Function-Based Support in Home, School, and Community

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Coeur d'Alene, ID, June 17-18, 2005
KMC Main Facility, Kootenai Medical Center, 2003 Lincoln Way

Pocatello, ID, June 24-25, 2005
1440 E. Terry St., Rm. 501, Garrison Hall, Building 63, ISU

Boise, ID, August 5-6, 2005
ISU Boise Center, 12301 W. Explorer Drive, Ste. 102, Rm. 139

Sponsored by the *Intensive Behavior Intervention Specialist Association*
and the
2005 Professional Development Workshops
of the
Department of Counseling
Kasiska College of Health Professionals
Idaho State University
http://www.isu.edu/hpcounsl

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1235 University of Oregon
Eugene, Oregon 97403-1235
June 15, 2005

Acknowledgment:

This booklet is, in large part, a revision of monograph, *Behavior Challenges: A Teacher's Guide to Functional Assessment* (Tobin, 1994). In addition, progress in the knowledge and use of function-based support over the last decade that is reported in this booklet was advanced by the following organizations, projects, and individuals:

Center on Positive Behavioral Interventions & Support

Educational and Community Supports at the University of Oregon
Special thanks to Anne Todd, Rob Horner, George Sugai, Teri Lewis-Palmer, Emma Martin, Claudia Vincent, Steve Newton, Brigid Flannery, Rick Albin, & Deanne Crone

U.S. Office of Special Education Programs

Project FIVE: Functional Interventions in Versatile Environments

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Section 1. Examples of Successful Use of Function-Based Support

"Function-based support" refers to behavioral interventions that are designed after consideration of the results of a functional behavioral assessment (FBA) and include one or more of the following actions: (a) provision of an alternative way to meet the function of the problem behavior, (b) proactive changes in environmental circumstances intended to promote adaptive behavior and to prevent problem behavior (e.g., activities to cope with setting events, antecedent manipulations, curricular changes, instruction), and (c) changes in reinforcers that follow desired, problem, and/or alternative behaviors (e.g., increases in reinforcement for adaptive behaviors and/or extinction or decreases in reinforcement for problem behaviors, including previously naturally occurring, even if unintended, positive reinforcers such as social attention or negative reinforcers such as escape from aversive tasks).

Part 1. Function-Based Support Reduced Self-Injurious Behavior (SIB)

Function-based support, particularly in the form of functional communication training, has been studied extensively with individuals with developmental disabilities and has contributed greatly to the use of positive behavior support that has improved quality of life for individuals with development disabilities (e.g., Anderson & Freeman, 2000; Bambara, Dunlap, & Schwartz, 2004; Durand & Carr, 1991; Koegel, Koegel, & Dunlap, 1996; Lalli, Casey, & Kates, 1995). An extensive literature exists on reducing self-injurious and other problem behaviors by teaching functionally equivalent adaptive behaviors to individuals characterized as developmentally delayed, autistic, or severely disabled (e.g., Albin et al., 1996; Brady & Halle, 1997; Didden, Duker, & Korzillius, 1997; Durand, 1990; Durand & Merges, 2001; Ervin et al., 2001; Horner & Carr, 1997; Horner, Carr, Strain, Todd, & Reed, 2002; Iwata, Dorsey, Slifer, Bauman, & Richman, 1982; Marquis et al., 2000; McEvoy & Reichle, 2000; Reichle & Wacker, 1993).

Part 2. Early Version of Function-Based Support Reduced Paddling in a Southern School

Taylor and Bailey (1996) report that interventions based on "behavioral diagnostic procedures" (p. 207), an early use of FBA, resulted in a reduction in the use of corporal punishment in a southern elementary school. Teacher interviews were used to collect information on setting events, antecedents, consequences, and other situational factors relevant to the behavior of concern. Next, teachers were asked to keep brief records for several days to indicate behavioral patterns, using checklists for environmental circumstances and scatter plots. Systematic direct observations by trained observers were used to collect baseline data and then to monitor the intervention. Participants were three elementary students in general education who had been paddled repeatedly by the school principal earlier in the school year.

The assessment information led to hypotheses that functions of problem behaviors included adult and peer attention, and escape from difficult tasks. Individualized support plans were developed that included, as needed, interventions to: (a) teach peers not to laugh at disruptive behavior, (b) provide increased adult attention and positive reinforcement for appropriate behavior, and (c) reduce task demands. A multiple baseline design demonstrated that when the positive interventions were implemented, the number of intervals with disruptive behavior decreased dramatically for each student. Overall, incidents of corporal punishment

dropped from .53 incidents per week (about 1 every two weeks) to zero. In this study, a school psychologist assumed a leadership role, however, Taylor and Bailey make two points relevant to training teachers to use function-based support: (a) the time invested initially will be worthwhile because less time will be spent later on ineffective interventions and/or disciplinary procedures and (b) the positive interventions are practical and can readily be implemented by teachers. Corporal punishment is still used in 23 states although "virtually every major national professional organization which deals with children has taken a stand against it, including the National Educational Association, the American Academy of Pediatrics, and the American Psychological Association" (Hyman, Stefkovich, & Taich, 2002, p. 77).

Part 3. Current Methods of Function-Based Support Make Inclusion Possible

Situation: Michael, a 6-year-old first grader, received special education services as "Other Health Impaired" due to "attention-deficit/hyperactivity disorder (ADHD) and an unstable seizure disorder . . . cognitive abilities were . . . in the average range [but] he had difficulty in the areas of expressive and receptive language processing . . . Michael's challenging behaviors included noncompliance, hitting, kicking, biting, pinching, poking, grabbing eyeglasses and jewelry, and screaming. . . . Getting Michael to the resource room's time-out area, 50 feet down the hall from the general education classroom [where he was placed with a one-on-one aide] invariably included a physical struggle. . . . [The aide] often needed help from other adults [and] resigned after the first week. . . . The entire building was often disrupted as Michael was taken down the hall several times a day to the time-out room, the resource room was in shreds, and the emotional climate in the building was tense" (Artesani & Mallar, 1998, p 34).

Desired behaviors: Follow directions without being disruptive or aggressive, work on tasks, and participate in class activities.

Typical consequence for desired behaviors: On-going class activities.

Setting events: Possible problems with medication or seizures; transitions within the school building sometimes upsetting; concerns related to being new in town and at this school; unpleasant interactions with untrained aide.

Antecedent: Interrupted when doing something he enjoyed (e.g., puzzles) and told to do a task (e.g., go to reading group or paper-and-pencil task).

Problem behaviors: Noncompliance, aggression, and disruption.

Maintaining consequence for problem behaviors: Avoid or escape task

Alternative behavior: Ask for assistance, a break, or a different activity.

Successful Intervention with Multiple Components Blended into Function-Based Support:
1. Setting Event (Ecological) Strategies: (a) Updated medical evaluation; (b) During transitions, Michael was given a peer partner who could model being calm and explain what was going on

and what was expected; (c) The new aide was given more training; (d) A friendship group was developed to support Michael.
2. Antecedent Strategies: (a) Michael was given more opportunities to choose which activities he would do first (e.g., allowed to continue working on puzzle if asks appropriately); (b) Easy and preferred tasks were interspersed with difficult, less preferred tasks; (c) Activities were made more appealing (e.g., reduce length, assistance offered).
3. Teaching Strategies: Staff had to encourage Michael to ask for assistance, a change in activities, or a break rather than acting aggressively or being disruptive.
4. Consequence Strategies: (a) Staff listened to and honored Michael's new alternative requests (i.e., he was given assistance, or a break, or allowed to choose a different activity if he made the requests appropriately); (b) Staff remained "emotionally supportive or at least neutral when confronted with problem behaviors" (p. 36). When a staff member felt upset while working with Michael, it was agreed that he or she could ask another staff member to take his or her place.

Measures Used in Data Collection for Monitoring Progress: (a) Number of incidents of aggression, noncompliance, and disruption per week, (b) percent of class activities in which Michael participated, (c) general indicators of quality of educational experience (e.g., type of activities, need for one-to-one assistance).

Outcome: (a) Average number of incidents of aggression, noncompliance, and disruption per week dropped from 18 to 1. (b) Participation increased from 38% of class activities in the autumn to 60% by mid-year and 94% by spring. (c) Learned to write his name and most letters and numbers appropriate for 1^st grade work; and, according to the aide, "although I continue to be assigned to Michael, I now spend much of my time assisting other children. He no longer requires my constant attention" and, according to the general education teacher, "Michael is no longer considered a behavioral concern" (p. 37).

More information about this example:

Artesani, A. J., & Mallar, L. (1998). Positive behavior support in general education settings: Combining person-centered planning and functional analysis. *Intervention in School and Clinic, 34*(1), 33-38.

Part 4. Function-Based Support Saves a Family

Barry and Singer (2001) reported that a family in crisis and on the verge of giving up a child with autism, due fear of problem behaviors they did not know how to change, was able to resolve the crisis and establish effective function-based support that made it possible for them to all live together. See also Moes and Frea (2000) for family support ideas.

Barry, L. M., & Singer, G. H. S. (2001). A family in crisis: Replacing the aggressive behavior of a child with autism toward an infant sibling. *Journal of Positive Behavior Interventions, 3*, 28-38.

Moes, D. R., & Frea, W. D. (2000). Using family context to inform intervention planning in the treatment for a child with autism. *Journal of Positive Behavior Interventions, 2*, 40-46.

Section 2. Ethics

Part 1 of Ethics: Values Held by Developers of Function-Based Support

Opposition to the use of aversive methods of behavior control, led by advocates for individuals with disabilities, has played a strong role in advances in the technology of FBA and positive behavioral support (Horner et al., 1991; Sailor, 1996). Consequences intended to punish often continue to be used repeatedly, even if they are ineffective in changing the problem behaviors in the long run (Morrison, Anthony, Storino, & Dillon, 2001). Punitive measures may provide momentary relief for the parent, the teacher, the care-giver. However, the disadvantages of aversive punishments, particularly the tendency for punishments to escalate and to cause physical damage and/or emotional side effects, prompted the early developers of function-based support to strive to improve positive methods of behavioral support. (Opposition to the use of aversive methods of behavior control continues today. See, for example, the web page of The Alliance to Prevent Restraint, Aversive Interventions, and Seclusion, retrieved May 22, 2005, from http://www.thefamilyalliance.net.)

Although the value of positive reinforcement was well known, the importance of selecting a reinforcer directly related to the function of the problem behavior and the concept of teaching acceptable alternative behaviors was not well known. In addition, the technology of accurately conducting a functional assessment and using the results to develop a positive behavior support (PBS) was not well developed until toward the turn of the century. Indeed, we are still working on improving this process, although the next wave of studies, many believe, must address "research to practice" issues. How do you think the values held by the developers of function-based support are related to controversies and debates in the areas listed below – and where do you stand on these issues?

- The use of positive reinforcement to control behavior: Is this a "bribe?" Does this destroy "intrinsic motivation?" Do individuals with problem behaviors not "deserve" positive reinforcement for small improvements? Is "virtue its own reward?" (See articles and books by Judy Cameron for detailed information on how to use rewards correctly, e.g., Cameron, Banko, & Pierce, 2001 and Flora & Flora, 1999 for research on the positive, long term outcomes of using rewards to encourage beginning readers.)

- The use of negative reinforcement to control behavior: Is it ethical to reinforce improved behavior by letting students get out of homework or children get out of chores? Is it ethical to introduce an aversive (e.g., an annoying noise like some cars make if you don't put on the seat belt or nagging to get help with cleaning up a mess) if it gets the desired behavior to occur? Under what circumstances?

- The control of behavior vs. self-determination and individual freedom: To what extent should children, students, and individuals with severe disabilities have their behavior controlled by parents, teachers, and care-givers? How do we decide what is legitimate control and what is infringing on an individual's rights?

- The value of quality of life for individuals with disabilities: Do parents, teachers, and caregivers have a moral obligation to facilitate quality of life for individuals with disabilities? How do we decide when to intervene and when it is not our responsibility to do anything to try to change a situation?

- The responsibilities of parents, teachers, care-givers, siblings, and peers to intervene and to provide support to individuals with behavior problems vs. "blaming" the individual for "making bad choices" or "willful disobedience."

- Objections to the use of punishment to control behavior: *"There are many wonderful programs around the country -- serving children with the most complex disabilities and behavioral challenges in non-punitive, non-coercive settings. Research and experience have clearly demonstrated positive approaches work. It is time to assure that that no child grows grow up afraid and abused by the very people and programs that are supposed to provide education and treatment"* (Trina Osher of the Federation of Families for Children's Mental Health, quoted in a press release by The Alliance to Prevent Restraint, Aversive Interventions, and Seclusion, retrieved May 22, 2005, from http://www.thefamilyalliance.net/APRAIS_Press_Release.htm.)

Part 2 of Ethics: Code of Conduct for Professionals

Several organizations and individuals have developed codes of conduct for professionals who work with children, students, or persons who have severe disabilities. They are not all the same. What do you think of the following list of values and expectations for Special Education professionals?

"1. Value students with diverse needs and recognize their commonality with all other students.
2. Appreciate, value and seek ways to enhance the strengths of diverse students.
3. Respect and value all students as individuals.
4. Recognize the importance of instructing students in the least restrictive environment and the value of early intervention.
5. Be aware of the impact cultural backgrounds can have on educational programming and see ways to incorporate family heritage.
6. Develop a desire to keep current on research and innovations within the field of special education.
7. Value collaboration with colleagues, parents and students to promote student success.
8. Affirm the goal of special programming is to produce productive, well-functioning adults." (Carol Bucher, Course Description, College of Wooster, in Ohio. Retrieved May 21, 2005 from http://www.wooster.edu/education/200/)

What would you add to this list or change? Does the situation in which you work call for the same values or are there different ethical issues?

How are "ethical" issues surrounding behavior management and support related to:

- legal issues,
- policies of school districts and other institutions for their employees,
- religious values and personal morality,
- cultural norms,
- "common practice" vs. formal standards of professional organizations,
- conflict between the needs and rights of the individual whose behavior is a problem and the needs and rights of those responsible for managing that individual's behavior, and
- disagreement about the obligations of teachers or other caregivers to provide support and services that take extra effort and the obligations of school districts/taxpayers and other employers of those who serve children and youth with behavior problems to provide a safe working environment and just compensation?

What do you think of this comment made recently by a university student, reflecting on her experiences growing up with moral education based on Marxist ideology in China: "*Morality was like a very thin layer of dust on the stone; it disappeared right away with the blow of the gentlest breeze of self-interest"* (Chen, 2005).

What do you think of this comment made by a "burned out" special education teacher, who shall remain anonymous, but who used to volunteer many hours of his own time to help his students, above and beyond the time he was paid for teaching (e.g., to make home visits, attend community events as an advocate for individuals with disabilities): "*The better you are with the tough kids, the worse kids they give you."*

Section 3. Introduction to Basic Concepts of Functional Behavioral Assessment (FBA)

This section begins with an excerpt from an unpublished manuscript by Tobin and Crone (2003):

"*Knowledge of Functional Behavioral Assessment (FBA): Why It Is Important and How Can It Be Measured***?"**

Knowledge of functional behavioral assessment (FBA) can be used to identify the function or need underlying a student's challenging behavior and enable teachers and other school personnel to develop effective positive behavior support. Psychologists working in the schools are increasingly being expected to design interventions based on assessments, including functional behavioral assessment, to facilitate collaboration among professionals, and to evaluate outcomes (Martens & Ardoin, 2002; Power, 2002). Positive, function-based, behavior support has an important role to play in the prevention of chronic antisocial and disruptive behavior patterns that interfere with educational progress and social adjustment (Conroy & Davis, 2000; Gresham et al., 2001; Sugai, et al., 2000). The literature on PBS consistently reports that it is based on an initial assessment of the function of the challenging behavior (Gable & Hendrickson, 2000; Jackson & Panyan, 2002; Turnbull et al., 1999; Turnbull, Wilcox, Stowe, & Turnbull, 2001).

The FBA approach to reducing problem behaviors is based on four related concepts (see Crone & Horner, 1999-2000, 2003; Gresham, Watson, & Skinner, 2001; Peck-Peterson, Derby, Berg, Horner, 2002; Sugai, Horner, & Gresham, 2002). First, FBA is based on the optimistic concept that problem behavior can be changed. Second, changes in the environment, particularly in the antecedents and/or consequences that are related to the behavior, are essential for effecting change in the problem behavior. Third, a key element in positive behavior support is the teaching of appropriate alternative behaviors that can be substituted for the problem behavior to meet needs associated with the problem behavior. Fourth, selection of interventions is based on an understanding of the individual student's situation, not on the topography, or type, of problem behavior. . . .

