# **Chapter 3**

# Dealing With Problem Behavior in the Classroom

A Behaviorological Perspective

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# PREREADING QUESTIONS

As you read this chapter, reflect on the following questions and issues:

- 1. Why do children engage in behaviors that get them into trouble?
- 2. What advantages are there to seeking out and using research-based strategies for behavior management?
- 3. What is a functional behavioral assessment (FBA), and how is it related to a behavior intervention plan (BIP)? What are the procedures at your school for how to conduct an FBA?

The primary goals of educators should be to provide young people with academic knowledge and social skills that will enable them to become caring individuals, critical thinkers, and adults who contribute to the betterment of society. Educators are key players in improving society. In addition to promoting academic achievement, educators also have the important task of engendering prosocial behavior in their students—a task that is even more important today because, too often, parents are defaulting on this social responsibility in the home. Increasingly, educators are dealing with disruptive behavior—actions that impede instruction and induce a social atmosphere of generalized disrespect for others—in their classrooms (e.g., Burley & Waller, 2005). Knowing what countermeasures a teacher should take continues to be a controversial issue. Yet daily, from one moment to the next, teachers must make decisions about the actions to take in response to the behavior of their students, not only about academic performance but also about deportment.

When you are faced with problem behavior in your classroom, your interpretation of what is causing that behavior and what to do about it becomes central to your responsibility as a teacher, which is providing your students with essential academic and social skills. This chapter focuses on how to deal with problem behavior in the classroom from a *behaviorological perspective*. The radical departure this perspective takes from the *psychological perspective* can best be appreciated by contrasting them.

# FOLK PSYCHOLOGY PERSPECTIVE

Educators attempt to deal with unacceptable classroom behavior on the basis of some kind of theory about behavior, even if, by default, their "theory" is merely an implicit set of assumptions about why children act the way they do. Many teachers operate on the basis of folk **psychology** (sometimes called pop psychology), a "commonsense" approach expressed in ordinary talk about putative psychological phenomena. But as Albert Einstein (1879–1955) reminded us, "Common sense is the collection of prejudices acquired by age 18." Routinely, folk psychology is nothing more than an outgrowth of whatever notions student teachers may have learned about behavior from their supervising teachers at the beginning of their professional careers. Based on the folk psychology approach to understanding and dealing with behavior problems, a common reaction of teachers is to show some form of disapproval. Although, initially, disapproval may to some extent suppress the undesired behavior, such improvements are often short-lived. More often than not, measures such as reprimanding, using "time-out," sending recalcitrant students to the principal's office, or sentencing them to in-school suspension or detention do not appear to reduce disruptive behaviors and may even make the problem behavior worse. When every trick in the book of disciplinary folklore has been attempted and yet the problem behavior persists, what are we to do? One useful answer might be, Question your theory of behavior.

### BEHAVIOROLOGICAL PERSPECTIVE

How does the behaviorological perspective differ from other perspectives that purport to explain behavior? There are two diametrically opposed ways to understand the causes of behavior: (a) as the result of some hypothetical inner causes (inner agencies) or (b) as actions

that are largely a function of other events. The former account characterizes not only folk psychology but also a large portion of mainstream psychology. The latter characterizes the behaviorological perspective—arguably, one that should be as basic to education as germ theory is to medicine. The goal, then, is to provide you with general guidelines for developing behaviorologically informed teaching practices that have been shown to be highly effective in dealing with behavior problems.

The natural science of **behaviorology** is the study of contingent relations between behavior and other events; it systematically excludes accounts of behavior based on notions of an inner causal agency such as ego, self, or similar trait-type psychological concepts. This science began with the pioneering research of B. F. Skinner in the 1930s. We will be concerned primarily with **applied behavior analysis**, the engineering aspect of behaviorology. The literature on the technology of behavior change includes the procedural details for implementing various behavioral interventions (see *Journal of Applied Behavior Analysis*, http://seab.envmed.rochester.edu/jaba/jabaindx.asp). The aim here is not to review this technical literature but, rather, to offer a way to think about behavior problems in an effective manner—that is, as a practical guide to understanding and dealing with behavior problems in the classroom.

