Disabilities, Hopewell Public Schools

Dr. Robert A. Gable, Constance and Colgate Darden Professor of Special Education, Old Dominion University

Elizabeth Germer, Director, Special Education and Student Services, Falls Church City Public Schools, Region IV

Margaret (Kay) Kline, George Mason University, TTAC

Carolyn Lamm, Supervisor, Student Support, Fauquier County Public Schools

Dr. Nicholas Smith, Principal, Ivy Creek School, Charlottesville

Special Education Directors Regional Representatives

Sharon Trimmer, Director of Special Education, Department of Juvenile Justice

Virginia Council of Administrators of Special Education (VCASE)

Pat Woolard, Old Dominion University, TTAC

Nicole Wright-Guise, Alexandria Public Schools, Aspiring Leader

Table of Contents

Background	1
Introduction	1
Developing a Function-based Intervention	2
When to Consider a Functional Behavioral Assessment	3
Research Supporting Functional Behavioral Assessment	4
Conducting a Functional Behavioral Assessment	5
Verify the Seriousness of the Problem Behavior	5
Define the Problem Behavior	5
Collect Information on the Reasons Behind the Problem Behavior	6
Analyze Information Collected on the Problem Behavior	7
Develop a Hypothesis about the Function of the Behavior	8
Verify the Hypothesis about the Function of the Problem Behavior	8
Develop and Implement a Behavioral Intervention Plan	9
Evaluate the Fidelity of Implementation of the Plan	10
Evaluate the Effectiveness of the Intervention Plan	11
Modify the Intervention Plan	11
Conclusion	12
References	13
Appendix A – Forms	16

Background

The 2004 reauthorization of the Individuals with Disabilities Education Act, renamed the Individuals with Disabilities Education Improvement Act (IDEA), contains various provisions that relate to the academic performance and classroom conduct of students with disabilities. These legislative provisions have a significant impact on the roles and responsibilities of school personnel in Virginia. In response to this legislation, the Virginia Department of Education (VDOE) formed a committee to examine various aspects of IDEA. The committee was charged with addressing those legislative provisions that relate to student behavior that impedes the teaching/learning process. The information contained in this document grew out of a series of discussions on evidence-based practices for dealing with student behavior problems and is intended to address best practices in conducting a functional behavioral assessment (FBA) and developing a behavior intervention plan (BIP). Committee members included parents, school administrators, psychologists, general and special education classroom teachers representing the public and private sectors, university researchers, teacher educators, and mental health and other community agency personnel. This guidance document is a revision of *Functional Behavior Assessments and Positive Intervention and Supports* (fourth edition, 2008).

Introduction

The federal regulations implementing IDEA do not define the terms “FBA” and “BIP” and specifically address FBAs and BIPs only in the context of discipline of students with disabilities. The *Regulations Governing Special Education Programs for Students with Disabilities in Virginia*, effective January 25, 2010, (the Virginia Regulations) have added definitions of those terms, but otherwise mirror the federal regulations.

The Virginia Regulations provide that “functional behavioral assessment means a process to determine the underlying cause or functions of a child’s behavior that impede the learning of the child with a disability or the learning of the child’s peers. A functional behavioral assessment may include a review of existing data or new testing data or evaluation as determined by the [Individualized Education Program] IEP team.” In addition, the Virginia Regulations describe a “behavioral intervention plan” as a “plan that utilizes positive behavioral interventions and supports to address behaviors that interfere with the learning of students with disabilities or the learning of others or behaviors that require disciplinary action.”

School divisions are required to conduct FBAs and implement BIPs for students who have been subject to disciplinary actions where the conduct was determined to be a manifestation of the student’s disability. School divisions may conduct FBAs and implement BIPs for students who have been long-term removed for conduct determined not to be a manifestation as deemed appropriate by the student’s IEP team.

While neither the federal nor Virginia Regulations address other uses of FBAs and BIPs, both sets of regulations require that, as a part of IEP development, when a student’s behavior impedes his learning or that of others, the IEP team must consider the use of positive behavioral interventions, strategies and supports to address the behavior. A BIP is, by regulatory definition, one means of addressing interfering behaviors. As a result, although not directly addressed in

the regulations, the VDOE has taken the position that, when an IEP team has conducted an FBA and developed a BIP for a student with a disability whose behavior interferes with his learning or that of others, that BIP must be treated as a part of and implemented with the same fidelity as the remainder of the IEP.