A study of practices in U.S. schools found that the predominant response to persistent problem behavior is reactive and negative, in spite of lip service frequently given to the use of positive methods (Bear, 1998). Policies of "zero tolerance" have increased the number of students being placed in alternative or more restrictive settings, expelled, or placed on long-term suspensions (Katsiyannis & Williams, 1998; Riley & McDaniel, 1999). A disadvantage of punishment is that it is associated with emotions of fear and anger (Chance, 1998). Undesirable emotional responses, or "maladaptive social information processing" (Hartman & Stage, 2000, p. 192) following punishment are factors in school dropout (DeRidder, 1991; Elias, 1998; Thurlow, Christenson, Sinclair, & Evelo, 1997; vandalism (Mayer, 1995), and escalating antisocial interactions which can lead to delinquency (Walker, Colvin, & Ramsey, 1995; Patterson, Reid, & Dishion, 1992). In spite of these side effects, disciplinary consequences intended to punish often continue to be used repeatedly, even when they are ineffective in changing the problem behaviors (Morrison, Anthony, Storino, & Dillon, 2001). This may be, in part, because people do not know enough about the correct use of FBA and function-based support, especially with

regard to how these methods should be used in school settings with students who have behavioral disorders (Sasso, Conroy, Stichter, & Fox, 2001). . . .

An extensive literature exists on FBA for reducing self-injurious and other problem behaviors by teaching functionally equivalent adaptive behaviors to individuals characterized as developmentally delayed, autistic, or severely disabled, particularly in clinics, residences, or special programs (e.g., Albin, Lucyshyn, Horner, & Flannery, 1996; Didden, Duker, & Korzillius, 1997; Durand, 1990; Durand & Merges, 2001; Ervin et al., 2001; Horner & Carr, 1997; Horner, Carr, Strain, Todd, Reed, 2002; Iwata, Dorsey, Slifer, Bauman, & Richman, 1982; Marquis et al., 2000; McEvoy & Reichle, 2000; Reichle & Wacker, 1993).

Recently, the literature base on FBA includes more studies with students not characterized as developmentally delayed or severely disabled, especially students characterized as emotionally disturbed, or having Attention Deficit Hyperactive Disorder (ADHD), or students in general education without a label but whose behavior is disruptive (Condon & Tobin, 2001; Cowick & Storey, 2000; Doggett, Edwards, Moore, Tingstrom, & Wilczynski, 2001; Heckaman, Conroy, Fox, & Chait, 2000; Lane, Umbreit, & Beebe-Frankenberger, 1999; Penno, Frank, & Wacker, 2000; Sterling-Turner, Robinson, Wilczynski, 2001; Scott, DeSimmone, Fowler, & Webb, 2000; Tobin, 2000). The underlying principles of effective applied behavior analysis, which include the use of FBA, are the same regardless of characteristics of the individuals involved or the topography of their challenging behavior (Anderson & Freeman, 2000; Dunlap, Kern, & Worcester, 2001; Gable & Hendrickson, 2000; Tobin, Lewis-Palmer, & Sugai, 2002).

The Essence of Functional Assessment

Understanding the student's perspective is the essence of functional behavioral assessment. The process of FBA may include a student interview (Ervin et al., 2001; Kern, Dunlap, Clarke, & Childs, 1994; Jolivette, Lassman, & Wehby; 1998; Kearney, 2001, 2002a, 2002b; Kearney & Tillotson, 1998; Reed, Thomas, Sprague, & Horner, 1997). Descriptive information can be obtained from other sources, such as: teacher or parent interviews; rating scales, direct observations in natural settings, and a review of school records and incident reports (Artesani & Mallar, 1998; Fox, Gunter, Davis, & Brall, 2000; McConnell, Hilvitz, & Cox, 1998; Todd, Horner, & Sugai, 1999; Salend & Taylor, 2002). Systematic manipulation of different types of consequences, a process called functional *analysis,* can be used to identify factors causally related to the student's behaviors (e.g., Brossard & Northup, 1997; Meyer, 1999; Moore, Doggett, Edwards, & Olmi, 1999) or to verify hypotheses developed from descriptive information (e.g., Doggett et al., 2001). Descriptive assessments, which depend on naturally occurring variations in environmental factors, are valuable for "planning treatments that will succeed in the natural environment" (Schill, Kratochwill, & Gardner, 1996, p. 93).

Using FBA, adults can understand a child's perspective and, with that in mind, develop interventions that will effectively decrease occurrences of inappropriate behavior while at the same time, provide the child with respect and consideration. Teachers need to be aware of what Montague and Warger (1997) called "the desired outcome from the student's perspective (e.g., attention from peers, teacher attention, avoidance of a math task because the student lacks the skills" (p. 7). Many students who behave inappropriately have found that it provides quick access

to powerful reinforcers, such as attention (even if negative) or opportunities to avoid difficult tasks. Teaching an alternative behavior that is functionally equivalent to the inappropriate behavior, in that it leads to the same consequence, eliminates problem behavior when the replacement behavior is a more efficient and/or more effective way to meet the need associated with the problem behavior (Carr, 1988; Carr, Reeve, & Magito-McLaughlin, 1996; Horner & Billingsley, 1988; Horner & Day, 1991; Neef, Bicard, & Endo, 2001; Neef & Lutz, 2001a, 2001b).

Many publications for learning about and using FBA have recently been developed (e.g., Asmus, Vollmer, Borrero, 2002; Cipani, 2002; Center for Effective Collaboration and Practice, 1998; Crone & Horner, 2003; Fad, Patton, & Polloway, 2000; Gresham & Noell, 1999; Kaiser & Rasminsky, 1999; Kearney, 2001; Kearney, 2002b; Kearney & Silverman, 1993; O'Neill et al., 1997; Ray & Watson, 2001; Roberts, Marshall, Nelson, & Albers, 2001; Scott & Nelson, 1999a, 1999b, 1999c; Sugai, 1998; Todd, Horner, Sugai, & Colvin, 1999; Witt, Daly, & Noell, 2000. New materials in formats using technology also are available, including an interactive cd-rom (Liaupsin, 2002; Liaupsin, Scott, & Nelson, 2000; Sailor et al., 1999-2000), a software program (Hofmeister et al., 1999), and Web sites (e.g., http://www.air-dc.org/cecp, http://darkwing.uoregon.edu/~ttobin, http://pbis.org).

Staff Development and Inservice Training

Inservice training is needed for teachers and other school staff in the use of FBA and positive behavioral interventions (Doggett et al., 2001; Nelson, Roberts, Rutherford, Mathur, & Aaroe, 1999; Park & Turnbull, 2002; Turnbull et al., 2002). Reid and Nelson (2002) reviewed the literature on the use of FBA in schools with students with high-incidence problem behaviors and found that "the FBA process was largely driven by researchers . . . the role of direct service providers was passive and largely confined to that of data source" (p. 18). A study of general education teachers found that 94% were "haphazard" about collecting data on the prereferral interventions they tried and had little knowledge of how to develop, use, and monitor behavioral interventions in their classrooms (Wilson, Gutkin, Hagen, & Oats, 1998, p. 56). A study of teachers' interactions with young children with challenging behaviors found that teachers did not provide adequate feedback or accommodations to these children (Lago-Delello, 1998).

Some teachers will urge parents of a student with behavior problems that has not responded to traditional disciplinary procedures to ask a physician about using medication (e.g. Ritalin) to remediate behavioral problems without first making an effort to provide more effective individualized behavioral support. Even when children and adolescents are receiving pharmacological treatments, school staff need to collaborate with other professionals and with family members in providing interventions and monitoring outcomes (LeFever, Villers, Morrow, & Vaughn, 2002; Northup & Gulley, 2001; Phelps, 1998; Phelps, Brown, & Power, 2002). Webster-Stratton, Reid, and Hammond (2001) recently reported research indicating that, for children who were between 4 and 8 years old, behavioral treatments resulted in "statistically and clinically significant improvements in child conduct problems" (p. 950) and that this was equally true for children with and without the ADHD classification.

Inservice training, regardless of the content, often begins with instruction in workshops designed to increase teachers' knowledge and is followed by classroom observations and/or consultation with teachers as they try to implement workshop material (Bryant, Lianan-Thompson, Ugel, Hamff, & Hougen, 2001; Johnson, 2000). On-site consultation and follow-up are important because imparting content knowledge alone is not sufficient (NSDC, 2001; Shellady & Stichter, 1999). When the goal is to enhance local, site-based, school staff capacity to use FBA in ways that will sustain over time, an assessment of knowledge gains is one way to measure initial progress toward meeting that goal. Gains in knowledge are an important part of professional development efforts to prepare schools for positive behavior support (Jackson & Panyan, 2002).

The current paper evaluates the test-retest reliability and discriminative validity of a test of knowledge of FBA and related concepts that was used as a part of inservice training for teachers and other school personnel. The test was originally designed to measure change in knowledge of FBA shown by teachers and other school staff after receiving inservice training in functional behavioral assessment in a series of workshops. Inservice training included 14 to 16 hours total of didactic group instruction, combined with on-site technical assistance and consultation over a school year. The test was developed as a part of the Functional Behavioral Assessment Project (Crone, 1999) by a research team which consisted of the authors, both College of Education faculty members (one in school psychology and one in special education), another school psychology faculty member, and five advanced doctoral candidates in school psychology. Each of the contributors had extensive training and experience in FBA, behavior management, and positive behavior support. . . .

The total number of university students who participated in the test-retest study was 49, with most of the students (45) being in graduate school. Seven participants took the test only once and did not return to take the test the second time. All 49 scores from the first tests were used in comparing those who reported having been trained to those who reported being untrained. Data from 42 participants were available for the test-retest comparison. . . .

Inter-coder agreement was determined for 14 randomly selected participants, or 33% of the test-retest sub-set. Average inter-coder agreement across the 15 questions was 95.24% (SD = 5.51%). The range was from 86% to 100%. . . . Average test-retest reliability was 92.41% (SD = 8.10%). The range was from 73.33% to 100%. The average change in total scores, out of 38 possible points, for the test-retest group was 1.64 points (SD = 2.34). Most (n = 39) of the 49 respondents reported having formal training in FBA, with 35 reporting having taken a class that included information on the topic. Respondents could indicate types of training that they had received and some marked more than one type of training. Eight reported having attended a conference session on FBA, and four reported a workshop. Seven also reported "other" training, including training provided by school district and working on grants related to FBA. Ten respondents reported that they had not received any type of formal training. Self-directed study was not counted as being trained. Of the untrained group, two reported having studied on their own. Of the group reporting some type of formal training, eight reported also having studied on their own.

The maximum number of points possible on the test was 38. The average percentage of points possible earned by the trained group was 68% (SD = 10.88%) with a range from 42% to 87%. For the untrained group, the average percentage of points earned was 45% (SD = 10%) with a range of 29% to 58%. As shown in Table 1, the mean score for the trained group was 26.64 (SD = 4.15) and the mean for the untrained group was 18.00 (SD = 4.03), a statistically significant difference ($p < .001$).

Table 1. Mean Score for Trained Group Compared to Untrained Group

	Mean Score	SD
Trained Group	26.64 points	4.14
Untrained Group	18.00 points	4.08

Source	df	F	p
Model	1	37.58	<.0001
Error	47		

The distribution of total scores on the FBA Knowledge Test revealed a clear difference between the trained and untrained groups, with no one in the untrained group earning more than 23 points while 79% of the group with training earned more than 23 points (see Figure 1). When average scores for the two groups were compared for each of the 15 questions, and ranked from most to least different, it was clear that the test could be simplified by eliminating the questions showing little difference, such as Questions 12, 6, 13, 3, and 15 (see Figure 2). The effect of using only the ten best questions (i.e. showing the greatest discrimination between the two groups) is to reduce the overlap at the lower end of the distribution (see Figure 3). (The numbered questions for the original test are listed at the end of this section and a revised test, using only the ten best questions, follows.) . . .

Many school districts are interested in providing inservice training in FBA for their teachers and other school personnel because function-based behavior support is a viable alternative to punitive reactions to discipline and other behavior problems. Knowledge of FBA is important for determining the function of behaviors that interfere with learning in order to develop interventions that reduce problem behaviors and teach appropriate alternative behavior. Although research indicates the value of FBA, a research-to-practice gap must be bridged. Teachers find that inservice training and collegial support are trustworthy, usable sources of information, and more accessible than professional journals or college courses (Landrum, Cook, Tankersley, & Fitzgerald, 2002). When inservice training is provided to teachers and other school personnel, an increase in knowledge of FBA is one goal of the inservice training. This study examined two types of reliability, inter-coder and test-retest, and one type of validity,

discriminative, for a test of knowledge of FBA and behavior support plans that was designed by the Functional Behavioral Assessment Project research team (Crone et al., 1999) to measure increases in knowledge resulting from inservice training. Both inter-coder reliability (95%) and test-retest reliability (92%) were acceptable. Discriminative validity was assessed by separating participants into "trained" and "untrained" groups on the basis of self-report of prior training (or lack of training) in FBA. The mean score for the trained group was statistically significantly ($p < .001$) different from the mean score for the untrained group. An analysis of specific questions indicated that the original test could be simplified to the ten questions most clearly indicating FBA training. . . .

ORIGINAL KNOWLEDGE TEST

Functional Assessment and Behavior Support Plans

Instructions: Answer the following questions the best you can. It is expected that you may NOT know answers to some of the questions. Don't dwell on questions you can't answer!

Multiple Choice (1 pt. each)

1. An example of reinforcement is:
   a) Student is praised by the teacher after giving a correct answer.
   b) Student is sent to the office for talking out in class.
   c) Student is sent to the office for talking out in class and the student talks out more often.
   d) Student is given 5 minutes of extra recess time.
2. An example of punishment is:
   a) Student is given detention for not completing homework and continues to not complete homework.
   b) Student is reprimanded for talking out in class.
   c) Student is praised by the teacher.
   d) Student loses class points after talking out in class and then talks out less often.
3. The school is required by law to conduct a full functional behavioral assessment for:
   a) All students referred for a behavior problem.
   b) Students with serious behavior problems.
   c) Students with disabilities whose behavior might lead to expulsion.
   d) Students referred for special education evaluations.

Short Answer

4. Define functional behavioral assessment. (3 pts)
5. What is the purpose of conducting functional behavioral assessment prior to developing a behavior support plan? (3 pts)
6. List two reasons why it is difficult to develop behavior support plans based only on a child's diagnosis (e.g., autism or ADHD). (2 pts.)
7. Describe 4 features of a good operational definition of a behavior. (4 pts.)
8. Why is it important to describe behaviors using the criteria you listed in #7? (3 pts)
9. What is the difference between a preliminary functional behavioral assessment and a full functional behavioral assessment? (3 pts.)
10. List 3 reasons for conducting direct observations as part of a functional behavior assessment. (3 pts)

11. List 3 factors you should consider when planning to conduct a direct observation. (3 pts.)
12. List 2 reasons for using data to make decisions. (2 pts.)
13. Elijah pushes other kids on the playground every time he wants to use playground equipment they are already using. As a behavior support team member, define a "desired behavior" and an "acceptable alternative behavior" for Elijah. (2 pts.)
14. List 4 features of a good Behavior Support Plan (BSP). (4 pts.)
15. List 3 reasons for progress monitoring student performance during the implementation of an intervention and/or Behavior Support Plan. (3 pts.)

REVISED KNOWLEDGE TEST

Functional Assessment and Behavior Support Plans

Instructions: Answer the following questions the best you can. It is expected that you may NOT know answers to some of the questions. Don't dwell on questions you can't answer!

Multiple Choice (1 pt. each)

1. An example of reinforcement is:
   (a) Student is praised by the teacher after giving a correct answer.
   (b) Student is sent to the office for talking out in class.
   (c) Student is sent to the office for talking out in class and the student talks out more often.
   (d) Student is given 5 minutes of extra recess time.
2. An example of punishment is:
   (a) Student is given detention for not completing homework and continues to not complete homework.
   (b) Student is reprimanded for talking out in class.
   (c) Student is praised by the teacher.
   (d) Student loses class points after talking out in class and then talks out less often.

Short Answer

3. Define functional behavioral assessment. (3 pts)

4. What is the purpose of conducting functional behavioral assessment prior to developing a behavior support plan? (3 pts)

5. Describe 4 features of a good operational definition of a behavior. (4 pts.)

6. Why is it important to describe behaviors using the criteria you listed in #5? (3 pts)

7. What is the difference between a preliminary functional behavioral assessment and a full functional behavioral assessment? (3 pts.)