# WHAT ARE CONTINGENCIES?

We cannot see contingencies directly, but we can observe their effects over time. This causal mechanism controls behavior that we call **operant** (actions that *operate* on the environment, in contrast to reflex-like responses), discovered by B. F. Skinner's pioneering research on pigeon behavior in the highly controlled experimental environment of the operant conditioning chamber. Skinner demonstrated that by careful manipulation of contingency relations, behavior could be predicted and controlled with great precision. Subsequent operant research demonstrated the operation of several kinds of contingency arrangements: positive reinforcement, the contingent presentation of reinforcing events; negative reinforcement, the contingent removal of aversive events (i.e., escape and avoidance behavior); positive punishment, the contingent presentation of aversive events; and negative punishment, the contingent removal of reinforcing events.

The accumulation of a huge body of experimental research over a 70-year period, in both laboratory and applied settings, has confirmed that operant contingencies are as real as any other causal mechanism in the natural sciences. The scope of this chapter does not allow elaboration of these causal mechanisms, but the important point is that the only way we can identify the mechanisms of reinforcement and punishment is by observing their effects on behavior. Although their effects (changes in behavior) cannot be captured in a photograph, they can be observed and recorded over time. These are real causal mechanisms, not invented hypothetical constructs.

Contingencies are always operating in the classrooms, and they influence the behavior of everyone in the room—students, teachers, instructional assistants, everyone (even the hamster in the cage). Learning to see how contingencies operate in the classroom is not a simple task, however. It will require that you learn the precise meaning of some technical terms. It will also require that you learn some basic behavioral assessment procedures. The pivotal behaviorological term is **contingencies**: the functional relations between actions and other events. Contingencies consist of relations between behavior, events that follow the behavior

(postcedent events), and the situation within which the behavior occurs (antecedent events). The concept of behavior is straightforward: simply, what someone does or says (i.e., talking, too, is operant behavior).

#### **Postcedent Events**

Some of these events constituting a contingency relation are **postcedents**—events that immediately follow certain actions. When the actions produce those postcedent events, they are called **consequences**—our primary concern when analyzing contingencies. Here are some examples of consequences: The effect of typing a word in a word processing document (i.e., a word appearing on the computer screen) is a consequence of the fingers pressing keys on a keyboard in a particular sequence. The consequence of a student getting out of his or her seat without permission during a seatwork period may be that this action evokes a reprimand from the teacher. Some consequences increase the actions they follow and are therefore defined as reinforcing consequences. If the out-of-seat behavior increases following the teacher's reprimanding, then the reprimands are reinforcing consequences. Other consequences decrease the actions they follow and are therefore defined as **punishing consequences**. If the out-ofseat behavior decreases following the teacher's reprimanding, then the reprimands are punishing consequences (at least for the time being). Whether a consequence is reinforcing or punishing is determined solely by its effect on behavior. If you praised the particular actions of a student—say, always completing his or her homework assignment before class—and as a result you subsequently observed that his or her assignment was not completed before class, you should strongly suspect that your praise is not functioning as a reinforcing consequence and may even be punishing.

Some postcedent events are not consequences; they simply occur adventitiously following a particular action but may nonetheless affect that behavior. The bowler who talks to the ball after releasing it down the alley illustrates such superstitious conditioning (i.e., the event of getting a strike is not a consequence of talking to the ball). The essential point to remember is that actions are selected by their consequences. This is a behavioral law that is as valid as any other law in the natural sciences and your most powerful tool in learning to manage behavior in your classroom. We can choose to ignore this behavioral law, of course, just as we might choose to ignore the law of gravity, but we do so at our own peril. Whether we like it or not, just as gravity will cause us to fall on our face when we trip over a curb, consequences can produce problem behavior in the classroom, and changes in consequences can replace them with desired behavior. Hence, it is to your advantage to see contingencies in operation in your classroom so that you can do something effective about them and their behavioral effects. But how do we go about "seeing contingencies"?