Practice recommendations contained in this document are based on applied behavior analysis principles. Information is presented for school employees, as long as they do not represent themselves as Licensed Behavior Analysts or Board Certified Behavior Analysts (BCBA) and do not practice behavior analysis professionally unless they obtain one of those licenses. The BCBA's are practitioners who have met the qualifications set by the national Behavior Analyst Certification Board (BACB). The terms and guidance contained in this document are not identical to BCBA practice or the qualifications set by the national Behavior Analyst Certification Board (BACB).

Federal and state regulations require that the relationship between learning and behavior must be a key ingredient in planning the IEP for students with disabilities. Practitioners in schools may achieve this through collaboration and the use of formal and informal methods, which will vary from clinical practice. Key differences between guidance provided for school practitioners and BCBA's include guidance on implementing functional behavior assessments (FBA) and recommendations for use of functional analysis. The Virginia Department of Education provides simplified and formal options for FBAs, whereas this distinction is not made in clinical practice. The VDOE recommends the use of positive behavioral interventions and supports to address the behaviors which interfere with the student's learning or the learning of the others. The VDOE does not provide guidance for punishment procedures within the context of an FBA or BIP.

Developing a Function-based Intervention

Here are two brief case studies that will be referenced throughout this document.

Ms. Jones is a second year, middle school teacher who is responsible for teaching multiple subjects to a diverse group of students, including several students who pose classroom management problems. For example, Ms. Jones was about to ask the class questions about the lesson on plants and photosynthesis, when one of her students, Ben, blurted out, "This is really stupid. Don't bother asking me any of your dumb questions." And, on multiple occasions, Ben has ridiculed and cursed at several of his classmates ("you are so _____; what do you know?") when they began to answer questions about a previous lesson. Because he also is verbally defiant in response to her attempts to offer corrective feedback, Ms. Jones has written multiple office disciplinary referrals. The principal has even discussed with her the possibility of suspension; but, nothing has seemed to change Ben's behavior.

In another classroom in the same building, Mr. Lawrence, is struggling with several students, the most challenging being Mary. Mary has significant intellectual disabilities and limited communication skills and, for whatever reason, sometimes resorts to biting or scratching herself during reading instruction. Mary is currently being served in a separate class for students identified with intellectual disabilities. Mr. Lawrence has limited experience with this kind of

problem and has not been able to find an effective intervention. He has begun to compile a record of the number of times and what is taking place in class at the time and has asked Mrs. Fry, the special education teacher, to meet with him to discuss the problem and 'brainstorm' possible interventions.

Teachers at all grade levels know that one or two students can monopolize a considerable amount of time and energy when they disrupt instruction. When these situations occur, teachers must look for ways to reduce or eliminate the problem behavior. Common intervention strategies include: reviewing classroom expectations with students, using physical proximity to students, promoting high levels of academic engagement, praising appropriate student behavior, giving regular feedback on performance, and providing corrective instruction following misbehavior (e.g., Kerr & Nelson, 2010). Unfortunately, for some students, these strategies are not enough to reduce or eliminate the inappropriate behavior and other more intensive interventions must be considered.

When to Consider a Functional Behavioral Assessment

Federal legislation and state law include provisions that address student behavior problems that interfere with classroom instruction. The IDEA and the *Regulations Governing Special Education Programs for Children with Disabilities in Virginia*, effective January 25, 2010 (the Virginia Regulations) require schools to address 'impeding' behavior through the use of functional behavioral assessment, behavioral intervention planning, and positive academic and behavioral supports.

Neither the IDEA legislation nor its regulations provide a definition of an FBA or a BIP. However, the Office of Special Education Programs (OSEP) within the United States Department of Education (USED) has provided the following description:

An FBA focuses on identifying the function or purpose behind a child's behavior. Typically, the process involves looking closely at a wide range of child-specific factors (e.g., social, affective, environmental). Knowing why a child misbehaves is directly helpful to the IEP Team in developing a BIP that will reduce or eliminate the misbehavior. (*Questions and Answers on Discipline Procedures*, U.S. Department of Education, Office of Special Education and Rehabilitative Services (OSERS; USED, 2009).

OSEP has also added the clarification that "an FBA may include both observation and formal assessments." (Letter to Glenna Gallo, personal communication, April 2, 2013, U.S. Department of Education, OSEP.)

Adding to this broad federal foundation, the Virginia Regulations provide:

[An FBA is] a process to determine the underlying cause or functions of a child's behavior that impede the learning of the child with a disability or the learning of the child's peers. [It] may include a review of existing data or new testing data or evaluation

as determined by the IEP team.