8. List 3 reasons for conducting direct observations as part of a functional behavior assessment. (3 pts)

9. List 3 factors you should consider when planning to conduct a direct observation. (3 pts.)

10. List 4 features of a good Behavior Support Plan (BSP). (4 pts.)

Part 1 of Basic Concepts: Antecedent, Behavior, and Consequence (ABC)

The "Parents' Guide to Functional Behavioral Assessment" available online at http://darkwing.uoregon.edu/~ttobin has an explanation of these basic concepts, illustrated with photographs and examples. The section below is from this Parent's Guide.

What is a functional assessment?

A process of identifying specific environmental factors that have an influence on when a particular behavior will occur.
Can be used to plan positive ways to prevent or manage behavior problems at school and at home.
We have all heard people say things like:

"He just showing off to get attention; ignore him."
"The way she acts is really a cry for help."
"He's trying to get out of doing his work."
"Those other kids get her upset."

Functional assessments are by nature variable.

Each individual child's situation will be unique in some ways.
A school may be required by law to conduct a functional behavioral assessment.
Should be used to prevent serious behavior problems, not postponed until a crisis forces the school to take action.

Functional Assessment at Home

It is easy to understand, to assess, why children will help make cookies. It is a social activity that is fun to do with others in the family and, if you don't burn them, the cookies taste good.

How can cooking behavior be motivated?

By wanting to please and surprise a busy working parent on her birthday --
Even if getting an appreciative kiss from Mom is a bit embarrassing for a middle-school age child!

Four major elements are studied in functional assessments:

Setting events
Antecedents
Behaviors
Consequences
Setting Events

Setting events are environmental factors that cause variations from typical behavior patterns.

For example, a boy who usually liked to cook supper did not one time because he felt sick and went right to bed as soon as he got home.
The other time, he and his mother had a big argument in the morning and he just put peanut butter and jelly and bread on the table instead of cooking supper.

Antecedents

Antecedents are events or factors that signal, prompt, or remind us that this is the time and the place for a specific behavior.
For example, time of day could indicated when to start cooking – one family had a schedule that when the 5:00 news came on, it was time to start cooking.

Behavior

Behavior like cooking is obviously something that is learned.
Some parents spend a lot of time helping a child learn to be a good cook and a safe cook.
Unfortunately, less desirable behaviors also can be learned; we do not always realize this is happening.

Consequences

Consequences are the events that happen after the behavior and can be good, bad, or neutral.
"There will be consequences for that!"
Actually, there are consequences of some sort for everything.
For behaviors that occur over and over again, the important, or **maintaining** consequence, is the reason for or "function of" the behavior.

Let's think of factors related to other kinds of behaviors, both problem behaviors and desired behaviors:

Examples:
(a) getting in the car to go to school with a smile vs. arguing about going or about the seat belt;
(b) being neat vs. being messy

The maintaining consequences that result in many behaviors being repeated over and over fall into two big categories (with innumerable variations):

Getting something
Getting out of something

Getting something

The first category is **getting something** the child wants or enjoys, such as, food, a toy, or a favorite activity, like a game with Dad.

Getting out of something: “escape” or “avoid”

Precisely what it is about the situation that triggers this reaction?
What is frightening, aversive, difficult, or otherwise unpleasant?
Can it be changed? Or, can help be given? If not, can a way of coping or managing the difficult be taught?

Brainstorming

A problem solving strategy that has helped many people in different situations is brainstorming a variety of possible solutions – without criticism.
A silly idea may lead to a great idea.

Narrow Down the List

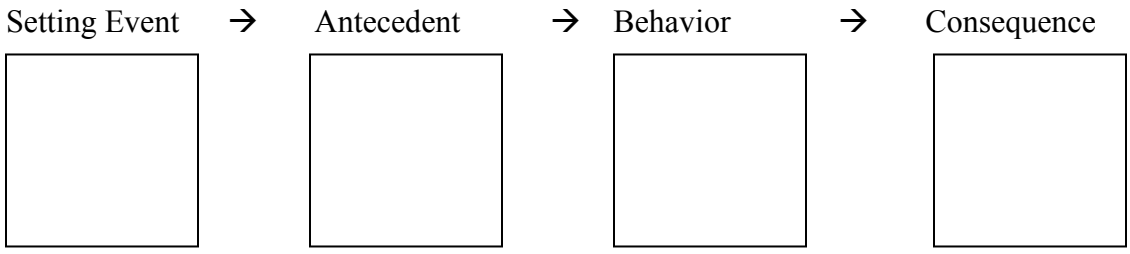
After the brainstorming session is over, narrow down the list of ideas to try first to the ones that seem
Most likely to be effective
Most practical

An Example of the Process

Interview
Observations
Hypothesis
Brainstorming
Developing the Behavior Support Plan
Monitoring the Intervention
Evaluating the Outcome

If a simple functional assessment is not enough, teachers and parents should seek help from others in their school, district, and community. Early intervention is worth the effort; don’t wait for a crisis to seek help!

THE BASIC BEHAVIORAL SEQUENCE:



Part 2 of Basic Concepts: How to Define and Measure Behaviors

Specific Dimensions of Behavior:
frequency or rate
topography or shape
intensity or force
latency or time before starting
locus or place
duration or amount of time

Frequency and Rate
Frequency – how often does the event or behavior occur? Just count it when it happens.
Rate – More sensitive – divide the frequency by the amount of **time** involved. Helps to find the average rate if the amounts of time vary when looking for progress.

If you kept a tally and found that one child used 20 swear words, it would really help if you also had the time period:
1 rate: During a 60 minute observation period in one day = 20 per hour (or 20/60 = .33 swear words per minute) 1 every 3 minutes
How would the rate change if the 20 words were during a longer time period? Over the course of a week, based on a running tally that the teacher kept = 20 per week (or if 5 school days in the week, 20/5 = 4 per swear words per day)

Topography or shape
You can use ordinary words (sitting, running) to describe the topography of a behavior but be specific and provide details that will help another person understand.

"She is running and reaching back with her right hand to pass on the "torch" in a relay race."
"He is turning the wheel with his right hand and reaching out to take the torch with his left hand."

Intensity or force:
How hard did she hit the ball?
Barely tapped it or so hard that it went way past the end of the court?
How loud was the sound she made when she played the violin?
So quiet that even the people in the front row could hardly hear it or so loud you could hear in the next room?
Decibels?

Latency or time before starting :
After a direction to do something, how long will it be before the student follows the direction?
3 seconds? 3 minutes? 3 days?

Locus or place :
Where does the behavior of interest occur?
In the hallway only? On the playground only? In the classroom? By the window?

Duration or amount of time:
Several ways to measure this:
From start to finish, how long did the temper tantrum last?
5 minutes? 25 minutes?
In a typical study session, what percent of the time does he stay on task?

How to operationally define and measure behavior
An "operational" definition must describe dimensions of the behavior that are
Observable
Measurable
Ways of "observing"
See, hear, smell, feel, taste
The actual behavior
The results of the behavior

Inferences vs. Observations
Grateful
"got it"
Has a bad attitude
Says "Thank you"
Gives the correct answer
Frowns, curses

Making decisions about what to measure: What is the concern?
Is **time** the issue?
Is it how long it takes to get started?
Or how long the behavior lasts?
Or what percent of the class is spend on it?
Is **frequency** the issue?
Happens too often? Need to decrease?
Does not happen often enough? Need to increase?
Making decisions about what to measure: What is the concern?
Is **force** or intensity the issue?
Touch, push, pull, pat, hit – too hard?
Speak, sing, talk, play music – too loud? Too soft?
Is **topography** the issue?
Sits half way on and half way off the chair
Doesn't sit up straight – shoulders slumped
One way "On-task" was operationally defined when the context was completing worksheets:
A student is applying his pencil to the paper --
unless he is engaged in another appropriate motor behavior for the task.
For example, a student might be counting on his fingers to complete a problem or erasing an error.

Another way to operationally define "on task" behavior – and related behaviors:

Active on-task -- Writing or answering questions
Passive on-task – Listening, watching other students answer questions
Off task – visual inattention to one's task materials or the teacher
Fidgets – Repetitive, task-irrelevant activity

Practice Activity:

Think of three individuals who have some type of behavior problem. Now rank them from most to least difficult. Pick the middle one. Make up a fictional name and provide a brief description of the individual, his or her general characteristics (e.g., age, gender, etc.), the situation where the behavior occurs, how you are involved or how you know about it.

Definitions of behaviors need to be "observable" – to include objective description of actions that can be verified by our senses.

What does the behavior look like? Sound like? How forceful or intense was it? Where was it happening or located? Was it dangerous? In what way? Was it damaging? In what way? Can you describe clearly enough that a substitute teacher or a babysitter would be able to definitely recognize it when it happens? Do not use inferences about what someone is feeling or thinking or what their personality is like; definitions of behavior are about what someone is doing. Be specific. Give examples of what it is and what it is not.

Measurable

How can we measure the behavior? Count how often it happens? How long it lasts? What percent of the time available it used up? We need some way to keep track of progress. Two people should be able to agree on exactly when the behavior starts and when it stops. We don't want arguments about whether it is still happening or not when we try to decide if the intervention is working. How would you be able to take some data on the behavior? Is your operational definition specific enough that you will know when to count it?

Section 4. Setting Events: Understanding the Big Picture and Changing Factors

Sometimes we need to understand more than the antecedents and consequences we see surrounding a behavior in the immediate situation. "Setting events" may have occurred that change the usual contingencies. For example, if someone is not hungry, offering something to eat as a reward probably will not be very effective. Typical setting events that may affect problem behaviors include being tired, having had an argument or fight (Horner, Vaughn, Day, & Ard, 1996). Not all setting events are bad. In real life, people speak of "setting the stage" to get someone in a good mood before bring up a topic of conversation that may be sensitive. Sometimes we cannot control setting events but rather, have to try to be aware, and sensitive, to things that may have happened that have lingering effect. For example, if we notice that someone seems to be sick, in pain, upset, discouraged, withdrawn, rather than going ahead with our planned activities, we may take time to see if some special assistance is needed.

Setting events are variable events, factors, or conditions that change the typical value of behavioral contingencies.

- They may be distal events (e.g., missing breakfast before school, parent left on a trip the previous day) that are difficult to directly observe although information about them might be available from interviews or self-reports.
- Setting events also can occur at school. For example, when a teacher uses a threat or reprimand that a student perceives as humiliating in one class, the stage may be set for problems with the teacher in the next class, even when a positive intervention that usually is effective is attempted (Gunter, Denny, Jack, Shores, & Nelson, 1993; Hartman & Stage, 2000; Shores, Gunter, & Jack, 1993).
- Setting events are, by definition, variable. Anything that stays the same all the time (e.g., a diagnosis for a chronic condition, the student's normal placement) is not a setting event although it may be useful information and may be related to actual setting events where something about that factor changes (e.g., did not take medication, had a substitute teacher).
- "Setting events" are not the same as the "setting." The "setting" is the place (e.g., playground, foster care home) or activity (e.g., small group reading, bedtime routine) where something is located. It is, of course, important to know that and it may provide clues about factors affecting the behavior, but it is not a "setting event" such as skipping breakfast or a bee sting.
- Unfortunately, many of the reports of functional assessments at school that have been published to date, neglect setting events.

Neglect of setting events may be due to neglecting parent interviews. Although it is difficult to find time to include parents in the functional assessment interviews, if you are trying to solve difficult behavior problems, learning what the parents can tell you is worthwhile. A booklet (Tobin & von Ravensberg, 2001, can be photocopied or viewed or downloaded from http://darkwing.uoregon.edu/~ttobin) is available that explains FBA using examples from both home and school. Ideas from this booklet, or the booklet itself, can be used when asking parents to participate in an interview and also to help with designing behavior support. Improving home-school communication, and making it more positive, may

be the first step toward a solution. In addition, if the behavior support design has parental input, it may also increase consistency in the way behavior problems are handled at home and at school. Setting events are likely to be an essential consideration for comprehensive interventions, such as, wraparound interventions (Eber, Nelson, & Miles, 1997) and interventions implemented in multiple locations (e.g., playground, classroom, home, community). Intervening in multiple locations with universal interventions facilitates reductions in conduct problems (Eddy, Leve, & Fagot, 2001; Eddy, Reid, & Fetrow, 2000). If individualized function-based support was combined with systematic universal interventions, and setting events were identified and communicated as students changed locations, we would expect behavioral improvements to generalize across locations.

Other ways to identify setting events include:

- Systematic analysis of school records and
- Attention to what is happening in non-classroom settings or between students, and student-teacher interactions (Gunter, Denny, Jack, Shores, & Nelson, 1993; Hartman & Stage, 2000; Shores, Gunter, & Jack, 1993)

Information on a recent study (McGill, Teer, Rye, & Hughes, 2003) of the relevance of tracking setting events was summarized online at http://www.kent.ac.uk/tizard/research/research_projects/settingevents.htm in the following way:
"Background/Rationale
As well as its relationship with immediate antecedents and consequences, challenging behaviour in people with learning disabilities appears to be associated with a broader range of personal and environmental circumstances.
Aims & Objectives
This study sought to identify the setting events reported by care staff as more and less likely to be associated with the challenging behaviours of people with learning disabilities.
Method
A sample of 65 staff working in residential settings with people who displayed high frequency challenging behaviours was interviewed using an inventory of putative setting events.
Findings
Findings were collated to allow identification of those events reported to be associated with increased and decreased likelihood of challenging behaviour. Some events (e.g., being in a crowded room) were strongly associated with the occurrence of challenging behaviour, some (e.g., one to one support) strongly associated with its absence. Some (e.g., day of the week) were largely "inert", many were idiosyncratically associated with occurrence, absence or inertness. Different categories of setting events contributed different relative amounts to variation in challenging behaviour." (Retrieved May 22, 2005, from http://www.kent.ac.uk/tizard/research/research_projects/settingevents.htm)

Here is another web site with discussions of "setting events" that you may find helpful in understanding difficult to treat behavior problems (if these links are too long, try deleting from the end, in your browser, so that they are shorter and then exploring or searching for the topic):

"A Guide for Parents and Carers"
http://www.cdlsworld.org/books/behaviour/home.php?chap=Chapter_7&id=20

also
http://www.cdlsworld.org/books/behaviour/home.php?chap=Chapter_6&id=11

Here is a great explanation of setting events, interventions related to setting events, and a form for use with others to figure out setting event situations. It is written for teachers but would be useful for anyone managing difficult behaviors:
http://www.specialconnections.ku.edu/cgi-bin/cgiwrap/specconn/main.php?cat=behavior&section=main&subsection=pbsint/setting