### ANTECEDENT EVENTS

By virtue of the fact that a particular set of stimuli are always present when a behavior is reinforced or punished, **antecedent events** may come to control behavior. These antecedent events, along with postcedent events, constitute a contingency relation (i.e., a three-term contingency relation: antecedent-behavior-postcedent). Antecedent stimuli consistently correlated with the delivery of reinforcing or punishing consequences acquire control of the

behavior. Presenting a stimulus previously correlated with reinforcement will evoke a behavior (these are called **discriminative stimuli**); presenting a stimulus previously correlated with punishment will suppress a behavior (these are called conditioned **aversive stimuli**). For example, when a teacher who has consistently reinforced on-task behavior in a classroom enters that classroom, there will be a dramatic increase in on-task behavior among the students. When a principal who has consistently employed punishment enters a classroom of unruly students, their misbehavior will immediately be suppressed.

# **FUNCTIONAL BEHAVIORAL ASSESSMENT**

How does knowing about behavioral contingencies translate into steps that will allow you to deal effectively with problem behavior in your classroom? This question leads us to a brief consideration of **functional behavioral assessment** (FBA). The purpose of FBA is to identify the actual variables responsible for the behavior of concern, thereby leading to an intervention that will do away with the problem. As a teacher, you need to be aware of FBA because it is a requirement of federal law. Since the 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA), schools are required to conduct an FBA if there is to be a change in school placement due to the behavior of a student who has qualified for special education services (i.e., a student with an Individual Educational Program, or IEP). IDEA also stresses the need for an FBA for positive behavior support programming—that is, the use of nonaversive strategies that teach students new skill repertoires that replace the old problem behaviors. But IDEA does not spell out what an FBA should be. What one school district calls an FBA may differ markedly from that of another school district. In one school, the FBA may be a one-page checklist or brief questionnaire, whereas another school may require extensive time-consuming documentation. When performing an FBA, it is one thing to meet the requirements of the law but quite another to identify real causal mechanisms responsible for producing and maintaining problem behaviors in the classroom. Whether or not an FBA leads to the development of an effective behavior intervention plan is not a matter of extensive documentation but of the accuracy of the assessments made in conducting the FBA. This chapter does not aim to provide you with the skills required to conduct an FBA but, rather, aims to highlight this assessment approach.

# **Psychological FBAs**

A psychological FBA assumes that behavior is the result of some hypothetical inner cause (inner agency). The putative causal variables from psychology such as attitudes, expectations, cognitions, and the like are easy to hypothesize but less than helpful for the purpose of planning effective behavioral interventions. With psychology as the guide, one simply observes some action, labels it using some psychological term, and then concludes that the action has now been explained by that term—so the label now becomes the cause of the problem. For example, Mary has difficulty reading, so we thus surmise that she has a **learning disability**. As we continue to observe Mary's reading problem, we now know why—she is learning disabled. Jack repeatedly hits other children, thus we conclude that he has a **conduct disorder**. Jack continues to hit other children because of this disorder. And so on *ad infinitum*. In these cases, the actions observed are empirical (or if the actions are merely reported to you, they may be actual), but the causal mechanisms purported to account for the actions are not real. Skinner fittingly called such terms

**explanatory fictions**—they appear to explain behavior, but in reality they explain nothing. They are simply illogical circular arguments. Moreover, psychological theories (including folk psychology) look at the form but not the function of the behavior. It is the form of the behavior, not its function, that is usually judged and labeled as inappropriate. Following are some examples:

- · Sam is aggressive.
- Jane is disruptive.
- Fred is impulsive.

What do we do about the aggressive, disruptive, or impulsive actions? Labels will not provide the answer. We must focus not on what the student *is* but on what the student *does*—the function of that behavior. The following case vignette approaches classroom behavior problems from the behaviorological perspective and shuns explanatory fictions:

Bobby is a 9-year-old, third-grade male identified as learning disabled with difficulty attending to academic work throughout the school day. His general education teacher, Mrs. Roberts, reports that he frequently talks out and plays with items that are in and on his desk, behavior that sometimes disturbs other students in the classroom. His off-task behavior usually continues for a couple of minutes or until he is redirected back to what he is supposed to be doing. This problem behavior usually occurs during lecture or small-group time in his regular classroom. Mrs. Roberts has observed that this problem behavior is most likely to be "set off" during reading or note taking and begins when he is no longer giving her eye contact—often "getting a glazed look in his eyes." Although Mrs. Roberts reminds Bobby to get back on task, this regularly does not work unless she stops what she is doing, walks over to his desk, and talks to him. When asked about the likely function (consequence) of the off-task behavior, she states, "I feel he is doing this to get attention from the students or his teachers, and very possibly to get out of doing assignments." When asked what behavior might serve the same function for the student that is appropriate within the same classroom context, Mrs. Roberts relates, "Bobby could get attention by doing his work and receiving praise." When asked for other information that might contribute to an effective intervention—for example, conditions under which the problem behavior was observed not to occur—she replies, "Bobby does not play with items at his desk when given simple tasks to complete or when he is given tasks that he actually likes, such as doing art projects."

When Bobby was observed during a half-hour reading group, the following sequence of events was recorded: Mrs. Roberts gives the reading group assignment >> Bobby plays with his pencil >> Mrs. Roberts tells Bobby to stop playing with his pencil >> Bobby responds while laughing, "Yes, Mrs. Roberts" >> Mrs. Roberts ignores Bobby's remark >> Mrs. Roberts begins small-group instruction >> Bobby begins whistling >> Mrs. Roberts reminds Bobby that he has an assignment to complete and to raise his hand if he has a question >> Bobby raises his hand >> Mrs. Roberts helps Bobby begin his assignment >> Bobby finishes his assignment. From the observation of this sequence of events (antecedent-behavior-postcedent

pattern), it is apparent that Bobby plays with items on his desk and makes noises when Mrs. Roberts gives instructions for individual work. Bobby receives attention from the teacher and his peers for his problem behavior and does not complete seatwork until he gets assistance from the teacher.

Overall, the function of Bobby's problem behavior (based on this informal functional behavioral assessment, or FBA) is attention from the teacher and classmates and escape from doing his assigned tasks. Because he completes assignments only with teacher assistance, Bobby may be having difficulty with the tasks he is given. From this informal assessment, the behavior intervention plan is as follows: The desired behavior is that Bobby will monitor his appropriate work behavior (working quietly and not playing with items at his desk). Mrs. Roberts will respond nonverbally (nodding, etc.) for appropriate behavior. For an entire class period of appropriate behavior, Bobby will also receive tangible rewards or extra time to engage in a preferred activity such as an art project. Thus, the potential reinforcing consequences for appropriate behavior are nonverbal teacher attention, positive feedback from self-monitoring, and rewards for longer periods of on-task behavior. Now, instead of receiving teacher attention for playing at his desk or making noise or both, Bobby will receive attention for doing his seatwork quietly. Significantly, Mrs. Roberts will also determine if the tasks she assigns Bobby are too difficult for him—and if so, make appropriate adjustments in his assignments.

Postscript. The behavior intervention was actually implemented, and Bobby's problem behavior was subsequently replaced with appropriate classroom behavior. The reward system was gradually removed, and Mrs. Roberts easily maintained the desired behavior with occasional contingent attention to improvements in Bobby's (adjusted) academic work. Thus, treatment validity (also referred to as treatment fidelity) was established. The remainder of the chapter is intended to help you develop behavior intervention strategies that will be effective in reducing disruptive classroom behaviors, as did the plan outlined above.

# **Behaviorological FBAs**

The function of a behavior requires a more thorough analysis:

- Sam hits other children when they do not comply with his demands.
- Jane makes animal noises when the teacher is attending to other children.
- Fred, without being called on, frequently blurts out answers.

We would like to observe what happens after Sam hits other children, after Jane makes animal noises, after Fred blurts out an answer. The assessment of such relationships is the focus of behaviorological FBA.

A behaviorologically guided FBA can allow us to determine what is responsible for a given behavior in the classroom, the real identifiable variables that account for the behavior in question. We can then plan our intervention accordingly. When viewed from the behaviorological rather than a bureaucratic perspective, the amount of documentation is irrelevant.

What is important are the kinds of variables assessed and how accurately they are assessed. This chapter is not intended as a guide for you to develop competence in conducting FBA (a topic that alone would require, minimally, an entire chapter—see Chandler & Dahlquist, 2002; also see the Web site <a href="http://cecp.air.org/fba/default.asp">http://cecp.air.org/fba/default.asp</a>). Rather, FBA will be discussed as an assessment approach, an overview of which will allow you to grasp the understanding that the operation of contingencies determines behavior.