[A BIP is] a plan that utilizes positive behavioral interventions and supports to address behaviors that interfere with the learning of students with disabilities or with the learning of others or behaviors that require disciplinary action (Virginia Regulations, 2010).

An FBA and BIP can be completed any time that it becomes necessary to address a child's behavioral challenges; however, regulations require that an FBA be completed when the IEP team determines that (a) a behavior is the manifestation of a disability and the student does not have a behavioral intervention plan, or (b) sooner, if appropriate, if the student's behavior interferes with the student's learning or that of others.¹ The FBA is considered an evaluation which requires the consent of the parent or eligible student if it involves more than a review of existing data. Behavioral intervention plan means a plan that utilizes positive behavioral interventions and supports to address behaviors which interfere with the learning of students with disabilities or with the learning of others or that require disciplinary action.

Research Supporting Functional Behavioral Assessment

The use of an FBA to identify the function (or reason behind) student problem behavior has strong empirical support (Gable, Parks, & Scott, 2014; Gage, Lewis, & Adamson, 2010) and, because an FBA facilitates the development of a behavior intervention plan that focuses on skill building rather than punishment, it is very appropriate for educational settings (McIntosh, Brown, & Borgmeier, 2008). The FBA is a way for school personnel to identify relationships between environmental events and the occurrence (versus non-occurrence) of a behavior (Dunlap et al., 1993). The purpose for conducting an FBA is to identify events that predict and maintain student behavior (Steege & Watson, 2009). The usefulness of FBA is based on the knowledge that: (a) behavior serves a function for the student—there is something in it for the student, (b) behavior is related to the context in which it occurs—classroom, hallway, cafeteria, etc., and (c) knowing the function of the behavior enables school personnel to develop an intervention plan aligned with the function of the behavior (e.g., Dunlap, Kern-Dunlap, Clarke, & Robbins, 1991; Gable et al., 2014; Scott, Alter, & McQuillan, 2010).

In their review of the accumulated research, Ervin et al. (2001) found that the majority of FBA-based interventions conducted in school settings produced positive changes in pupil behavior. More recently, Goh and Bambara (2012) found essentially the same thing, namely that FBA-based interventions are effective across students with and without disabilities and across grade levels. Based on their review, Goh and Bambara asserted that an FBA can play a crucial role in determining the effectiveness of an intervention.

With the introduction of FBA, there has been a fundamental shift in the way school personnel address behavior problems—from punitive consequences to instructional strategies.

¹ Behavior that interferes with a student's learning or that of others may also be addressed through goals, services and accommodations in the IEP.

The logic behind functional assessment is that practically all student behavior is purposeful—it satisfies a need that is related to the context in which it occurs (e.g., in the classroom, cafeteria, hallway). Students will likely change their behavior when they are taught a different response that more reliably, effectively, and efficiently satisfies the same need or produces the same outcome. For this reason, identifying the motivation or function for student misbehavior—what the student gets, avoids, or communicates through the behavior—is essential to finding ways to address behavior that disrupts the teaching and learning process.

Conducting a Functional Behavioral Assessment

An FBA relies on various indirect (e.g., interviews, questionnaires) and direct (e.g., antecedent-behavior-consequence form, event recording, interval recording) data collection strategies to identify the function (or reason) behind inappropriate or unacceptable student behavior (see Appendix A for sample forms). The goal is to identify the major factors associated with the behavior (e.g., those factors that most directly and predictably influence the occurrence versus the non-occurrence of the behavior; Gable et al., 2014). The purpose for conducting an FBA is to identify a behavior that serves the same function as the inappropriate behavior but is more acceptable or appropriate. By carefully examining the problem behavior, the context in which it occurs, and identifying the reason(s) why a student misbehaves, school personnel are able to develop an intervention plan aligned with the function of the behavior and designed to reduce or eliminate behavior that impedes learning and, at the same time, promote a new, replacement behavior.

An FBA is widely viewed as a team problem-solving process. Experience has shown that when an FBA is conducted by a team and, when the team develops an intervention plan, its members are more likely to implement it with fidelity and continue to do so across time. It is especially useful to have one or more team members who have knowledge of applied behavior analysis (Gable et al., 2014). What follows is a description of a 10-step FBA process developed by Gable and his colleagues (Gable, Quinn, Rutherford, & Howell, 1998).