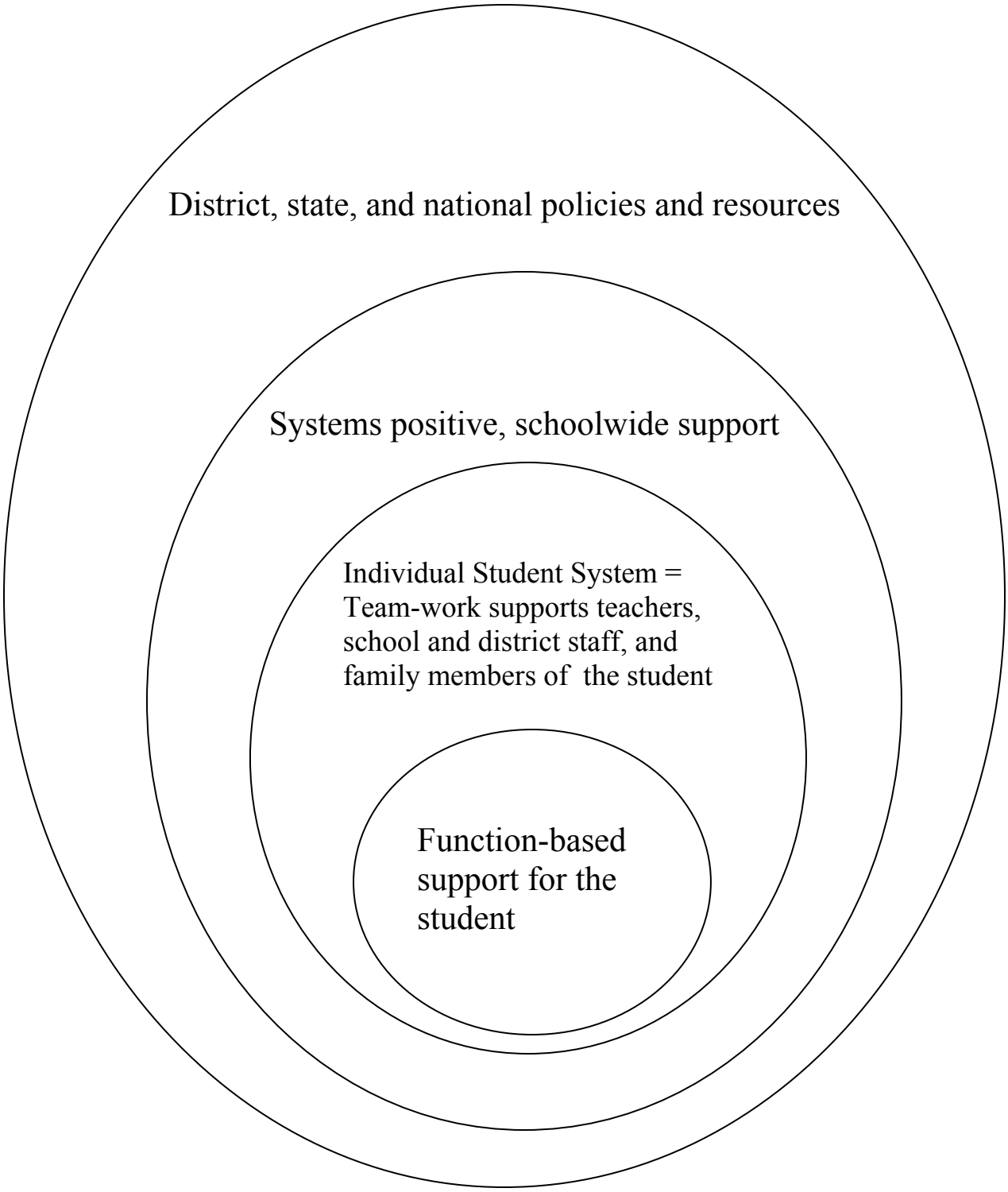
Section 5. Team Work: Tools for Communication and Documentation

Effective team-based approaches to inservice training skills related to positive behavioral interventions and the use of FBA in schools have been described (e.g., Chandler, Dahlquist, Repp, & Feltz, 1999; Crone & Horner, 1999-2000, 2003; Dunlap et al., 2000; Jolivette, Barton-Arwood, & Scott, 2000; Knoster, 2000; Scott & Nelson, 1999a; Tobin & Martin, 2001; Todd, et al., 1999). The team members, typically a small group of teachers and other school personnel, become knowledgeable about FBA through training and consultation with psychologists and behavior specialists who may be from the local school district and/or from universities, community agencies, or state departments of education. After training, team members are able to assist others in their school throughout the school year. Knoff (2000) recognized the importance of this type of staff support within the context of school-wide programs in recommending "the identification of a group of 'behavioral intervention master teachers' within the building who are available to their colleagues for additional technical consultation" (p. 29).

The conceptual framework underlying behavior support teams begins with an ecological systems perspective (Bronfenbrenner, 1979, 1995; Thurman, 1997). "Bronfenbrenner's ecological systems theory emphasizes the child's interaction with the environment as an active process in child development. This model has three basic elements: (a) the person, (b) the context (where the behavior occurs), and (c) the processes that produce developmental change" (Wheeler, 1999, p. 80). It is primarily at this level, the microsystem, that function-based support takes place. The mesosystem involves "interrelations among contexts of the microsystem in which children actively participate. The relationship between school and home would be a good example" (Richey, 1999, p. 10).

> The exosystem includes settings that influence a child's development but in which the child does not play a direct role, for example, the executive board of a child care center or the parents' workplace. The macrosystem represents a set of ideological and institutional patterns of a particular culture. (Richey, 1999, p. 10).

The drawing below illustrates how (a) functional behavioral assessment and positive behavior support for a student, (b) the Individual Student System, (c) schoolwide Positive Behavior Support programs, and (d) the wider policies of the school district, the state, and the nation are related within the perspective of ecological systems.


District, state, and national policies and resources
Systems positive, schoolwide support
Individual Student System = Team-work supports teachers, school and district staff, and family members of the student
Function-based support for the student

In this section, the importance of behavior support teams in schools is considered. For the sake of brevity, the phrase "teachers and other school personnel" will be shortened to "teachers." You may assume that when the word "teacher" is used, the reference includes other school staff members and that the concepts apply to anyone who is trying to manage problem behaviors, including parents, caregivers, and behavior specialists. Although this discussion focuses on schools, the concepts are relevant to other situations where team work is needed. In this discussion, we assume that, perhaps by virtue of the training you are receiving now, you may be a team leader.

Many schools will already have systems in place that could be expanded or adapted, such as opportunities for consultation with special educators, counselors, school psychologists, Teacher Assistance Teams (TAT), and Student Study Teams (SST). However, when administrators are members of the team, teachers (and other school personnel) may hesitate to bring up problems they are having for fear of being evaluated negatively and that it might affect their employment (Fenwick, 2001). Teachers will welcome help and accept feedback on their efforts to try out what they have learned about function-based support from team leaders, behavior specialists, or school psychologists -- provided these experts do not evaluate the teachers' job performances (Logan & Stein, 2001; Logan et al., 2001). Even when an "expert" is not available, "interdisciplinary teaming provides an organizational structure for staff development which encourages collegiality and shared decision making" (Whitford & Kyle, 1992, p. 111-112). Mutual respect and a non-judgmental situation make it possible for teachers to seek out assistance.

As the behavior support team leaders, you work with groups of people in different ways, yet you are always providing help to others as they learn to use function-based support. Think about this in terms of different types of committees or teams, such as, Individual Education Plan (IEP) teams, Teacher Assistance Teams (TAT) teams, Student Study Teams (SST) teams, and individual student's behavior support action teams (might include just the people directly involved -- a family member and an educational assistant). What experiences and concerns do you have about each of the following activities:

- Facilitating the setting of goals? (Either school-wide or for an individual)
- Contributing your own professional ideas? (In meetings and when talking one-to-one)
- Making it safe for members to ask for help and offer suggestions? (When teachers have trouble handling a student's behavior, they may feel very defensive. Likewise, if in they past they have been criticized or ignored, team members may hesitate. Given that differences of opinion will exist, and even that mistakes will and have been made, what can the team leader do to create a climate where people are willing to admit problems, put aside petty differences, and work together to find solutions?)
- Using conflict resolution and negotiation skills? (What skills do team members already have in these areas? Is a review needed? Do they teach these skills to the students? Can the team use some tips from the students' lessons?)
- Allowing members of the group to increasingly take on responsibilities? (As a team leader, you carry a lot of responsibility. Be looking for talents and interests in your team members and find opportunities to delegate.)

- Teach others to conduct functional behavior assessments. Although it takes time initially to observe team members as they conduct functional assessments, and teachers and other school staff members as they implement and document interventions, finding time to do this and to provide the types of performance feedback here, will build capacity in the school, improve the school climate, and lead to more successful outcomes for students with behavior problems. Be sure to give positive feedback, even when it has to be combined with corrective feedback. Just as we tell teachers to emphasize the positive when giving feedback to students, team leaders need to emphasize the positive when giving feedback to team members and other school staff.

It is not easy for teachers to work with students with severe behavior problems. When you are in the position of asking a teacher to try a new intervention, especially a function-based, positive behavior support plan, which probably will require time, patience, and energy – perhaps what may seem to be above and beyond the call of duty, at least as previously understood by this teacher -- how can you do this in a way that will gain the teacher's support for the intervention? Here are some suggestions:

- Ask them to try it out and promise to check back and see how it went.
- Allow freedom to chose how they will experiment with the new idea. Be open to their ideas, even if not exactly what you would prefer, if within reason, the commitment that is likely to result from their taking "ownership" will be valuable in the long run. However, it is okay to ask them to be willing to give some new ideas a chance too!
- Share your experiences of successes and published reports of the effectiveness of the intervention.
- Control over the amount of risk they take. An open discussion of perceptions of risks may help. Some places have run into situations where teachers were calling their union representatives about behavior support plans that they felt "pushed" unfairly into doing.
- Allow time to experiment (Again, this means checking back and being willing to revise. But it is worth it in the long run.)
- Peer support can be very helpful for teachers working with students with behavior problems. When you consider that the teacher's behavior needs to change too, who is going to provide reminders and reinforcers to the teacher? In some schools, teachers have helped each other in this way.
- Relate function-based support goals to teachers' primary concern with academic instruction. Behavior problems take time away from academic instruction. Sometimes an adjustment in academic instruction will reduce or eliminate a behavior problem. For example, students who find academic work too difficult or too easy, or seemingly irrelevant to their lives, may engage in escape-maintained behaviors.
- Address the need for systems level changes to support the changes that individual staff members will make. This is an especially sore point for many who are trying to implement function-based support well in situations where it has never been implemented before. At this time, the point is to recognize the need and to encourage a problem-solving approach as schools adjust to new ways of handling behavior problems.
- Mentoring will be needed to provide ongoing professional development (Malderez & Bodóczky, 1999). In the area of function-based support, both in terms of assessments and, perhaps even more so for implementing interventions, team leaders may be called upon to serve as mentors for team members. Likewise, team members may serve as

mentors for other school staff. What have your professional experiences with mentoring in general been? Think of a time when you either had a mentors or were a mentees. For example, have you worked with student teachers or school psychology interns? Or have you either mentored a new teacher or had a colleague serve as a mentor for you? Do the points listed here seem important to you? (a) Providing non-evaluative feedback supported by data from direct observations? (b) Facilitating reflection? (c) Modeling desired skills?

- Have a grand vision but start with small changes. Although our vision is for schools to be able to include and to provide support to all students, we realize that time, money, energy, and other resources are limited and that some students have needs that the schools currently are not able to meet. Yet schools may be able to serve students with more serious problems than they previously thought would be possible if function-based support is well understood. Build ongoing professional development into the school's normal routines. Whole school staff development in the area of function-based support is needed. Even when a behavior support team has special training, teachers and other school personnel will benefit from basic information on behavior support. In addition, as the school develops specific routines and procedures for conducting functional behavioral assessments and implementing related interventions, procedures for keeping all staff members up-to-date will be needed.
- Adults need to use self-management strategies to succeed with functional behavioral assessments and, especially, with the implementation and documentation of function-based interventions. Almost every one has had some experience with self-management strategies for changing their own behavior in some other aspect of life. Let's think about times when we have broken an old habit, developed a new routine. How can the methods that worked then be adapted for use with function-based support?

We can learn from reports of early efforts made by school psychologists to introduce functional assessment (FA) procedures and related interventions and to establish behavior support teams in schools. Here is a report of this type of early effort:

A Brief Report on the Follow-up Study of Impact of
"Comprehensive Functional Assessment for Schools"
(Prepared by Tary Tobin, University of Oregon, June 17, 2002)

The impact of training provided to school psychologists and others during the "Comprehensive Functional Assessment in Schools" (CFA) project (Horner & Sugai, 1998) is described by summarizing in-depth, semi-structured interviews with 11 school psychologists from 2 districts, who provided information on current practices in schools and identified concerns remaining to be addressed by future research. The psychologists who were interviewed had served in 106 schools, including elementary, middle, and high school, between 1998 and 2002. Each respondent had served in at least one school using the Effective Behavior Support approach to school-wide discipline although only 4 had served in schools with a focus on developing the Individual Student System (see Crone & Horner, in press; Horner, Sugai, & Todd, 2001; Sugai et al., 2000; Taylor-Green et al., 1997; Tobin, Lewis-Palmer, & Sugai, 2002; Todd, Horner, Sugai, & Colvin, 1999). The CFA project was part of a national effort to extend the use of positive support based on functional behavioral assessments (FBA) to students in

public schools who are not responsive to school-wide discipline programs. It was one of the first efforts to bring a systems-level approach to the use of function-based support in the public schools. The key findings are summarized here and additional information is available on request.

Three hypotheses were addressed:

Hypotheses 1: School psychologists who participated in CFA training activities will be able to describe examples of effective use of functional behavioral assessment in the development of **positive behavior support for individual students** with challenging behaviors.

Ten of the eleven psychologists provided examples of successful individualized, function-based support. In these cases, the student was generally in 2nd or 3rd grade; 6 of the 10 were in Special Education, and of those 6, four were characterized as Emotionally Disturbed. Behavior problems varied (e.g., tantrums, fighting, leaving without permission, crying, disruption). Typically, multi-component interventions were used which combined teaching an alternative behavior that was functionally equivalent to the problem behavior (e.g., learned an appropriate way to take a break or to access adult attention) with increased positive reinforcement of a more traditional nature (e.g., prizes, extra recess, coloring) and daily report or "point" cards which teachers marked to indicate how well goals were being met. However, as is appropriate for individualized support, there were more differences than similarities in the interventions.

Hypotheses 2: School psychologists who participated in CFA training activities will be able to describe situations in which **teachers improved their ability** to use functional behavioral assessment to provide positive, individualized, behavior support to students with challenging behaviors.

Of the eleven psychologists, 9 provided an example of a teacher whose ability improved. In almost every case, going through the FBA process helped the teacher to understand behavior problems and to think of solutions that had not occurred to the teacher in the past. In addition, school psychologists, other teachers, and university consultants and practicum students provided important assistance by modeling, assisting with initial implementation, and offering feedback and suggestions to the teachers. In most cases, teacher change occurred in association with a function-based intervention that was successful for the student. However, a psychologist reported that in one case, although the student (for whom a function-based support plan was developed and implemented) did not respond well and a placement change was the eventual outcome, the teacher's skill in managing other students' behavior problems improved as a result of having learned how to use a functional approach.

Hypothesis 3: School psychologists and/or other school staff members who participated in CFA training activities will be able to describe examples of **systems level change in schools** that improved the capacity of the school to provide positive, function-based, behavior support to students with challenging behaviors.

Ten of the eleven respondents provided an example of positive change in a school system. Three identified EBS as a key factor in the change. Other key features varied and included (a) special education programs being well coordinated with general education and special education teachers who provided leadership for school reform, (b) behavior teams that responded quickly to requests for help, (c) university help, (d) strong administrative leadership, and (e) determination to improve behavior yet (f) willingness to work with students with behavior problems.

Components of FBA

A list of recommended components of FBA was provided (e.g., interview student, directly observe the student, review school records). Although all of the suggested components were endorsed as valuable, the components rated as most necessary were (a) objectively defining behavior, (b) interviewing teachers / school staff, (c) developing a hypothesis about the behavioral function, and (d) brainstorming possible interventions. The components receiving the lowest ratings (often with comments that, ideally, it should be used but realistically, given time pressures and constraints, it was not likely to be included in a formal way) were: (a) rating confidence in the hypothesis, (b) interviewing parents / family members, and (c) evaluating outcomes.

Number of Functional Assessments, Level Differences, Persons Involved

All respondents reported that functional assessment is being used in all of the schools. However, the number of full FBAs per year per school ranged from 1 to 7, with 3 or 4 being typical. Several respondents expressed the opinion that function-based support was easier to implement and more effective at the elementary level than at the secondary level. At the high school level, often an attempt was being made to meet legal requirements because an expulsion or a change of placement was eminent but these attempts were not perceived as good examples of function-based support. At the elementary level, where the focus was more on prevention of an escalation of difficulties than on handling a serious crisis, outcomes were more often considered successful. In middle school, although interventions with prevention as a goal were being implemented, difficulties in monitoring and being consistent were reported because the students change classes and teachers so often during the school day. The school psychologists and university practicum students conducted most of the FBAs.

Difficulties and Obstacles

The school psychologists reported a wide range of obstacles and difficulties; the following were mentioned most often:

- Going from school to school (almost all were assigned 4 schools) – being in any one school only once a week
- Lack of time
- Expectation on the part of the teachers that the school psychologist's role is to facilitate placement changes, not to suggest that the teacher change his or her ways of managing behavior

- Lack of support personnel (counselors, health services, educational assistants)
- Lack of resources
- Lack of trained teams

Suggestions for Future Research

The main recommendation was for research in which a model demonstration project would be established and described in replicable terms. The feature most often recommended was to have a **behavior specialist** who would (a) not be responsible for evaluating students for special education eligibility, (b) provide leadership and technical support to schools in the development of school-based teams that would develop function-based support, and (c) provide follow up for individual cases.