# **Setting Events**

In addition to the events that immediately precede and follow behavior, contextual variables must also be taken into account for performing an FBA or understanding classroom behavior in general. Hence, when working with students, we also need to consider **setting events**, situational or contextual factors that affect how a student will respond to antecedent and consequent events. "Setting events may be divided into three categories: physiological/biological, physical/ environmental, and social/situational" (Chandler & Dahlquist, 2002, p. 55). For example, setting events may include things happening in the student's life outside the classroom that are affecting the behavior of concern. For example, Jane recently started to be mainstreamed more often into the regular classroom. She has begun to take math (an area of strength and interest) in the general education classroom. In this example, receiving recognition for her accomplishments may be having a positive "ripple effect" in the resource room as evidenced by a decrease in her problematic attention-seeking behavior. Tom has recently moved to his father's home where he is not properly supervised. He stays up half the night playing video games and consequently takes naps at school. Bob did not receive his medication this morning, and his hyperactivity subsequently increased. Jimmy has been diagnosed as having Attention Deficit Hyperactivity Disorder and is now on stimulant medication (a biological variable).

Thus, FBAs evaluate behavior functionally, not structurally—that is, they focus (a) on what the student *does*, not what the student *is*, and (b) on the events functionally related to what the student does (or does not do). The aim of an FBA is **treatment validity**: the extent to which it contributes to the development of an effective behavioral intervention program. The old saying that "the test of the pudding is in the eating" holds true with FBA. Did the use of the assessment information result in a plan for behavior intervention that actually produced the desired change in the target behavior?

# Assessing Antecedent-Behavior-Postcedent Relations in the Classroom

Short of conducting a formal FBA, then, how do you go about making an educated guess about the variables that control operant behavior? For your guess to be behaviorologically informed, you need to be somewhat familiar with the questions that a properly conducted FBA would address. Basically, such an FBA would carefully consider the conditions just prior to and during occurrence of the behavior of concern, the behavior itself, and the events that immediately follow the behavior. This procedure is often referred to as an *A-B-C analysis* (antecedents-behaviors-consequences), but it would be more correct to call it an *A-B-P analysis* (antecedents-behaviors-postcedents). Briefly, the following are areas that the FBA must carefully assess.

# Defining Behavior and Identifying Important Antecedent and Postcedent Events

Behavior. State the specific behavior about which you are concerned. Unwanted behavior (behavioral excesses) is relatively easy to specify because its occurrence is so obvious. Desired behavior that rarely occurs is somewhat more difficult to track. Avoid targeting the absence of behavior such as being quiet (i.e., if a dead person can do it, it is not behavior). Also avoid using ambiguous behavioral descriptions such as noncompliance. There are many forms of noncompliance.

Antecedents. Describe where the behavior occurs and the particular conditions present just before and during the time that the behavior is observed. At what time of the day does the behavior usually occur? What activities are going on while the behavior occurs? What people (teacher, peers, etc.) are around when the behavior tends to occur? In short, what appears to set off or consistently precede the behavior of concern? Also, don't forget to consider possible setting events, either immediate (e.g., temperature in the classroom) or remote (level of sleep deprivation, medication, etc.).

*Postcedents*. The FBA literature typically states something such as, "Define the intent or the function that the behavior appeared to serve. Was it power, control, attention, etc.?" There is a problem with such terms. "Intention" can lead us astray, prompting us to speculate about what may be going on in the student's mind. What does *control* mean? As for *attention*, the important considerations are the particular events that are called to attention and exactly when such events occur with respect to the specified behavior. In particular, do these events tend to immediately follow the behavior? Overall, postcedent events can be classified within a two-by-two table as follows:

		Behavior Effect	
		Behavior Increased	Behavior Decreased
Condition Changes	Something Presented	Positive reinforcement	Positive punishment
	Something Removed	Negative reinforcement	Negative punishment