1. Verify the Seriousness of the Problem Behavior

Many behavior problems in the educational setting can be eliminated by consistently applying strategies of proven effectiveness, including: clear rules and expectations, precorrection, behavior specific feedback to shape pupil responses, and self-management (e.g., Kerr & Nelson, 2010). However, when it is apparent that the problem behavior cannot be resolved through the use of evidence-based practices and, because of the seriousness of the problem, it warrants further attention, school personnel should consider initiating an FBA.

2. Define the Problem Behavior

Once it has been determined that the problem behavior merits further action, the teacher and the IEP team should precisely define the problem behavior. In returning to the two classroom scenarios, if the team relies on only a vague description of the behavior, such as “Ben has a poor attitude or Mary is aggressive,” it will be difficult to accurately measure the behavior,

decide on an appropriate intervention, or evaluate its subsequent success. For that reason, definitions of behavior should be stated in measurable, observable, and objective terms. After some preliminary information is collected, the team can refine the definition and include multiple examples of the behavior (e.g., when asked a question by the teacher, Ben disrupts instruction—refuses to respond to teacher requests, argues with the teacher, swears at classmates, and fails to comply with teacher requests). For Mary, the definition would read like this: Mary repeatedly bites or scratches her arm during reading instruction with the paraprofessional; this behavior results in physical harm (i.e., bite or scratch marks or bruises and sometimes breaks the skin).

3. Collect Information on the Reasons Behind the Problem Behavior

In some instances a simplified FBA may be appropriate. A simplified FBA involves discussion among those teachers with direct knowledge of the student and the context of the problem behavior. The team discusses past observations and concentrates on predictable relationships between environmental events and student behavior. Together, the team decides on a plan of intervention. A more formal FBA is warranted when a simplified approach has not produced a successful plan (Scott, 2013).

With a more formal FBA, team members observe the student and the context in which the problem behavior occurs to determine the exact nature of the problem. The team generally collects information on the times, conditions, and individuals present when problem behavior is most versus least likely to occur; the events or conditions that typically occur before and after the behavior; and other relevant information regarding the behavior (please see Appendix A for samples of data collection forms). An examination of these data may suggest times and settings in which to conduct further observations to document those variables that are most predictive of appropriate versus inappropriate student behavior. It often is useful to observe situations in which the student performs successfully as well, to compare classroom conditions that evoke appropriate versus inappropriate behavior.

Teams are not always able to observe the events that precipitate or maintain student misbehavior (Nichols, 2000). Accordingly, teams may need to collect indirect as well as direct observation data to identify the likely reasons behind the misbehavior. Indirect methods include: a review of the student's cumulative records, such as health, medical, and educational records or structured interviews with teachers and other school personnel (e.g., bus driver, cafeteria workers). Let's consider the case studies on Ben and Mary. Conducting a structured interview with Ben may reveal that he would rather act up than fail to respond correctly to teacher requests in front of his classmates; whereas, interviews with Mary's teacher and the paraeducator might yield insights regarding specific aspects of instruction (e.g., length, difficulty level, interest areas) not otherwise available.

In most FBAs, different school personnel collect multiple types of information, since a single source will not produce an accurate picture—especially if the problem behavior serves various functions under different circumstances. For problems that are neither too frequent nor too severe, it may be appropriate to rely on indirect means of data collection, a process that is strengthened when multiple team members collect data (Gable et al., 2014). Some authorities

recommend using indirect assessment (i.e., student or teacher interviews; rating scales) as the basis for generating a hypothesis statement and then manipulation of events in the setting to verify the accuracy of the hypothesis; others encourage consistent use of interviews and other forms of indirect measurement, along with direct observation (i.e., frequency count; Gable et al., 2014). Scott and Kamps (2007) suggest that there may be a “middle ground” when the student’s behavior is neither too complicated nor too severe. The information collected on low intensity behavior that serves as the basis of the hypothesis statement might consist of brief observation, along with indirect measures, such as the Functional Assessment Checklist for Teachers and Staff (FACTS; March et al., 2000) student interviews (e.g., Kern, Dunlap, Clarke, & Childs, 1994; Reed, Thomas, Sprague, & Horner 1997) or teacher questionnaires (e.g., Problem Behavior Questionnaire; Lewis, Scott, & Sugai, 1994). The more agreement there is between indirect and direct measures, the more likely it is that the results are accurate (Gable et al., 2014).