Advice for Behavior Specialists:

- "Teachers are really busy. Don't ask them to go to meetings they don't need to go to."
- "Go through the FA process & help teachers understand behavior. Follow up with the teacher; observe and talk to teachers about what's working, what's not; give feedback in tactful way."
- "First, actually have behavior specialists who provide inservice to teachers! Second, have teachers understand that FA is not like other assessments, re change the environment, not fix the kid."
- Don't write up a plan by yourself and give it to the teacher. Teachers and other school staff need to help each other. It is better if someone other than the teacher who was having trouble with the student starts the intervention. "It's hard to provide positive reinforcement when you're pissed off."
- "Insist on team meetings. Understand nothing works in ideal way; fit intervention to how teachers work, how schools run, what resources are available."
- "Help teachers to not have impossibly high expectations, to focus on the positive, to use free reinforcers, like praise; and when fading, don't take it completely away -- keep at least 10% in place."

Phases of Learning Applied to Staff Teams

Training for skills in function-based support that school staff team members are expected to use should take into consideration the five phases of learning (Haring, White, & Liberty, 1978, cited in Wolery, Bailey, & Sugai, 1988): (a) acquisition, (b) fluency-building, (c) generalization, (4) maintenance, and (5) adaptation.

- What does "acquisition" mean for us? Lean how to perform the skills needed for functional behavioral assessment and function-based support and be able to do it with about 80% accuracy or better in workshops and initial efforts immediately afterwards.
- Fluency-building? Learn to perform the skills quickly, in natural settings throughout the school building and grounds, without hesitating or waiting for guidance from the team leader. Comes with practice, performance feedback, and success!
- Generalization? Learn to use the skills in a variety of situations, including in different places or settings, with different behaviors, with different types of materials, and with different people. When generalization is achieved, the skill will be used outside the place where it was taught (e.g., can recognize behavioral functions on the playground, in different classrooms), with various relevant behaviors and materials (e.g., can provide function-based support to reduce aggression as well as off-task behavior, can use a range of interview formats and interventions), and with different people (can understand functions of other teachers' behaviors as well as children's). Practicing under different conditions is one way to promote generalization.
- Maintenance? Team members continue to use the skills even when they are no longer being taught, prompted or reinforced by the team leader or district behavior specialist. Self-management, keeping informed, and being able to perform the skills well enough to access the naturally occurring reinforcement that comes with success are important.
- Adaptation? Team members can modify the skills when necessary. The concept differs from generalization in that, for generalization, the same skills are used under different conditions while in adaptation, the skills themselves must be modified. The purposes for using the skills remain the same but team members are able to see how variations are needed to fit new situations or to solve new problems. Team members must be flexible and creative to do this. It helps to have team members understand the importance of function-based support for the inclusion and education of students with behavioral challenges, to be able to appreciate individual differences, and to be able to analyze unique circumstances.

Section 6. Gathering Indirect Information

Information from interviews, questionnaires, rating scales, and school records is called "indirect" because it does not come from systematically recorded direct observations but rather from reports of others or from one's own memory of events seen in the past. Gathering and organizing indirect information is an essential first step in functional behavioral assessment for developing function-bases support. Sometimes enough information can be gathered indirectly to quickly implement an intervention, without going on to direct observations and a full FBA. When asked if they would prefer a quick response to one that might be more effective in the long run but would take longer, teachers usually respond, "Quick, of course!" In this case, the interview should address questions about safety or crisis situations to see if these types of interventions are needed immediately. Function-based support should follow after the safety and/or crisis issues are resolved.

Typically, before starting, parent permission will be obtained. This should not be a routine, formal, procedure. Rather, it should be part of an ongoing collaboration with the parent. Be sure to explain to the parent the value of function-based support at home as well as at school and in the community. A resource that you can use is the "Parent's Guide" available at http://darkwing.uoregon.edu/~ttobin. Forms for obtaining parental permissions for individualized assessments and interventions, including functional behavioral assessments and function-bases support, usually can be obtained from school districts or other agencies if you are working with an agency or in a school. Rather than just sending home a form for parents to sign, encourage meetings with parents to talk about the situation. Parent interviews have been very helpful in many cases. Parental contacts will continue to be important throughout the process. Work with school and/or agency administrators in establishing procedures for obtaining parental permissions, accessing family support services, and having school staff members conduct functional assessment interviews with parents.

It is possible that a situation would develop where a school (or other agency) was faced with a need and even a legal obligation to conduct an FBA and develop an individualized behavioral intervention even if the student's parents did not give permission for this. This also happens sometimes in connection with IEPs and alternative placements. These situations are beyond the scope of this training but you should be aware that it could happen. If it happens, work with administrators and legal advisors in dealing with the situations.

An important aspect of functional behavioral assessment is confidentiality. However, confidentiality should not prevent the communications needed for teamwork. Team members need to clarify how confidentiality will be respected while essential communication of assessment and intervention results is made possible among those with a need for the information. Sugai and Tindal (1993) describe essential aspects that everyone involved in the process of collecting and using the FBA information should understand:

> "Avoid discussing irrelevant personal matters . . . Conduct all meetings and case-related discussions in private . . . Teachers' lounges, hallways, and public places are unacceptable . . . Discussions should not occur in the presence of students or teachers

> who are not directly involved . . . Avoid leaving materials in places where teachers and students have free access." (Sugai & Tindal, 1993, pp. 144-145)

In this workshop, we do want to discuss actual situations and solve real problems. In order to respect confidentiality, please do not use actual names. Make up pseudonyms for the examples you use in our discussions. Note that all names given in the examples of individual behavior problems in this booklet are pseudonyms.

Interviews and rating scales can be used to gather information on what people remember about the circumstances surrounding challenging behaviors. This indirect information is especially helpful in deciding when and where to observe. School records and other institutional archival records are already on hand, contain important background information, and generally can provide a quick overview of patterns of behavior over long periods of time. Keep in mind that your goal, in gathering indirect information, is to be able, when you are finished, to summarize your results into the categories shown on the following form.

CONFIDENTIAL

Summary[1] of Indirect Functional Behavioral Assessment Information

Name of Individual of Concern:

Name of Person Completing this Form (or Interviewer and Interviewee*):

Names and Roles of Persons Providing Information:

Name of Instruments Used (if published forms were used other than this form):

Who has the original data collection instruments or where are they stored?

Who will use this form and where will it be stored?

Today's Date:

Directions: Looking over all the information that was collected, answer the following questions in a way that presents an overview of everything. If different sources provided significantly different views, briefly explain and refer to original instruments. Note that "target" behaviors can be problem behaviors to be decrease and/or desired appropriate behaviors to be increased. People usually focus first on decreasing the problem behavior. If both, answer the questions for both; attach a second form for the second behavior if necessary. Note that urgent crisis and safety issues need to be addressed separately and followed up with function-based support.

1. What are the strengths, goals, interests, and/or positive characteristics of the individual?

2. Are there any crisis, safety, health, or other serious issues that need to be addressed immediately? If yes, explain.

3. What is the problem behavior? Is this the target now?

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[1] This form can be used as a semi-structured interview with different individuals before being used to summarize all the information gathered indirectly.
*If used as an interview, indicate the names of the interviewer and the interviewee.

4. What is the desired appropriate behavior that should be happening instead? Is this the target now?

5. When and where is the target behavior most likely?

6. When and where is the target behavior *not* likely to occur?

7. What usually happens before the target behavior?

8. What usually happens after the target behavior?

9. Are any other behaviors associated with the target behavior? Are there behaviors that seem to lead up to the target behavior or tend to co-occur with it?). If yes, describe the other behaviors and how they are related.

10. Who are the people who seem to be involved and how are they involved?

11. Are there any suggested alternative behaviors? If yes, what? Any indication of who would have time to teach, prompt, or reinforce alternative behaviors?

12. Are there any suggestions for positive reinforcement? If yes, what?

Next Step(s):
a. Collect more indirect information.
b. Direct observations
c. Meeting to discuss options.
d. See assistance or consultation from: _____
e. Other action:

f. Start the following intervention: (Briefly describe or attach information about the intervention.)

Who will be responsible for making sure the next step happens? _____
What follow up activities are planned and for when?

Interviews

Interviewing is a part of the overall problem-solving process that is at the heart of function-based support. The interview as a tool in the functional assessment process is different from interviews designed to establish traits or to rate characteristics in that the goal is to understand environmental influences on behavior and behavioral sequences or patterns. For school staff members concerned about time spent in long conversations, an important advantage of the functional assessment interview in conferences about behavior is that it is focused on specific questions likely to lead to effective interventions.

An interview form can be used like a questionnaire and filled out by teaching staff, either on their own or in a group meeting. In addition, forms can be adapted to suit individual situations by adding or deleting questions appropriately. For example, the basic interview form in O'Neill et al. (1997) includes a series of questions that are particularly important when the person of concern has limited means of communication. Some of these questions are not relevant when communication is not a concern. Teacher, parent, and student FBA interviews or rating scales have been designed for specific concerns, such as attendance (Kearney, 2001; Kearney, 2002b; Kearney & Silverman, 1993; Kearney & Tillotson, 1998), escape from academic situations (Kern, Dunlap, Clarke, & Childs, 1994), or person-center planning (Artesani & Mallar, 1998). Research reports on methods of interviewing for FBA support the value of this method of obtaining information for FBS. In addition, computerized applications are appearing to simplify the process (Olympia, Heathfield, Jenson, & Clark, 2002) and no doubt more will appear in the future.

Interviews with student have helped with the selection of effective function-based interventions for adolescents with attention deficit hyperactivity disorder (Ervin, DuPaul, Kern, & Friman,1998). Other researchers have addressed the use of student-based information in the FBA process. Kern et al. (2001) report that having a student's Behavior Support Plan (BSP) include self-management and social skills instruction that are explicitly linked to the results of the FBA will make it "personally relevant" (p. 225) to the student and increase the likelihood that behavioral gains will maintain. Reed et al. (1997) interviewed 10 upper elementary and middle school students, using the interview in O'Neill et al. (1997), and assessed agreement between separate student and teacher interviews. They found moderate to high agreement on the functions of problem behaviors, antecedents, and consequences, but not on setting events.

Interviews with students should be conducted at times when the student is calm and has not just been involved in an interaction that offended the teacher who is to conduct the interview. If that happens, reschedule the interview for a later time or have someone else conduct the interview. Adults are used to talking to children about problem behaviors in ways intended to admonish or to advise. That should <u>not</u> happen during an FBA interview. Instead, ask the child, in a nonjudgmental way, to report and describe the circumstances occurring before and after the behavior.

Tips for Interviewing Children. In some other types of behavioral assessments, with children who set fires or who have been abused, for example, considerable work has been done on the best way to interview children. Although children over 9 years old are considered fairly

reliable reporters, younger children are easily influenced by suggestions and comments from an adult interviewer. The following "Do's" and "Don'ts" reflect the findings of research on improving the accuracy of information obtained by interviewing children (White & Edelstein, 1991):

Don't:

- Ask, "Why did you do that?"
- Ask leading questions that "put words in the child's mouth" by suggesting possibilities.
- Say, "Are you sure?" or make other remarks indicating disbelief.
- Use the same interview questions used for adults.
- Force the child to say what you want to hear.

Do:

- Modify the interview questions to suit the child's age.
- Put the child at ease by conversing about something of interest to the child.
- Start with an event the child clearly remembers and go forward or backward in time from that event to the target situation.
- Ask open-ended questions.
- Ask for clarification.
- Ask, "What happened next?"
- Ask about the recent past rather than an unlimited time period.

Rating Scales

Several different rating scales have been developed for different purposes related to function-based support. Durand (1990) provides information on a rating scale used to assess the functions of challenging behaviors in the field of severe developmental disabilities. A rating scale that was helpful in planning interventions to reduce children's psychosomatic headaches was developed by Budd and Kedesdy (1989). Kearney and Silverman (1990, 1993) studied a rating scale about factors that influence school refusal behavior. Truancy can be reduced by developing interventions that address the specific consequences that maintain it (Kearney, 1993, 2001, 2002a, 2002b)

Records Reviews

Institutional records are routinely compiled and provide an inexpensive, readily available source of information about a wide range of variables over a long period of time, going back to when the student first entered school. This makes it possible to determine, in some cases, how well established a behavior pattern is, when it is most likely, and what background factors should be considered as possible setting events. Records of behavioral incidents that resulted in disciplinary actions or referrals for medical or social services, or counseling, preserve what was written at the time of the incident. Although reviewing records can be done informally, when attempting to understand and resolve serious behavior problems, the use of a systematic process to gather the information from records can reveal patterns, identify strengths, areas of concern that might otherwise be overlooked.

Several tools are available for systematically collecting information from school records. The School Archival Records Search (SARS) (Walker, Block-Pedego, Todis, & Severson, 1991), a standardized instrument, has established reliability and validity for the identification of students at risk for dropping out of high school well in advance of this event, primarily on the basis of academic records and written, negative narrative comments found in the records. The Sugai-Tobin Archival Review (STAR) (Sugai & Tobin, 1999), a more detailed instrument, has established reliability and validity for identifying relationships among office discipline referrals, positive support, attendance, grades, positive support, special education placements, and high school outcomes. As FBA becomes more common, students with serious behavior problems are likely to have more than one FBA and a series of behavior support plans over time. With an awareness of the need to collect information from school records for teams to use in planning function-based support, the STAR has been revised to include information relevant to FBA and intervention planning for students at any grade level (Sugai & Tobin, 2001). This tool is included in Appendix B; note the directions to record only information relevant to the task at hand. The form is lengthy due to the need to be useful in a variety of circumstances but for any individual student, experience has shown that the relevant sections can be completed quickly (Tobin, Lewis-Palmer, & Sugai, 2002; Tobin & Martin, 2001).

In the future, school records may contain more information that will be helpful in developing positive interventions. The concept that problem behaviors do serve some type of function, albeit inappropriately, is coming to be understood. This understanding led to requests that (a) staff filling out office discipline referrals include information about possible functions (see http://swis.org) and (b) students completing in-school suspension forms and self-report relevant environmental variables (Hartman & Stage, 2000).

Deciding on the Action to Take Next

If the results obtained from gather indirect information immediately suggest an intervention that seems likely to accepted and effective, try out the intervention. Monitor the effects of the intervention. If the intervention resolves the behavior problem, perhaps further assessments procedures are not needed. On the other hand, if the information gathered from the indirect sources is inconclusive, or an intervention was attempted but not successful, the functional assessment process should continue with additional procedures, such as direct observations and hypothesis testing. These procedures will be explained next.

Section 7. Gathering Direct Information: Observations in Natural Environments

Direct observations are valuable because events that surround both appropriate and inappropriate behaviors can be identified. Careful attention to the relationship between variations in contexts and variations in behavior can lead to ideas for effective function-based support. Direct observation can be helpful in identifying behaviors that covary, or vary in relationship to each other. This information has led to some creative and effective solutions for behavior problems. Although teachers, parents, and caregivers observe every day, direct observations for an FBA need to be done in a systematic way and recorded.

Covariation

Directly and systematically observing to see if there are other behaviors that covary with a problem behavior may clarify the functional relationships involved. Behaviors that covary may form what is called a “response class.” A response class refers to several behaviors that a student can use for the same purpose. If covarying behaviors are a part of the problem, or could be a part of the solution, information on the behaviors that covary would be an important part of an FBA. For Example, if a student’s goal was to make a peer laugh, the student might make a funny face or tickle the peer. These two behaviors would be a response class because they have the same function. If the child was not allowed to tickle anyone, making faces might increase. If the teacher taught the child a number of humorous stories and jokes and provided occasions for the student to share these with peers, telling jokes might replace making faces.

You may observe that some responses covary directly. When When one response decreases, so does the other. Other responses may covary inversely; when one increases, the other decreases. Sometimes responses that covary form a “chain” of behaviors, where one follows another in a specific order. If a chain of behaviors is identified, it may be possible to intervene at the beginning of a chain that might otherwise escalate into a crisis (Colvin, 2004).