What we are trying to determine here is not the *purpose* of the behavior (a term that can too easily steer us toward folk psychology formulations) but the nature of the events that typically follow the behavior—their function as a causal mechanism. These events are two-dimensional; that is, (a) they are either presented or removed following the behavior and (b) they either increase or decrease the behavior they follow. When we say that something is "presented" or "removed" we do not necessarily mean that these are deliberate actions. For example, a teacher who gives attention to out-of-seat behavior by saying, "Johnny, sit down" may not be aware that her attention is functioning as a causal mechanism (positive reinforcement) responsible for the very behavior she is trying to reduce. She certainly would not be "presenting" attention in order to increase that behavior. Nonetheless, attention *occurs* immediately following the out-of-seat behavior.

#### The FBA Interview

In summary, FBA is not a set of assessment techniques; it is an *assessment approach* to identifying possible causes of problem behavior. FBAs are conducted for two purposes: (a) to meet the legal requirements of IDEA and (b) to develop an effective positive behavioral intervention plan. This chapter does not address the legal aspects, nor will it provide details about various assessment procedures routinely employed in FBA. Of the assessment methods used in FBA, the indirect method of formal behavioral interviewing is most appropriate for our purpose. The following is a list of questions an interviewer might ask to collect information about antecedents and postcedents (adapted from Milterberger, 2004, p. 264).

#### **Antecedents**

- When does the problem behavior usually occur?
- Where does the problem behavior usually occur?
- Who is present when the problem behavior occurs?
- What activities or events precede the occurrence of the problem behavior?
- What do other people say or do immediately before the problem behavior occurs?
- Does the student engage in any other behavior before the problem behavior?
- When, where, with whom, and in what circumstances is the problem behavior least likely to occur?

#### **Postcedents**

- What happens after the problem behavior occurs?
- What do you do when the problem behavior occurs?
- What do other people do when the problem behavior occurs?
- What changes after the problem behavior occurs?
- What does the student get after the problem behavior?
- What does the student get out of or avoid after the problem behavior?

You will note that each question asks about the events that immediately precede and follow the student's problem behavior. Instead of interviewing someone else, however, you would be answering these questions yourself. If you are team teaching or have an instructional assistant in your classroom, you would, of course, want to interview that person as well. In circumstances where you feel it would be appropriate, it may also be useful to interview the student who is displaying the problem behavior. Your goal at this point is to formulate a hypothesis (educated guess) about what contingency arrangement is most likely causing the problem behavior. The behavioral interview will be useful to the extent that it approximates that of a well-conducted behaviorological FBA—one that focuses on contingent relations between behavior and other events. To become adept with FBA, you need to learn how to see these contingent relations going on about you, the functional relations among particular actions of your students and other events—both antecedent and postcedent—including, especially, your own actions. From such observations you will be able to identify the variables (causal mechanism) controlling the problem behaviors and then design effective interventions.

# PLANNING BEHAVIOR INTERVENTIONS

The purpose of a behaviorological FBA is to develop a positive and proactive set of strategies to remediate the behavior problem. The effectiveness of a particular problem-solving approach depends on its accuracy in identifying the variables responsible for the behavior problem. So how do you determine if your assessment is accurate? The ultimate test is whether or not it leads directly to an effective intervention in your classroom—that is, whether it has treatment validity. But that test is after the fact. How can you decide on a particular plan at the onset of the problem-solving process? The answer lies in classroom-based research. Based on a colossal body of empirical research in school settings, there is no question that applied behavior analysis has achieved this distinction—to wit, well over 200 classroom behavior management studies reported in the *Journal of Applied Behavior Analysis* (http://seab.envmed.rochester.edu/jaba/jabaindx.asp) as well as dozens of books on the subject (some are much better than others).

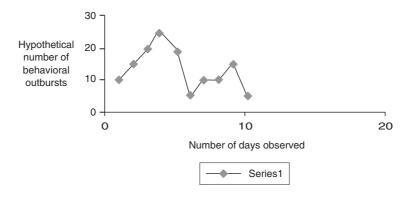
### What Kind of Behavior Problem?