4. Analyze Information Collected on the Problem Behavior

Once the IEP team is satisfied that enough information has been collected, the next step is to analyze the data. The team looks for a pattern of events that predicts when and under what circumstances the behavior is most versus least likely to occur, what is maintaining the behavior, and what is the likely function of the behavior. Scott et al. (2010) advocate a straight-forward approach to data analysis that consists of a simplified version of the Competing Pathways Chart developed by Sugai, Lewis-Palmer, and Hagan-Burke (1999) and consists of the following questions:

- When and where does the behavior occur? When and where does it not occur?
- What’s happening - with regard to the problem behavior?
- What is the purpose of the behavior – why does the student do it?

Another option is for the team to ‘triangulate’ its data, meaning that three different sources of information are collected and recorded on a three-column form to help identify any patterns that emerge across indirect (e.g., adult and student interviews, problem behavior questionnaire) and direct measures of behavior (e.g., antecedent-behavior-consequences [ABC] form, scatterplot, frequency count, interval recording).

Upon review, the team may conclude that Ben disrupts class by blurting out inappropriate statements or cursing at a classmate whenever the teacher calls on him to read aloud in class. In this example, his behavior typically leads to removal from the group and the lesson. For Mary, her self-injurious behavior consists of biting and scratching and, when she bites or scratches herself, the paraeducator discontinues reading instruction. In compiling information on student behavior, it is important to keep in mind that even an occasional event or unusual condition cannot be ruled out as a reason for the problem behavior (Virginia Department of Education, 2009).

5. Develop a Hypothesis about the Function of the Behavior

Next, the IEP team formulates a hypothesis (or motivation) statement regarding the likely function of the problem behavior. The statement relates to what the data suggest the student gains, avoids or gets out of, or may be communicating by engaging in a particular behavior. While there sometimes are multiple explanations, usually it is advantageous to concentrate on the primary function of the problem behavior (Alter, Conroy, Mancil, & Haydon, 2008), the explanation that accounts for the most change or variability in pupil behavior (Gable et al., 2014). The hypothesis statement can then be written to predict the conditions under which the behavior is most likely to occur, the behavior itself, what the student accomplishes, and the possible reason(s) why the student engages in the behavior. For example, removal from instruction may have been exactly what Ben wanted to happen, namely when presented with an especially challenging task, the behavior escalates and Ben is removed from class, which allows him to escape from the task demands of the teacher. On the other hand, Mary may bite and scratch to escape from reading instruction and to express frustration with the task demands of the paraeducator but, because of expressive language deficits, is unable to express herself in a more acceptable manner.

6. Verify the Hypothesis about the Function of the Problem Behavior

Before proceeding with an intervention, it is useful to confirm the specific conditions under which the student misbehaves. A traditional functional analysis requires experimental manipulation of multiple variables under very controlled conditions and may not be feasible in most educational settings. In contrast, a mini-functional analysis consists of the systematic manipulation of two variables--events that precede the behavior and events that follow the behavior, to measure their differing effects on the behavior. In other instances, a structural analysis may be an appropriate option. With a structural analysis, school personnel only manipulate various antecedent events in an attempt to verify their assumptions regarding the likely function(s) of the behavior (Gage & Lewis, 2010). For instance, the team may hypothesize that during class discussions, Ben is disruptive because he sees the work as too difficult. In this case, the team decides to make adjustments in the difficulty level of the questions posed to Ben and to call on another student first so he has a model of the correct response. If this strategy produces a positive change in Ben's behavior, then the team can assume its hypothesis was correct and a behavioral intervention plan can be fully implemented; however, if his behavior is unchanged, then a new hypothesis needs to be formulated and tested.

The team might take a different course of action with Mary. The team might conduct a brief functional analysis, manipulating various classroom conditions, including: teacher attention; escape from a task; and, a control condition, a condition under which Mary has evidenced little or no self-injurious behavior (SIB). After conducting a brief functional analysis, the team concludes that Mary engages in SIB when the reading lesson is lengthy and time-consuming. The fact that the occurrences of self-injurious behavior are brief suggests that her self-injurious behavior is environmentally-maintained.

In some instances, it may not be necessary or appropriate to manipulate classroom conditions to observe their effects on student behavior. For instance, when a student engages in severe acting-out or aggressive behavior, the team should hypothesize the likely motivation behind the behavior, immediately implement an intervention, and evaluate its impact against ongoing data collection. Based on this analysis, the team should be ready to make any necessary adjustments in the original intervention plan.

7. Develop and Implement a Behavioral Intervention Plan

After collecting enough information to identify the function of the behavior, the IEP team must develop or revise an existing behavioral intervention plan. The plan should be written by school personnel who have direct knowledge of the student. It should include one or more strategies to eliminate the problem behavior and one or more strategies to promote a replacement behavior, and any supplementary aids or supports required to address the behavior. It also is important to consider any staff supports or skill training that is necessary to implement the proposed plan. When it is appropriate, multiple intervention options might be presented to the student who is asked to rank order them.