There may be clusters, or several, responses that covary together. Sometimes treating one behavior in a response class will result in a change in a covarying behavior that was not directly treated. Parrish, Cataldo, Kolko, Neef, & Egel (1996) reported that an intervention designed to increase preschool children’s compliance with adult requests (using positive reinforcement) not only increased the appropriate response, but also decreased untargeted inappropriate behaviors (aggression, disruption, property destruction, and pica). Assessing response covariation and behavior chains can help because it may be possible to change difficult-to-target behavior by targeting a covering response. For example,

Technology

Direct observation includes observing videotapes and it includes observations recorded by someone assisting the teacher. An interesting article about a teacher’s use

of direct observation in conducting an FBA for a student with a mild mental disability and a chronic behavior problem was written by Cooper, Peck, Walker, and Milland (1993). This teacher videotaped the student during school time to facilitate data collection. The teacher did all the data collection herself, using various typical classroom activities. She designed a successful intervention which included providing increased attention and praise to the student for completing academic tasks. Teachers also have been able to collect data using audio tapes. New technology makes it even easier to record direct observations. For example, a personal digital assistant (PDA) can be used to collect direct observation data (Olympia, et al., 2002).

Administrative Support

Schools are in the process of developing new procedures and finding staff time for direct observations for FBAs. Some school administrators have hired substitutes to teach while teachers do observations in their own and in other teachers' classrooms. Other administrators have collected direct observation data themselves or made arrangements for school psychologists, behavior specialists, counselors, special educators, trained paraprofessionals, and university students to collect direct observation data.

Even without administrative assistance, some teachers have found other options. One teacher make arrangements to have a parent volunteer record direct observation data; this parent used an interval-based observation procedure that the teacher found in Witt, Daly, and Noell (2000), which is a book on functional assessment written for school psychologists but which the teacher had read. Behavior support team leaders should not underestimate teachers or parents!

Recording A-B-C Sequences

Teachers do not necessarily need to use the same type of direct observations methods that researchers often use, such as 10 second interval recording. A variety of methods of recording direct observations are available. With a little additional training, teachers can master writing descriptions of a series antecedent-behavior-consequence (A-B-C) sequences (Bijou, Peterson, & Ault, 1968; Sugai & Tindal, 1993). Long and Forehand (1988) suggest limiting the amount that needs to be written by focusing the record of A-B-C sequences in advance on specifics of interest and using abbreviations (e.g., "non" for noncompliance and "com" for compliance).

Scatterplots

Taylor and Bailey (1996) used a similar plan for collecting direct observation data on a simple matrix (showing times by rows and class or activity by column), to create scatter plots (Foster-Johnson & Dunlap. 1993; Touchette, MacDonald, & Langer, 1985) of when and where a student's behavior problems were occurring. They found that patterns could be identified for some students in less than a week and that this information was useful for developing effective interventions.

The Functional Analysis Observation Form (FAOF)

Artesani and Mallar (1999) reported that, over a two week period, a special education teacher used the Functional Analysis Observation Form (FAOF) for direct observation for functional assessment from O'Neill et al. (1990; see also the revised, 1997 version) as a way to record behavioral incidents and related environmental factors when incidents occurred, even while continuing to teach. That is, the teacher did not stop teaching, sit down, and just observe. Instead, the teacher continued to teach but if and when an incident occurred, the behavior would be recorded along with the antecedents and consequences, etc. However, very little writing needed to be done during class because with the FAOF, one lists in advance (i.e., before class) expected behaviors and anticipated environmental events as column headings (leaving some columns blank in case one needs to add an unexpected event). Row headers show the time. A symbol (a number that serves to identify the incident and double as a frequency count)is recommended) is recorded although one could just use check marks. By doing this over time (for Artesani & Mallard, a 2-week period), it was possible to identify a behavioral pattern and to use that information, along with other data, to develop an effective intervention. The FAOF combines features of scatterplots with A-B-C sequences.

Daily Behavior Report Card (or Point Card, Tracking Sheet)

Many schools use point cards, tracking sheets, or daily behavior report cards to quickly record a rating of a student's behavior when extra monitoring is needed. The daily behavior report card is a practical alternative to formal direct observations in school settings when time, personnel, and skill to conduct research-style systematic observations is not available (Chafouleas, Riley-Tillman, & McDougal, 2002). Although often held up as a "gold standard" in research, the use of formal direct observations was not found to be associated with positive student outcomes in a study of prereferral interventions (Flugum & Reschly, 1994, cited in Chafouleas et al., 2002). They found that it often was not used and was not as essential as other quality indicators of intervention planning, such as behavioral definitions and measurable goals. In addition to being useful for collecting information prior to intervention, daily behavior report cards can continue to be used during and after intervention as a means of monitoring and evaluating progress (Condon & Tobin, 2001; Crone, Horner, & Hawken, 2004; March & Horner, 2002).

Section 8. Your Hypothesis: A Summary Statement and a "Best Guess"

After you have collected information, you summarize the important features of the situation by forming a hypothesis about the function of the behavior and related factors. The functional behavioral assessment (FBA) approach to reducing problem behaviors is based on five related concepts (Crone & Horner, 2003; Gresham, Watson, & Skinner, 2001; Moore & Edwards, 2003; Peck-Peterson, Derby, Berg, Horner, 2002; Sugai, Horner, & Gresham, 2002).

First, FBA rests firmly on the concept that problem behavior can be changed. Your hypothesis is your best guess as to how to change the problem behavior.

Second, changes in the environment, particularly in the antecedents and/or consequences that are related to the behavior, are recognized as important in the change process. Your hypothesis will identify ways that changes in antecedents and/or consequences will affect the behaviors of concern.

Third, function-based support involves the teaching of appropriate alternative behaviors to replace the problem behavior by effectively and efficiently meeting needs associated with the problem behavior. The hypothesis might indicate a replacement behavior to be taught or at least provide information that can be used in making decisions about interventions involving teaching alternative behaviors.

Fourth, selection of function-based interventions depends on an understanding of the individual student's needs and perspective, especially the operant function that the problem behavior met, not on the topography, or type, of problem behavior. Your hypothesis will indicate an understanding of the student's point of view.

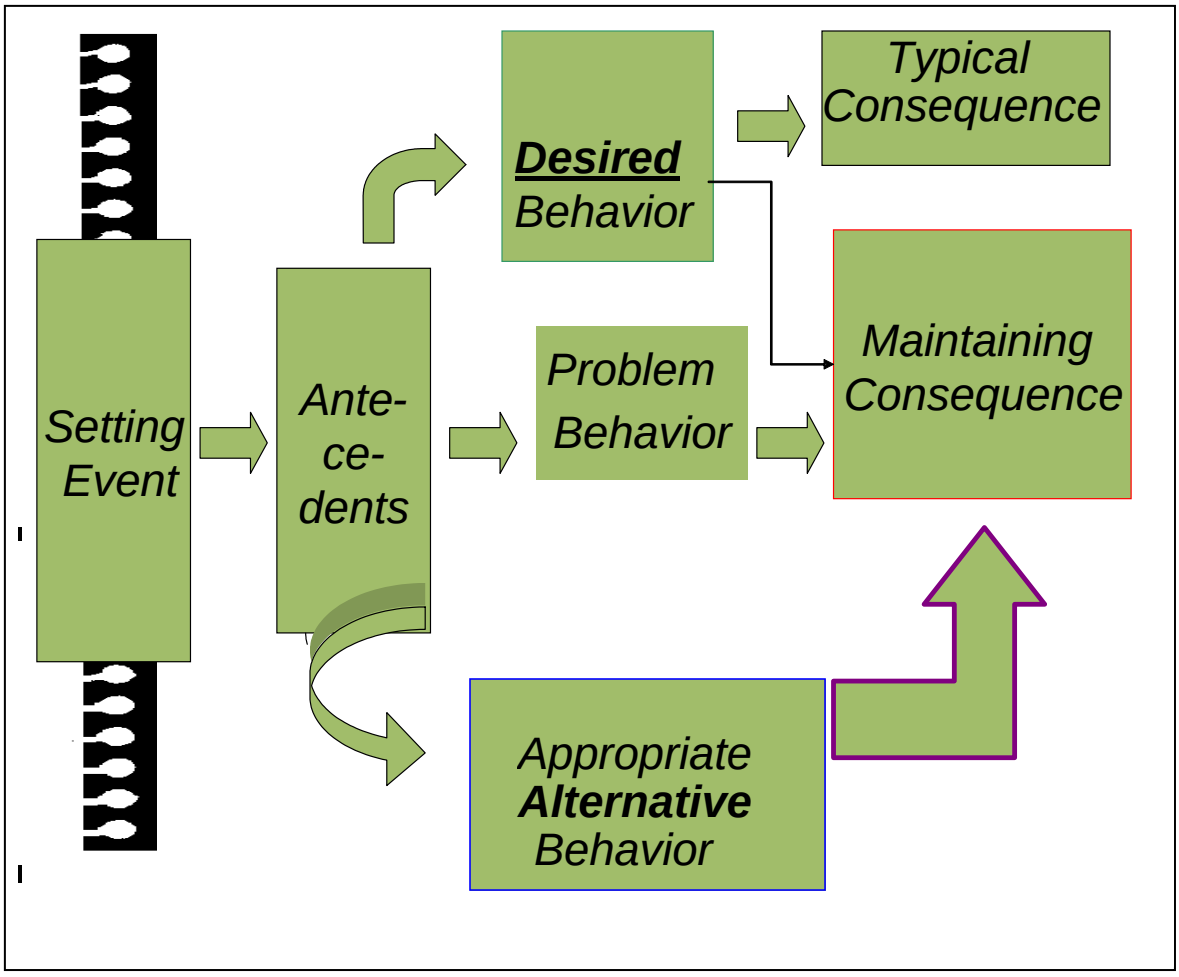
Fifth, advances in the use of FBA and PBS in recent years are related to opposition to the use of aversive methods of behavior control, led by advocates for individuals with severe disabilities (Horner et al., 1990; Sailor, 1996). In schools, disciplinary consequences intended to punish often continue to be used repeatedly, even when they are ineffective in changing the problem behaviors (Morrison, Anthony, Storino, & Dillon, 2001). This may be, in part, because punitive measures may provide momentary relief, but have not been associated with long-term durable positive behavior changes, and the correct and efficient use of FBA and function-based support has yet to be effectively integrated into natural settings (Gresham, 2004; Sasso, Conroy, Stichter, & Fox, 2001).

Section 9. Experimental Analysis and Other Ways to Test Your Hypothesis

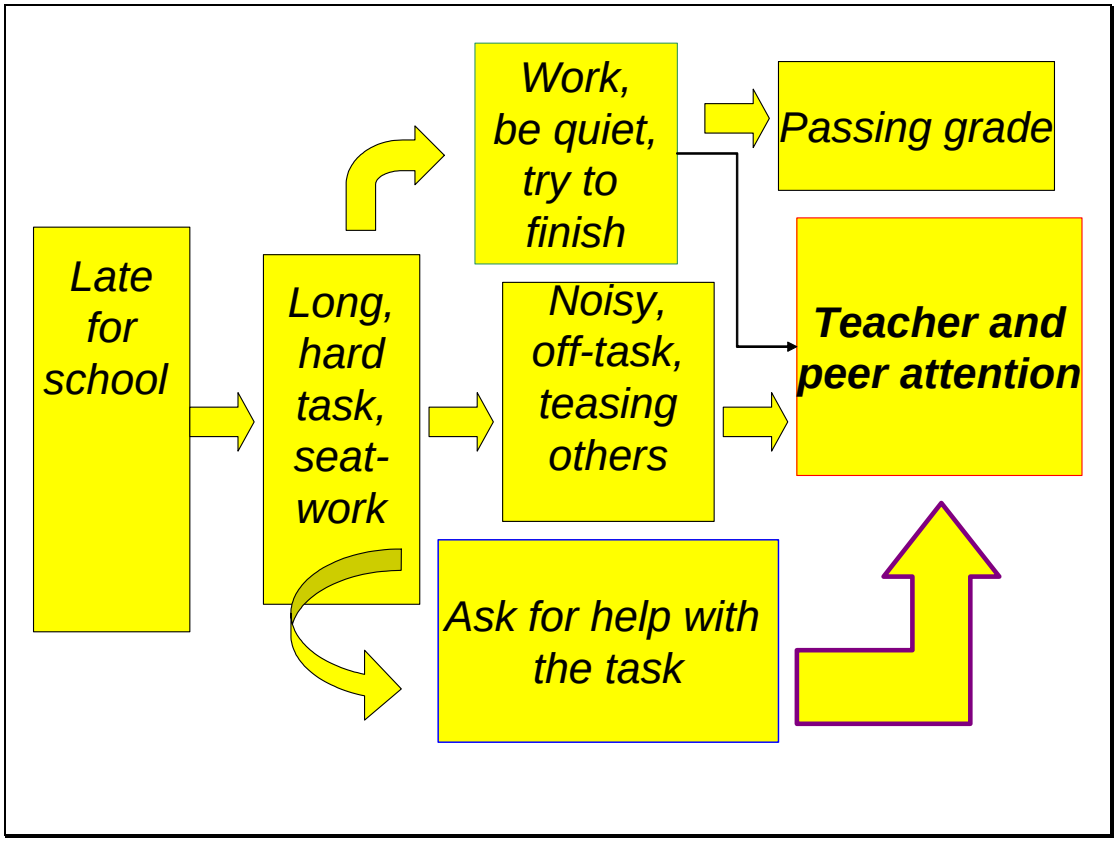
Section 10. Using the *Competing Behaviors Pathways* Diagram

The *Competing Behavior Pathways* model (O'Neill et al., 1997) is a clear statement of the logic that drives an instructional approach to intervention rather than a punitive approach. Diagrams of *Competing Behavior Pathways* facilitate brainstorming of potential interventions that address the power of the natural contingencies that have been enabling the problem behavior and harness that energy to develop strategies that will lead to durable improvements (Condon & Tobin, 2001; Lucyshyn et al., 2002; O'Neill et al., 1997; Sugai et al., 2002). It encourages the use of antecedent-based interventions (e.g., Conroy & Stichter, 2003; Reisen et al., 2003; Sprague & Thomas, 1997) in combination with reinforcement-based interventions. In addition, teaching an alternative or replacement behavior that is functionally equivalent to problem behavior will reduce or eliminate the problem behavior if the alternative behavior is a more efficient and/or more effective way for the student to meet the need associated with the problem behavior (Carr, 1988; Carr, Reeve, & Magito-McLaughlin, 1996; Horner & Billingsley, 1988; Horner & Day, 1991; Neef, Bicard, & Endo, 2001; Neef & Lutz, 2001a, 2001b).

The Competing Behavior Pathway diagram (see below) summarizes the sequences of events surrounding (a) desired behaviors, (b) problem behaviors, and (c) appropriate alternative behaviors. They start with the same setting events and antecedents. The typical consequence for the appropriate behavior (such as, doing chores) often is not reinforcing. In addition, the problem behavior is leading to some kind of reinforcement that is maintaining it, perhaps getting out of work (even if sent to time-out). Function-based support brings about lasting behavior change by using a problem solving process to find an alternative behavior that will lead to the type of positive reinforcement powerful enough to maintain behavior for this student. We have to find a way to eliminate reinforcement that has been – perhaps unintentionally – following problem behaviors (e.g., laughter from peers for being rude to an adult or even being made the center of attention when scolded). Sometimes we can make a change so that the desired behavior leads to the consequence that used to maintain the problem behavior. For example, being able to work with a peer to complete a worksheet immediately provides peer attention. Old fashioned behavior management used to use arbitrary reinforcers, like candy, without addressing the contingencies maintaining the problem behavior. Today, with function-based support and an understanding of competing behaviors, we can break the link between the problem behavior and whatever was maintaining it and find ways to reinforce appropriate behavior that are more likely to continue to be available in the natural environment when the intervention is faded. Ideally, whatever used to maintain the problem behavior, in some way, will be included in the function-based behavior support plan as a reinforcer for appropriate or an acceptable alternative behavior. The desired appropriate behavior, the behavior that is normally expected in the situation (e.g., doing homework, doing chores, being polite), is the **long term goal**. In addition, the long term goal includes having this appropriate behavior occur under ordinary circumstances, without needing a special intervention to support it. The alternative appropriate behavior, the replacement behavior in the function-based support plan (e.g., asking for help or for a break instead of throwing a temper tantrum when faced with difficult tasks), is a **short term goal**. There may be a series of short term goals as behavior improves and the support can gradually be faded. Practice drawing and filling in a Competing Behavior Pathway for real situation underneath the diagram.