First, you need to determine what kind of problem you are encountering, along with the nature of the consequences responsible for it. Reducing behavior problems to their simplest terms, you are dealing with either a "cannot do" *skill problem* or a "will not do" *performance problem*, and the maintaining consequences are either that the student gets something or avoids something. Thus, we have four broad possibilities: For skill problems, the student may get attention from peers for immature behavior (lacks appropriate social skills) or for failing to comprehend your assignment (lacks prerequisite academic skills). For performance problems, the student may get more attention for inappropriate behavior than for appropriate behavior (although equally capable of either behavior) or may avoid asking you for assistance with a difficult task (capable but hesitant).

# **Developing the Behavior Intervention Plan**

Next, you need to develop a **behavior intervention plan** (**BIP**). Determine if an informal intervention will suffice. For example, suppose Jerry is bothering Jean in class. As an informal solution, try moving Jerry to a desk on the other side of the room. That may end the problem. If the problem persists and Jerry begins to annoy his new neighbor, then a more systematic intervention plan is needed. A systematic plan begins with a definition of the problem behavior that is observable and measurable. Again, the scope of this chapter precludes an adequate guideline on the measurement of behavior (see Van Houton & Hall, 2001). For our purpose, perhaps it will do to state that in many cases, behavior measurement can be fairly simple. One of the easiest ways to measure behavior is to count how many times it occurs in a specified period of time. The behavior needs to be defined so that you can tell when it begins and ends. We can count talking out, being out of one's seat (although a duration measure using a stopwatch may be better for students who tend to wander around the room once they are out of their seat), the number or percentage of arithmetic problems answered correctly, and so on. Then you need to draw a simple behavioral graph consisting of a vertical scale for the behavior and a horizontal scale for the time dimension (see Figure 3.1). Label the behavioral scale up the

Figure 3.1 Sample Behavior Chart



side (e.g., "Number of Minutes of In-Seat Behavior") and the time scale across the bottom of your graph (e.g., "Days"). Each day during the same time and activity and for a fixed period of time (e.g., 15 minutes), count the number of times the behavior occurs. Then graph your data by placing a data point at the intersection of the day and the point on your behavior scale corresponding to your count. As you plot data points from day to day, connect them with a line (forming a data path). Next, measure the behavior several days before you begin your intervention. This part of your graph is called the baseline. Then draw a vertical line as long as your behavioral scale between day lines to separate the baseline phase from the intervention phase—which we will now discuss.

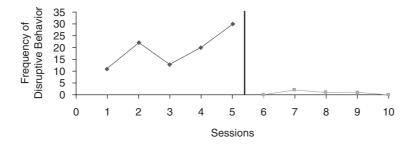
A BIP is a written plan that describes the behavioral intervention you designed to address a problem behavior. The purpose of a BIP is to alter the social or physical environment or both so that it will prevent the problem behavior from occurring by making it less effective, efficient, and relevant while—and this is the heart of the matter—developing an alternative acceptable behavior that will be more effective, efficient, and relevant. That is, teach a viable replacement behavior. As examples, if the problem is out-of-seat behavior, reinforce in-seat behavior. If it is running in the hall, reinforce walking in the hall. If it is talking out, reinforce raising a hand before speaking. If it is off-task behavior, reinforce on-task behavior. If the writing assignment is only half-done, reinforce the satisfactorily completed product. See if you can replace the problem behavior with an educationally meaningful behavior. For more serious behavior such as fighting, more intrusive interventions may be needed. Although the reference list includes texts that address the reduction of dangerous behavior, it might be helpful to seek the assistance of a competent behavioral consultant.

If your intervention plan attempts to teach an acceptable alternative behavior, but the new behavior is not more effective, efficient, and relevant than the problem behavior for the student, the plan is not likely to be successful. Effective *BIPs are directly linked to FBAs*.

# **Basic Intervention Strategies**

In general, a BIP specifies intervention features in four main areas: (a) teaching acceptable replacement behaviors—strategies for teaching replacement behaviors (e.g., modeling,

Figure 3.2



corrective feedback, positive reinforcement); (b) antecedent manipulations—strategies that involve removal or modification of triggering antecedents or programming antecedent stimuli that trigger the replacement behavior; (c) consequence manipulations—strategies that involve the removal or modification of maintaining consequence stimuli, or the addition of other consequence stimuli that positively reinforce and maintain the replacement behavior; and (d) setting event manipulations—strategies that involve the removal or modification of factors that perpetuate the problem behavior, or the addition of strategies that nullify such factors. The intervention strategy that you develop should be implemented in a way that is effective, yet least intrusive to the student, and consistent with established professional standards. And it must be implemented in the way you designed it, an important consideration if you are team teaching or if you have an instructional assistant in your classroom. The plan should include clear, written directions outlining who, what, when, where, and how.