Teams typically develop an intervention plan that includes one or more of the following strategies or procedures:

- Teach the student more acceptable behavior that serves the same function as the inappropriate behavior (e.g., ways to get peer attention through positive social initiations) or achieves the same outcome (e.g., allows the student to take a short break during a very lengthy assignment).
- Modify the classroom setting events (e.g., physical arrangement of the classroom, general classroom management strategies, grouping arrangements) to decrease the probability of inappropriate behavior occurring and to increase the likelihood of replacement behavior occurring.
- Modify the antecedent events (e.g., introduce advanced organizers or use scaffolded instruction).
- Modify the consequent event (e.g., contingency contract, descriptive praise, verbal and nonverbal feedback).
- Modify aspects of the curriculum and/or instruction (e.g., multilevel instruction, matching student abilities and interests).
- Introduce a reinforcement-based intervention (e.g., systematic reinforcement of an alternative or incompatible behavior).
- Manipulating environmental variables has a high probability of producing a positive change in behavior (Scott, 2013).

In the two previous examples, the team determined that, based on a careful analysis of the data, for Ben, in-class assignments should be shortened and that high probability tasks should be interspersed throughout the day, along with differential reinforcement for incompatible behavior. The team also discussed the possibility of self-control training. In contrast, for Mary, the team determined that a combination of extinction, differential reinforcement of other behavior, and functional communication training using assistive technology constituted a logical intervention.

For the majority of problem situations, there will be more than one solution that can result in a positive outcome. In some cases, the team might wish to present a list of possible interventions and have the student rank order them from least to most acceptable. Regardless of the actual intervention, it is important to ensure that the student has frequent opportunities to engage in and be reinforced for demonstrating the replacement behavior. It is essential that the family realizes the importance of its role in providing supports and reinforcing the new replacement behavior as well. As a general rule, the student should have at least twice as many opportunities to be reinforced for engaging in the replacement behavior; otherwise, it is unlikely that there will be any change in behavior.

In analyzing behavior, it is important to recognize that students come from diverse backgrounds. Norms and expectations may vary from student to student as well as styles of social interaction (Townsend, 2000). Thus, in developing behavioral intervention plans, IEP teams should take into account gender, ethnic, cultural, and linguistic differences among students.

The success of an intervention plan rests on the student's willingness and ability to engage in the appropriate behavior without continued external support. Accordingly, teams need to incorporate strategies designed to promote the maintenance and generalization of appropriate student behavior. One strategy is to teach peers and other adults in the school and or community and home to prompt and to reinforce the positive behavior of classmates; another is to instruct the student in the use of self-management, self-talk, and/or self-cueing to engage in the replacement behavior (Virginia Department of Education, 2009).

It is important for the team to make function-based decisions about the most appropriate intervention. The team may need to adjust the complexity of the intervention according to the seriousness of the problem and to 'bundle' multiple interventions (e.g., changes in instruction and reinforcement). Umbreit, Ferro, Liaupsin, and Lane (2007) have developed a practical guide to facilitate the decision-making process.

8. Evaluate the Fidelity of Implementation of the Plan

Fidelity of implementation refers to the extent to which an intervention is delivered in the way it was intended to be delivered (Lane, Bocian, MacMillan, & Gresham, 2006). It is especially important that the IEP team monitor both the accuracy and the consistency with which the intervention plan is implemented. Otherwise, it will be impossible for the team to distinguish between a flawed intervention and a potentially effective intervention that was poorly

implemented (Virginia Department of Education, 2009). To monitor implementation, the team must put in writing the various components of the intervention plan, along with the individuals responsible for its implementation. Then, a checklist of steps or a script—a step-by-step description of the intervention and its application, can be developed for each person responsible for implementing the plan (Lane et al., 2006). The form should be completed every several days. Team members have found it is useful to record the operational definition of the target and the replacement behavior and spell out the intervention on the form.

9. Evaluate the Effectiveness of the Intervention Plan

A second evaluation procedure must be developed to evaluate changes in the behavior itself. Initial or baseline information can serve as a standard against which to judge subsequent changes in student behavior. Evaluating the effects of the intervention will yield data with which the team can decide about future modifications in the intervention plan. Ongoing collection and review of the data can help to determine the effects of the intervention across time. It is important to collect data on changes in both the inappropriate behavior and the replacement behavior so that the IEP team can more accurately evaluate the overall effectiveness of the intervention plan.