Setting Event
Ante-ce-dents
Desired Behavior
Typical Consequence
Problem Behavior
Maintaining Consequence
Appropriate Alternative Behavior

The four boxes in the middle row are the basic behavioral sequence. The boxes can be numbered according to the order we follow in figuring them out: Box 1. Problem behavior, Box 2. Antecedent, Box 3. Maintaining consequence for the problem behavior, and Box 4. Setting event. The top row, sometimes called the North route, show what we would want and expect in terms of appropriate behavior that does not need any special intervention. This is our long term goal. Fill out it out in this order: Box 5. Desired behavior, Box 6. Consequence for the appropriate behavior (may not be anything special). The bottom row, the South route, has only one box but it is very important because it is for the behavior that is to replace the problem behavior. Fill in Box 7. Alternative behavior, last.



The alternative behavior is extremely important!

- The alternative behavior must be:
  - At least as easy for the student to do as the problem behavior
  - Profitable – the student must get what he wants at least as often for the new behavior
- If not, the student will continue the problem behavior. He has practiced it more, knows how to do it well, and it gets him what he wants.

The alternative behavior often needs to be taught. If a student does not know how to do something, promising a reward for doing it is silly unless you are going to teach it first. If a student really don't know how to read, it would not help to offer a reward of $100, or even $500, to read a story out loud. We often hear teachers say, with disdain about a student who has not been working hard on academic assignments, "He can do the work! He's just lazy." Yet, when a more careful check is done, it turns out that certain pre-skills are lacking or that there is a miss-match between the student's ability and the placement. Likewise, with social skills, a student really may not know how to do the behavior that is expected or may need a demonstration, say, of the right way to apologize or to ask for help, and then a chance to practice. The basic guideline is: teach first, then praise and reinforce. It is best to break the learning task into small steps and provide small reinforcers for each step than one big reinforcer at the end. Gradually, the series of short term goals move toward the long term goal, as the appropriate behavior is shaped.

After appropriate behavior is learned, positive reinforcement and praise encourage continued use of the behavior. Sometimes a behavior is not occurring just because, to the student, it doesn't seem like there is any point in doing it. Positive reinforcement is a consequence that makes a particular behavior more likely to happen again because the student gains a desired activity or item. This may, or may not, be the same as a planned reward, because what a reward that was intended to function as positive reinforcement may not be effective.

Typical planned examples:

"Excellent" or a sticker on an assignment.
Students in this row are dismissed for lunch first because they are tidy and quiet first.

Functional behavioral assessment and person-centered planning help us identify and use positive reinforcers well. That is, instead of guessing at what might be a powerful reinforcer for an individual student – who may be different from other students in likes and dislikes – we have solid data for making a decision.

How is this different from "negative reinforcement?"

Negative reinforcement is a consequence that makes a particular behavior likely to happen again because the student avoids or escapes from an unpleasant activity.

Typical examples of negative reinforcement:

Gets out of doing a difficult assignment
Teasing or arguing stops

The terms “positive” and “negative” can be used in different ways. In this case, we are using “negative” just to mean that something was taken; we are not saying it is “bad.” Negative reinforcement can be a positive (in the ordinary sense of the word) experience for the student! Often, the term “negative reinforcement” is mistakenly confused with punishment. The reality is just the opposite! We like it when something unpleasant stops. In this term, “negative” refers to something stopping or being taken away but if that something is an annoying, irritating, or painful thing, then the relief of getting away from it going to reinforce whatever it was we did to get rid of the annoying thing. So, if complaining gets a student out of a difficult assignment, or hitting and kicking makes teasing stop, then you can expect more complaining and more hitting and kicking – because they have been negatively reinforced. In real life, naturally occurring negative reinforcement controls a great deal of behavior. How often do you do something, not so much because any positive reinforcement can be obtained, but rather, to avoid something negative? Although we prefer to plan interventions that use positive reinforcement, we must understand how naturally occurring negative reinforcement may be maintaining problem behaviors.

What is “automatic reinforcement?”

It is a type of natural reinforcement where a behavior is occurring because it produces a desired feeling or stops an unpleasant feeling (e.g., reduces hunger, relaxes muscles). These sensory consequences are internal. The effect occurs automatically, not because we make it happen or because the student chooses it. When necessary, behavior support plans may include ways of preventing, coping with, or using automatic reinforcers.

Section 11. Planning Changes that Address All Phases of the Behavioral Sequence

Coping with Setting Events Dadson, S., & Horner, R. H. (1993

Ongoing training also should help team members remember that s*etting events* should be considered when designing function-based support. This is the aspect of the behavioral sequence for which teachers are most likely to need additional training. As explained in Part 1 of Volume 1, setting events (sometimes called "establishing operations") are variable events, factors, or conditions that change the typical value of behavioral contingencies. They may be distal events (e.g., missing breakfast before school, parent left on a trip the previous day) that are difficult to directly observe although information about them might be available from interviews or self-reports. However, setting events also can occur at school. For example, when a teacher uses a threat or reprimand that a student perceives as humiliating in one class, the stage may be set for problems with the teacher in the next class, even when a positive intervention that usually is effective is attempted (Gunter, Denny, Jack, Shores, & Nelson, 1993; Hartman & Stage, 2000; Shores, Gunter, & Jack, 1993). Although collecting and considering information on setting events is highly recommended part of designing function-based support (Drasgow, et al., 1999; Dunlap et al., 1996; Horner, 1994; Horner & Carr, 1997; Horner, Vaughan, Day, & Ard, 1996; Iwata et al., 1982; O'Neill et al., 1997; Shores & Wehby, 1999; Sugai, Horner, & Sprague, 1999; Sugai, Lewis-Palmer, & Hagan, 1998), to date, few reports of function-based support in schools include information on setting events (Tobin, 2000). Because setting events are, by definition, variable, team members may need additional training and individualized assistance to be able to recognize them.

Following up with team members to be sure they gather information on setting events is especially important when planning interventions for students with serious and multiple behavior problems. Setting events are likely to be an essential consideration for comprehensive interventions, such as, (a) wraparound interventions (Eber, Nelson, & Miles, 1997); (b) strength-based treatments (Epstein & Sharma, 1998); (c) family support, an effective intervention for children with aggressive behavior problems according to Brestan and Eyberg (1998, cited in Bennett & Gibbons, 2000); (d) school attendance problems (Kearney & Tillotson, 1998); or (e) interventions implemented in multiple settings (e.g., playground, classroom, home, community) which is recommended for prevention of conduct disorder (Eddy, Leve, & Fagot, 2001; Eddy, Reid, & Fetrow, 2000; Reid, 1993; Reid & Eddy, 1997).

Providing New Antecedents

The Team Leader may need to provide additional training that has focus on antecedent interventions. In some cases, providing new antecedents, such as finding ways that teachers can give students choices or different types of instructional activities, will be sufficient. Often, providing new antecedents needs to be combined with changing consequences.

Changing Consequences

The Team Leader will need to work with team members as they develop their skill in designing behavior support plans to be sure that plans are made for changing consequences for all three behaviors of interest, the problem behavior, the alternative behavior, and the desired behavior. The Team Leader must watch to help team members and other school staff members to avoid three common mistakes that will doom an intervention. A serious but, unfortunately common, error in behavior plans is to leave out procedures for putting the problem behavior on extinction. Another common error is to fail to plan ways to provide, in response to the alternative behavior, the consequence that formerly maintained the problem behavior. The third pitfall is failing to plan ways to increase praise or positive reinforcement for the desired behavior.

Guiding Action Teams

Ongoing training and staff development efforts related to developing fluency in designing behavior support needs to include guidance in establishing cooperation and consistency among the group of adults, or *Action Team*, who will be implementing an intervention with an individual child (Todd, Horner, Sugai, & Colvin, 1999). As explained in Volume 1, the student's Action Team differs from the behavior support team for the whole school in that only the teacher(s), paraprofessional(s), parent(s), or others who will be directly involved in support plan activities, such as, providing instructions, prompts, or reinforcers, or discontinuing previous activities that have been determined to inadvertently reinforce problem behaviors (e.g., providing attention contingently), will be involved. Furthermore, unlike the FBS team for the school, an Action Team for an individual student does not deal with other students and may be disbanded if the individual student's behavior improves sufficiently.

Insert here a checklist for giving team member's feedback on designing behavior support – maybe checklists from EXCEPTIONALITY articles, if can use with permission, or something like them. There are 2 in 2 different articles in the special issue (1999-2001) that also has the article you co-authored with Rob.

Appropriate behaviors include:
Alternative behaviors (Box 7 in the Competing Behavior Diagram – the only one in the bottom line, the south route) are ones that we identify in developing function-based support and teach the individual student with special needs to use to instead of his or her problem behaviors.
Desired behaviors (Box 5 in the Competing Behavior Diagram – the first one on the top line, the north route)are ones that all students are expected to use in following school-wide rules, meeting classroom expectations, and in getting along with others at school.

Section 12. Implementing Interventions and Addressing Contextual Fit Issues

"*Contextual fit*" is the extent to which the procedures in a behavior support plan are consistent with the values, skills, resources and administrative support of those individuals who will implement the plan. Moes and Frea (2000) found that contextualized treatment-planning resulted in more positive outcomes than prescriptive treatment-planning. Effective processes for achieving contextual fit for interventions in homes have been identified (Albin, Lucyshyn, Horner, & Flannery, 1996; Lucyshyn, Blumberg, & Kayser, 2000; Lucyshyn, Kayser, Irvin, & Blumberg, 2002; Reed Schindler & Horner, 2005; Vaughn, White, Johnston, & Dunlap, 2005).

Section 13. Documentation and Data for Making Decisions

Monitor and take data on how well the behavioral intervention is being implemented and on how well the student is progressing. Make data-based decisions about needed changes, both in the current situation and as you help the student prepare for the future. Evaluate how well the intervention went, document your efforts – keeping the records in a place where people who may need them in the future can find them – and plan ways to provide information on the outcomes to stakeholders.

Evaluation of Individual Behavior Support

Following Up

Team Leaders will need to provide ongoing training in ways of assessing the effects of interventions for individual students and following up with teachers who asked for assistance. The FBS team needs to know if the initial assistance was helpful or not and without a plan for obtaining this information and a Team Leader to see if the plan is followed, this is may be overlooked. Ongoing training for evaluation of function-based support should focus on ways of answering three essential questions:

1. Was the intervention implemented as planned?
2. Was the outcome for the student satisfactory?
3. What should be done next?

In the initial training team members learned to use a form (in Volume 1, Part 3, Step 7 of the "Behavior Support Plan and Implementation Plan") which had columns for (a) review dates, (b) check marks, (c) tasks, (d) "by when," (e) person responsible, and (f) evaluation decision (monitor, modify, discontinue). Team Leaders need to provide ongoing training through coaching, modeling, and performance feedback, to team members as they begin to evaluate individual interventions, in completing this last column. Teachers may need help using this type of formative evaluation, where the goal is to improve the behavioral support, rather than to just make a decision about whether the plan "worked" or not. Team members should focus, in using this form, on evaluation decisions about specific aspects and steps in the plan. That is, a global decision about the entire plan is not being made at this point. Instead, this is a careful analysis of the effect of each task within the plan. This is extremely valuable in "tweaking" or refining the implementation of the intervention as the plan comes to life and unexpected situations arise. However, at some point the overall plan also may be evaluated.

According to Jolivette, Barton-Arwood, and Scott (2000), an overall evaluation of a behavior support plan will go more smoothly if the following events took place when the plan is first developed:

- The teacher had a chance to provide input.
- Copies of the written plan were given to the staff members who were to be involved in the implementation.

- A decision was made in advance as to what the criteria will be for changing overall plan.

The criteria for changing the plan probably will be related to observations of the student's behavior. In addition to developing fluency in using direct observation to analyze behavioral patterns and to develop hypotheses, teams also should use direct observations when evaluating interventions (Fox, Gunter, Davis, & Brall, 2000). Team members often need additional training in how to summarize direct observational data for use in evaluations and how to make decisions about presentation formats (e.g., use of graphs, raw numbers vs. percents or rates) (Jolivette et al., 2000).

The school behavior support team should have procedures in place for making sure that the smaller Action Teams that formed around individual students are successful and efficient. Todd et al. (1999) provide a one page form that FBS teams could use to follow up with Action Teams and that also could be used as a part of the evaluation of individual interventions. Designed to determine if additional support is needed, the form asks questions about:

- How well the plan was followed
- How easy or difficult is was to do in addition to teaching
- If the student's behavior improved
- If the plan needs to be modified
- If more help is needed or if there are any concerns

Insert here guide for providing feedback to team members on planning for evaluation.

Comprehensive Analysis

Although the simple method of evaluating individual support described above may be sufficient in many cases, if Team Leaders are interested in a more comprehensive analysis, for example, for a difficult case where a through grasp of elements of the intervention that might be changed to make it more effective is needed, the tool, "*STRIVE, Analysis and Assessment of FBA + BSP"* is located in Appendix E. Using this tool will help teams identify elements of FBS that may have been overlooked initially. In addition, the process of holding up the individual support plan to this high standard may lead to new ideas for a more comprehensive interventions, which may be what is needed in the case of a student with very serious behavior problems.

Data that will answer your question.
Easy, available, reliable.

Balance between reliability and accessibility.
Systems level approach.

Logistics.
Who, what, where, when, how.

Two Levels.
Accessible v. extra resources.

Data Decision Rules
Define adequate progress before current intervention changed.

Determined before you intervene.

"Three Day Rule" -
deceleration: 3 consecutive days **above** aim line
acceleration: 3 consecutive days **below** aim line

Data Decisions
Do nothing.
Step back.
Change criterion (date or level/rate).
Change instructional (antecedent) procedure.
Move to new phase of learning.
Move to new skill.
Change consequent procedures.

When Should Data Decisions Be Made?

Natural cycles.
Weekly, monthly, quarterly, existing meeting schedules.

Level of system or detail addressed.
E.g., individual - daily or weekly.
E.g., school-wide - monthly, quarterly.

PLANNING ACTIVITY FOR FUNCTION-BASED SUPPORT

Work with your group to answer the questions below about one of the examples given at the end of this section. Decide who is going to take which roles. After talking it over with your group, decide on your role and circle it on the following list: (a) general education teacher, (b) special education teacher, (c) behavior consultant, (d) parent or family member, (e) student, (f) psychologist, or (g) educational assistant. Also decide who will present your behavior support plan to the class: Your group's presenter's name (please print):

_____

DIRECTIONS:

This is to be a multi-component support plan, designed to affect antecedents, behaviors, and consequences for desired behaviors, problem behaviors, alternative behaviors, and/or replacement behaviors.

- Every one on your action team is to have a part in making it work. Be sure to note exactly what your part will be.
- Include 3 or more specific interventions that are intended to help the student increase one or more adaptive behaviors and decrease problem behaviors.
- Include and explain specifically at least one antecedent modification and/or setting event adaptation (e.g., teach new routines, offer of choice of activities, provide something that will help, make a change in the social environment, add a prompt or reminder, model or role play an adaptive behavior, teach something that will help, make a curricular modification, etc.)
- Do not include any strategies that are intended to function as punishers.
- You may include strategies based on the concepts of extinction and negative reinforcement.
- You must include strategies intended to function as positive reinforcement.
- You must include a strategy intended to function as some type of Differential Reinforcement of Other (DRO) behavior .
- For your interventions that are intended to provide reinforcement, describe the plan for the initial schedule of reinforcement and explain both the type and the frequency.
- Have a plan for measuring behavioral changes.
- Have a plan for evaluating and modifying the intervention over time.
- Begin with brainstorming a variety of possible interventions.
- Select ones to try first and ones to consider possible back ups or variations.
- Use the back of these papers or use your own paper if you need more space and attach it to this paper or fold it inside this paper.

1. What will your antecedent and/or setting event modifications be?

2. How could you use extinction?

3. If you use negative reinforcement, explain specifically how and when that will happen and who will be involved in implementing it.

4. Explain how you will use a strategy intended to function as positive reinforcement for the desired behavior, an alternative behavior, and/or a replacement behavior:
(a) What could be used as potential positive reinforcers and for which behaviors?

(b) Who would be involved in delivering the reinforcers and how would they do it specifically? How can strategies involving DRO be used? What would be the criteria for earning the reinforcer(s)? What is the plan for the schedule of reinforcement?

5. Who is going to explain the alternative behavior and the behavior support plan to the student? How and when will that be done?

6. MEASUREMENT:
(a) How will behavior change(s) be measured? What will be measured? When? How will this be recorded?

(b) Who will be responsible for measurement?

7. EVALUATION
When is the plan going to be evaluated? How will it be evaluated? Who is going to decide if it is working or not? Will it be a data-based decision?

8. If the plan is working really well over time, how could the intervention be faded? What would be the first change?

9. If the plan is not working over time, how could the intervention be modified? From the various strategies you brainstormed, is there one that would be the first choice for a back up plan?