Finally, you need to continue to measure the target behavior each day in exactly the way you did during the baseline phase and plot the date on your behavioral graph (see Figure 3.2). At the top of your graph, you should write "Baseline" to the left of your phase-change line, and to the right, provide a descriptive label for the intervention (e.g., "Contingent Praise"). As you plot data during the intervention phase, you can compare the data paths during the baseline and intervention phase to see if the measured behavior is improving. If after several days the intervention is not sufficient to effect a noticeable change in the behavior, you should reexamine your intervention. Is it being carried out consistently? If it involves consequence manipulations, do these manipulations immediately follow the target behavior? Are antecedents or setting events being changed appropriately? And so on. If you troubleshoot and the BIP is still not successful, it may be necessary for you to conduct further assessment and adjust the BIP accordingly.

One hallmark of the behaviorological approach to solving behavior problems in the classroom is, "If at once you don't succeed, try, try again." You will have the enormous advantage of determining in a timely way whether or not you are succeeding. And if you are not succeeding, a behavior-change technology of demonstrated effectiveness is available for your use. Again, seeing the *Journal of Applied Behavior Analysis* is a strong recommendation.

### **SUMMARY**

One of the biggest obstacles standing in the way of effective behavior management in the classroom is reliance on folk psychology to solve problems. Folk psychology is based on the assumption that behavior (desired or undesired) is caused by some hypothesized inner agency, such as "Billy is a good-natured boy" or "Mary has a mean streak in her." The behaviorological perspective takes another position; while not ruling out the effects of genetic inheritance (there are inborn individual differences in behavior) and physiological variables, the behavior change technology derived from behaviorology focuses on the manipulation of environmental variables in the context within which the behavior of concern is manifested. Thus, the behaviorological approach posits that problem behaviors that occur in the classroom are the result of causal variables that are potentially identifiable. By recognizing the fact that student behavior is caused by a particular set of variables operating in the classroom environment, with a properly conducted functional behavioral assessment these causal variables can be identified and systematically altered, thereby eliminating the problem behavior—usually, by replacing it with a desired behavior. Although the scope of this chapter precludes providing an adequate guide for conducting a thorough FBA, it does offer a scientifically based frame of reference for understanding and eliminating problem behavior. To the extent that you understand how contingencies control classroom behavior, you will be better prepared to deal with problem behaviors when they do arise and—even more important—prevent them from occurring in the future as they are replaced with desired and educationally meaningful behavior.

# **DISCUSSION QUESTIONS**

- 1. What are the differences between behaviorological and folk psychology approaches to understanding and dealing with behavior problems?
- 2. Provide an original example of an *explanatory fiction*. What makes it a fiction?
- 3. What is applied behavior analysis, and how is it related to behaviorology?
- 4. The subject matter of behaviorology necessarily includes important technical terms. Can you answer the following technical questions?
  - a. What are the two types of punishment?
  - b. What is the difference between positive and negative reinforcement?
  - c. What is the difference between consequences and postcedents?
  - d. What are contingencies?
- 5. Suppose you were interviewing another teacher about antecedent and postcedent events in relation to a student's problem behavior. Give some examples of questions you should ask. (Note: When you encounter behavior problems in your classroom, these are questions you should ask yourself, becoming at once both interviewer and interviewee.)

# FOR ADDITIONAL HELP

	Organization	Web Address	Description
Dealing With Problem Behavior in the Classroom	New York University Child Study Center	www.aboutourkids.org	Dedicated to advancing the field of child mental health through evidence-based practice, science, and education
	Center for Effective Collaboration and Practice	http://cecp.air.org/ preventionstrategies/ Default.htm	Research-based and practical information for parents and professionals about behavior problems in children

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