10. Modify the Intervention Plan

An intervention plan should be examined regularly and revised whenever the IEP team feels that an adjustment is necessary. Reasons to modify the intervention plan include:

- The student no longer exhibits the problem behavior.
- The situation has changed and the plan no longer addresses the student’s needs.
- The IEP team determines during a manifestation determination review that the behavior intervention strategies are inconsistent with the student’s IEP or placement.
- The original plan is not producing positive changes in the student’s behavior.

It is worth underscoring the fact that not all problem behavior warrants a formal FBA. There is growing appreciation for the role of “function-based thinking” (Hershfeldt, Rosenberg, & Bradshaw, 2010); whereby school personnel look beyond the behavior and ask the question—why is the student acting that way? This is not to minimize the significance of the behavior; rather, it is recognition that all behavior serves a purpose and, by identifying the likely reason for the behavior, school personnel are in a better position to deal with mild to moderate problems. Drawing upon research-based components of FBA, teachers are able to respond immediately in ways that reduce the need for a more elaborate FBA (Hershfeldt et al., 2010). At the same time, school personnel can identify what resources currently are in place and where there might be gaps to be filled with evidence-based practices that can serve a proactive, preventative function.

Conclusion

In order to change the lives of students who have behavior problems in positive and significant ways, we need to better understand the relationship between environmental events and student behavior (Steege & Watson, 2009). By conducting an FBA and developing a BIP that is aligned with the function of the problem behavior, IEP teams can draw upon a growing number of evidence-based practices to provide academic and/or behavioral supports that increase the likelihood students will attain more positive outcomes (Gable et al., 2014). With adequate in-service training and experience, along with administrative and technical support, experience has shown that IEP teams can resolve a wide range of problem behaviors.

References

The location and/or content of the Web site links may have changed since the publication of this document.

- Alter, P. J., Conroy, M. A., Mancil, G. R., & Haydon, T. (2008). A comparison of functional behavioral assessment methods with young children: Descriptive methods and functional analysis. *Journal of Behavioral Education, 17*, 200-219.
- Dunlap, G., Kern-Dunlap, L., Clarke, S., & Robbins, G. R. (1991). Functional assessment, curricular revision, and severe behavior problems. *Journal of Applied Behavior Analysis, 24*, 387-397.
- Dunlap, G., Kern, L., dePerczel, M., Clarke, S., Wilson, D., Childs, K. E., & Falk, G. D. (1993). Functional analysis of classroom variables for students with emotional and behavioral disorders. *Behavioral Disorders, 18*, 275-291.
- Ervin, R. A., Radford, P. M., Bertsch, K., Piper, A. L., Ehrhardt, K. E., & Poling, A. (2001). A descriptive analysis and critique of the empirical literature on school-based functional assessment. *School Psychology Review, 30*, 193-210.
- Gable, R. A., Park, K., & Scott, T. (2014). Functional behavioral assessment and students at risk for or with emotional disabilities: Current issues and considerations. *Education and Treatment of Children, 37*, 111-135.
- Gable, R. A., Quinn, M. M., Rutherford, R. B., & Howell, K. (1998). Addressing problem behavior in schools: Use of functional assessments and behavior intervention plans. *Preventing School Failure, 42*, 106-119.
- Gage, N.A., & Lewis, T.J. (2010). Structural analysis in the classroom. *Beyond Behavior, 19*, 3-11.
- Gage, N. A., Lewis, T., & Adamson, R. M. (2010). An examination of 35 years of Behavioral Disorders: What, how, and who has been published. *Behavioral Disorders, 35*, 280-293.
- Goh, A. E., & Bambara, L. M. (2010). Individualized positive behavior support in school settings: A meta-analysis. *Remedial and Special Education*. Advance online publication. doi: 10.1177/0741932510383990
- Hershfeldt, P. A., Rosenberg, M. S., & Bradshaw, C. P. (2010). Function-based thinking: A systematic way of thinking about the function and the role it plays in changing student behavior problems. *Beyond Behavior, 19*, 12-21
- Individuals with Disabilities Education Act of 1997, P.L. 105-17, 20 U.S.C. § 1400 *et seq.*

Individuals with Disabilities Education Act of 2004, P.L. 108-446.

Kern, L., Dunlap, G., & Clarke, S., & Childs, K. (1994). Student-assisted functional assessment interview. *Diagnostique, 19*, 29-39.

Kerr, M. M., & Nelson, C. M. (2010). *Strategies for addressing behavior problems in the classroom* (6th ed.). New York, NY: Macmillan.

Lane, K., Bocian, MacMillan, D., & Gresham, F. (2004). Treatment integrity: An essential but often forgotten component of school-based interventions. *Preventing School Failure, 38*(3), 36-43.

Lewis, T., Scott, T., & Sugai, G. (1994). The Problem Behavior Questionnaire: A teacher-based instrument to develop functional hypotheses of problem behavior in general education classrooms. *Diagnostique, 19*, 103-115.

Lowman, S., & Borgmeier, C. (n.d.) Practical Functional Behavioral Assessment Training Manual for School-Based Personnel: Participant's Guidebook. Retrieved from: http://www.pbis.org/common/pbisresources/publications/PracticalFBA_TrainingManual.pdf

March, R., Lewis-Palmer, T., Brown, D., Crone, D., Todd, A.W., & Carr, E. (2000). *Functional assessment checklist for teachers and staff (FACTS)*. Eugene, OR: University of Oregon, Education and Community Services.

McIntosh, K., Brown, J. A., & Borgmeier, C. J. (2008). Validity of functional behavior assessment within a response to intervention framework: Evidence, recommended practice, and future directions. *Assessment for Effective Intervention, 34*, 6-14.

Nichols, P. (2000). The role of cognition and affect in a functional behavioral analysis. *Exceptional Children, 66*, 393-402.

Reed, H., Thomas, E., Sprague, J., & Horner, R. (1997). Student-guided functional assessment interview: An analysis of student and teacher agreement. *Journal of Behavioral Education, 7*, 33-49.

Scott, T. M. (2013, July). *Function-based thinking and a simplified approach to FBA*. Paper presented at Old Dominion University, Norfolk, VA.

Scott, T. M., Alter, P. J., & McQuillan, K. (2010). Functional behavior assessment in classroom settings: Scaling down to scale up. *Intervention in School and Clinic, 46*, 87-94.

Scott, T. M., & Kamps, D. M. (2007). The future of functional behavioral assessment in school settings. *Behavioral Disorders, 32*, 146-157

Guidelines for Conducting Functional Behavioral Assessment and Developing Positive Behavior Intervention and Supports/Strategies

- Steege, M. W., & Watson, T. S. (2009). *Conducting school-based functional behavioral assessments*. (2nd ed.). New York, NY: Guilford.
- Sugai, G., Lewis-Palmer, T., & Hagan-Burke, S. (1999). Overview of the functional behavioral assessment process. *Exceptionality*, 8, 149-160.
- Townsend, B. (2000). The disproportionate discipline of African American learners: Reducing school suspensions and expulsion. *Exceptional Children*, 66, 381-291.
- Umbreit, J., Ferro, J., Liaupsin, C., & Lane, K. (2007). *Functional behavioral assessment and function-based intervention: An effective, practical approach*. Upper Saddle River, NJ: Pearson.
- U.S. Department of Education, Office of Special Education Programs (OSEP). (2009, June). *Questions and answers on discipline procedures*. U.S. Department of Education, Washington, DC. Retrieved from <http://idea.ed.gov/explore/view/p/%2Croot%2Cdynamic%2CQaCorner%2C7%2C>
- U.S. Department of Education, Office of Special Education and Rehabilitative Services (OSERS). (2013, April 2). *Letter to Glenna Gallo*. U. S. Department of Education, Washington, DC. Retrieved from <http://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/acc-12-017845r-ut-gallo-fba-4-2-13.pdf>
- Virginia Department of Education (2009). *Functional behavioral assessment, behavioral intervention plans, and positive intervention and supports: An essential part of Effective Schoolwide Discipline in Virginia*. (4th ed.). Richmond, VA: Virginia Department of Education.
- Virginia Department of Education, Division of Special Education and Student Services, (2010, January 25). *Regulations Governing Special Education Programs for Children with Disabilities in Virginia*. Virginia Department of Education, Richmond, VA. Retrieved from http://www.doe.virginia.gov/special_ed/regulations/state/regs_speced_disability_va.pdf

Appendix A

This section contains forms, instruments, and procedures that relate to the process of functional behavioral assessment. They are included to illustrate the range of available forms; inclusion of these documents should not be construed as an official endorsement of these forms by the Virginia Department of Education.

Forms may be reproduced for educational purposes only. Forms are included to show the range of available resources and should not be construed as endorsement by the Virginia Department of Education.