10. If your back up plan does not work either, what could you do to get more help? (Who could you ask? Would a functional analysis be an option? Would collaboration with community agencies be an option?)

EXAMPLES

Example 2* . Another Michael

Situation: This Michael was enrolled in a classroom for students with Emotional Disturbance. He was a seven year old, second grade student and "obtained a composite score of 106 on the Stanford Binet. His referral was due to 'avoidance of academic tasks, especially paper/pencil tasks' and specific problem behaviors including aggression, playing with work materials, negative verbalizations directed at peers and teachers, and property destruction" (Dunlap, White, Vera, Wilson, & Panacek, 1996, p. 484).

Competing Behavior Model Summarizing Results of a Functional Assessment:

Desired behaviors: Work on assigned tasks without being disruptive or aggressive.

Typical Consequences: On-going class activities

Setting event: None identified.

Antecedent: Presented with two English (language arts) worksheets, instructed to read the directions, begin work, and raise hand whenever he needed help.

Problem behaviors: Disruptive, refuses to work, destroys property, inappropriate verbalizations, aggressive.

Maintaining Consequence for Problem Behavior: Avoids work.

Alternative Behavior: Select from a menu of modified assignments; work on one at a time.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & **Newton, J. S.** (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

http://darkwing.uoregon.edu/~ttobin Click on "Case Book" to find the rest of the summary for your example, including a summary of the actual, successful intervention.

Dunlap, G., White, R., Vera, A., Wilson, D., & Panacek, L. (1996). The effects of multi-component, assessment-based curricular modifications on the classroom behavior of children with emotional and behavioral disorders. *Journal of Behavioral Education, 6,* 481-500.

*Example 1 from the "Case Book" (based on Artesani & Mallar, 1998) was reported in this booklet in the first section.

Example 3. Gizelle

Situation: Gizelle was enrolled in a classroom for students with Emotional Disturbance. She was a nine year old, fourth grade student and "obtained a full score of 80 on the WIS-C. Her teacher reported that she displayed low levels of task engagement and high rates of problem behaviors including aggression, property destruction, negative verbalizations to peers and teachers and leaving her assigned area" (Dunlap et al., 1996, p. 484).

Competing Behavior Model Summarizing Results of a Functional Assessment:

Desired behaviors: Work on assigned tasks without being disruptive or aggressive.

Typical consequences: On-going class activities.

Setting event: None identified.

Antecedent: Presented with an English (language arts) worksheet, instructed to read the directions, begin work, and raise hand whenever she needed help or was finished.

Problem behaviors: Disruptive, off task, destroys property, inappropriate verbalizations, aggressive.

Maintaining Consequence for Problem Behavior: Avoids work.

Alternative Behavior: Select and work on a modified assignment.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & **Newton, J. S.** (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

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Dunlap, G., White, R., Vera, A., Wilson, D., & Panacek, L. (1996). The effects of multi-component, assessment-based curricular modifications on the classroom behavior of children with emotional and behavioral disorders. *Journal of Behavioral Education, 6,* 481-500.

Example 4. Ann

Situation: Ann was enrolled in a classroom for students with Emotional Disturbance. She was a seven year old, first grade student and her composite score on the Stanford Binet was 83. Her teacher referred Ann for a variety of problem behaviors, including being aggressive when prompted to work, playing with and destroying work materials, especially paper and pencil tasks. However, she was attentive and appropriate during discussions and experiential learning. She lived with her grandmother, who reported that Ann helped with chores at home, including grocery shopping.

Competing Behavior Model Summarizing Results of a Functional Assessment:

Desired behaviors: Trace words on four worksheets about food groups without being disruptive or aggressive.

Typical consequences of desired behaviors: Given next assignment, which was to cut out pictures of food from a magazine and paste on sheets, matching picture to word.

Setting event: None identified.

Antecedent: Presented with worksheets about food groups and instructed to trace the food names.

Problem behaviors: Disruptive, off task, destroys property.

Maintaining Consequence for Problem Behavior: Avoids work.

Alternative Behavior: Select and work on a modified assignment.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & **Newton, J. S.** (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

http://darkwing.uoregon.edu/~ttobin Click on "Case Book" to find the rest of the summary for your example, including a summary of the actual, successful intervention.

Dunlap, G., White, R., Vera, A., Wilson, D., & Panacek, L. (1996). The effects of multi-component, assessment-based curricular modifications on the classroom behavior of children with emotional and behavioral disorders. *Journal of Behavioral Education, 6*, 481-500.

Example 5. Kyle*

Situation: Kyle was a 9 year old 4th grader who attended a general education blended 3rd and 4th grade class. He was eligible for special education services due to learning disabilities and his IEP called for 150 minutes per week of specially designed instruction in reading and math and 60 minutes of specially designed instruction in language arts. Kyle also had Legg-Calve-Perthes disease and used an abductor brace to strengthen his hip. His teacher requested that Kyle be tested for ADHD and doubted that any intervention except medicine would have any effect of Kyle's behavior (but he was not receiving any medication at any time during this study). In addition, the teacher put in a request for assistance from the school's Teacher Assistance Team. Kyle did not complete his work, had poor attendance, and was disruptive by teasing and taunting peers and making "sexually inappropriate comments" (Todd, Horner, & Sugai, 1999, p. 67). Kyle also "stole pencils from his desk partners, blew their papers off their desks, kicked peers under the table, made funny faces to distract the other children, and did not volunteer to participate in class discussions or ask for clarification" (Todd et al., 1999, p. 70).

Competing Behavior Model Summarizing Results of a Functional Assessment:

Desired behaviors: Be on task and nondisruptive.

Typical consequences for desired behavior: On-going class activities.

Setting event: None identified.

Antecedent: Large group (i.e., more than 5 students in the group) or "unsupervised work times" (Todd et al., 1999, p. 69).

Problem behavior: Off task and disruptive teasing and taunting peers and making "sexually inappropriate comments" (Todd, Horner, & Sugai, 1999, p. 67).

Maintaining consequence for problem behavior: Obtain adult and peer attention.

Alternative behaviors: Learn appropriate ways to obtain peer and teacher attention.

For more information:

Todd, A. W., Horner, R. H., Sugai, G. (1999). Self-Monitoring and self-recruited praise: Effects on problem behavior, academic engagement, and work completion in a typical classroom. *Journal of Positive Behavior Interventions, 1*(2), 66-76.

**Note: This is "Example 18" in the Case Book. See* http://darkwing.uoregon.edu/~ttobin Click on "Case Book" to find the rest of the summary for your example, including a summary of the actual, successful intervention.

Example 6. Eddie and Curricular Interventions

Situation: Eddie was an 11-year-old boy in fifth grade who obtained a full-scale IQ score of 118 on the WISC-R. He attended a public elementary school special education program serving students with emotional disturbance. "He was functioning at or above grade level in all academic subjects, as demonstrated by his performance on standardized tests . . . interactions with peers and adults were considered to be generally appropriate. . . . Despite these strengths, Eddie's behavior in the classroom was frequently off task; consequently, he rarely completed assigned work. When Eddie was asked to hand in his work at the end of an academic session or when he was reprimanded for failing to complete an assignment, he engaged in tantrums consisting of episodes of crying and, occasionally, self-injury in the form of head banging or arm biting" (Kern, Childs, Dunlap, Falk, 1994, p. 9).

Competing Pathway Concepts Summarizing Results of a Functional Assessment:

Desired behaviors: Be engaged with, and complete, academic tasks.

Typical consequences for desired behavior: On-going class activities.

Setting event: None identified.

Antecedent: Academic expectations.

Problem behavior: Off task, tantrums (crying, head banging, etc.)

Maintaining consequence for problem behavior: Escape academic tasks that he found aversive, especially tasks involving a lot of handwriting and, in math, drill and practice.

Alternative behaviors: In Spelling and English, learn to complete assignments using a tape recorder or computer instead of pencil or pen. In Math, work on problem solving instead of drill and practice.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & **Newton, J. S.** (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

http://darkwing.uoregon.edu/~ttobin Click on “Case Book” to find the rest of the summary for your example, including a summary of the actual, successful intervention.

Kern, L., Childs, K. E., Dunlap, G., Clarke, S., & Falk, G. D. (1994). Using assessment-based curricular intervention to improve the classroom behavior of a student with emotional and behavioral challenges. *Journal of Applied Behavior Analysis, 27*, 7-19.

Example 7. Bill

Situation: "Bill was a 9-year-old boy in third grade who was diagnosed as having behavioral problems and learning difficulties. He spent most of his time (more than 25 hours per week) in the special education classroom [for students with emotional disturbance] with some time in general education settings. Math skills assessment indicated that Bill could complete addition and subtraction tasks *without* renaming but had deficiencies in performing addition and subtraction tasks *with* renaming." (Lee, Sugai, & Horner, 1999, p. 196). He often was off task during when given difficult tasks: "pausing, looking around, and engaging in irrelevant activities (e.g., drawing pictures)" (p. 197). Bill also had problem behaviors, including "aggression (e.g., kicking a desk, tearing paper, throwing objects) and disruptive behaviors (e.g., talking out, being out of chair, making noise, playing with objects, making faces)" (p. 197).

Competing Pathway Concepts Summarizing Results of Functional Analysis:

Desired behaviors: Be on-task and engaged doing math.

Typical consequences for desired behavior: On-going class activities.

Setting event: None identified.

Antecedent: Difficult tasks, making errors.

Problem behaviors: Disruptive, off task, aggressive

Maintaining consequence for problem behavior: Escape difficult task and avoid making errors.

Alternative behaviors: Learn the component skills needed to solve the math problems correctly.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & **Newton, J. S.** (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

http://darkwing.uoregon.edu/~ttobin Click on “Case Book” to find the rest of the summary for your example, including a summary of the actual, successful intervention.

Lee, Y., Sugai, G., & Horner, R. H. (1999). Using an instructional intervention to reduce problem and off-task behaviors. *Journal of Positive Behavior Interventions, 1*(4), 195-204.

Example 8. Corey*

Situation: Corey was an 8 year old boy who was the only student eligible for special education services in the 3rd grade general education classes that he attended. Corey's school had a system where three 3rd grade teachers worked together in that, although each had a homeroom class, each teacher specialized in an academic area and the children rotated for language arts, social studies, and math. Each teacher also had an assistant. Although the teachers reported that the Ritalin reduced Corey's impulsive behaviors, he still engaged in disruptive behaviors to such an extent that they requested an IEP team meeting to consider a different placement. Corey's disruptive behaviors were "talking to other students seated near him; making facial or hand gestures directed at the other students; getting up and walking around the room; and tapping his pencil, hands, or other objects loudly on his desk. To manage these behaviors, the teachers had developed a program that involved self-monitoring, tokens for appropriate behavior, and redirection for disruptive behavior. All six staff (i.e., three teachers and three aides) reported the program had been ineffective" (Umbreit, 1995, p. 268).

Competing Behavior Model Summarizing Results of a Functional Assessment:

Desired behaviors: Be on-task, nondisruptive, follow directions, and in social interactions, be positive or neutral.

Typical consequences for desired behavior: Tokens for appropriate behavior (back up reinforcer not identified in the report).

Setting event: None identified.

Antecedents: Academic classes with independent seatwork when seated near other children and group work when his friends were included in the group.

Problem behavior: Disruptive.

Maintaining consequences for problem behavior: Obtain peer attention -- "although most of the students did not respond to Corey's disruptive behaviors, a few of them consistently responded by looking at him and imitating what he was doing" (Umbreit, 1995, p. 272); adult attention (e.g., occasional reprimand); also avoids task.

Alternative behaviors: Do group work with students who will provide attention only for appropriate behavior, learn to request a break.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

Umbreit, J. (1995). Functional assessment and intervention in a regular classroom setting for the disruptive behavior of a student with attention deficit hyperactivity disorder. *Behavioral Disorders, 20*(4), 267-278.

* http://darkwing.uoregon.edu/~ttobin Click on "Case Book" to find the rest of the summary for your example, including a summary of the actual, successful intervention. *(In the Case Book, your case is Example 19.)*

Example 9. Little "No Name"

Situation: A 6 year old, typically developing first grader, for whom no name is given, displayed "high levels of disruptive and inattentive behaviors during those periods of the day when he did not receive one-on-one attention" (Grandy & Peck, 1997, p. 32).

Competing Behavior Model Summarizing Results of a Functional Assessment:

Desired behaviors:

Story Time: Sit quietly on carpet, listen

Art: Sit or stand quietly, complete project

Seat Work: Sit quietly, complete assignment.

Typical consequences for desired behavior: On-going class activities.

Setting event: None identified.

Antecedent: Low level of adult attention.

Problem behavior: Disruptive (Poking others, kicking his feet, out of seat, talking out)

Maintaining consequence for problem behavior: Obtain adult attention (e.g., reprimand)

Alternative behaviors: Self-monitor own behavior and receive contingent attention both for self-monitoring and for being on-task.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

Grandy, S. E., & Peck, S. M. (1997). The use of functional assessment and self-management with a first grader. *Child and Family Behavior Therapy, 19*(2), 29-43.

* http://darkwing.uoregon.edu/~ttobin Click on "Case Book" to find the rest of the summary for your example, including a summary of the actual, successful intervention. *(In the Case Book, your case is Example 20.)*

Example 10. Lou

Situation: Lou was a 4th grade student identified as having a learning disabled in written language. He attended a resource room part of the day and was in general education classes most of the day. His behavior problems included drawing on his papers instead of doing his assignments or folding or tearing the paper. In addition, he often lost his assignments. When he did a written assignment, it was often done carelessly.

Competing Behavior Model Summarizing Results of a Functional Assessment:

Desired behaviors: Be on task with written assignments and work more carefully.

Typical consequences for desired behavior: On-going class activities.

Setting event: None identified.

Antecedents: Written assignments.

Problem behaviors: Off-task and careless.

Maintaining consequence for problem behavior: Teacher attention (e.g., prompting).

Alternative behaviors: Use a personalized notebook to organize materials and learn to recruit teacher attention for completed assignments.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

Scott, T. M., DeSimone, C., Fowler, W., & Webb, E. (2000). Using functional assessment to develop interventions for challenging behaviors in the classroom: Three case studies. *Preventing School Failure, 44*(2), 51-56.

* http://darkwing.uoregon.edu/~ttobin Click on "Case Book" to find the rest of the summary for your example, including a summary of the actual, successful intervention. *(In the Case Book, your case is Example 21.)*

Example 11. Jake

Situation: Jake was a 3rd grade student identified as learning disabled received special education in a resource room for two hours a day and was in general education classes the rest of the school day. He needed behavioral support to refrain from off task and disruptive behaviors, specifically, "stomping feet, tapping hands on desk, making popping noises in mouth, and talking without permission" (Scott et al., 2000, p. 54).

Competing Behavior Model Summarizing Results of a Functional Assessment:

Desired behaviors: Stay on task and make only appropriate noises or work quietly.

Typical consequences for desired behavior: On-going class activities.

Setting event: None identified.

Antecedents: Teacher is involved with other students.

Problem behaviors: Off-task and making inappropriate noises.

Maintaining consequence for problem behavior: "Access attention from the students or classroom teacher" (Scott et al., 2000, p. 54).

Alternative behaviors: The desired behavior can be the alternative behavior if the teacher shifts her attention from the problem to the appropriate behaviors.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

Scott, T. M., DeSimone, C., Fowler, W., & Webb, E. (2000). Using functional assessment to develop interventions for challenging behaviors in the classroom: Three case studies. *Preventing School Failure, 44*(2), 51-56.

* http://darkwing.uoregon.edu/~ttobin Click on "Case Book" to find the rest of the summary for your example, including a summary of the actual, successful intervention. *(In the Case Book, your case is Example 23.)*

Example 12. Don needed a multi-component support plan.

Situation: Don was a 9 year old 4th grader who received special education services in a resource room two hours a day due to learning disabilities in reading, math, and written language. The remainder of the school day he was in the 4th grade classroom. His problem behaviors included being off task and disruptive (e.g., throwing materials, swearing, slamming his book shut).

Competing Behavior Model Summarizing Results of a Functional Assessment:

Desired behaviors: Be on task and nondisruptive.

Typical consequences for desired behavior: On-going class activities.

Setting event: None identified.

Antecedent: Nonpreferred academic demands, particularly math and written language assignments, although these were at an appropriate level.

Problem behavior: Off task and disruptive (e.g., throwing materials, swearing, slamming his book shut).

Maintaining consequence for problem behavior: Avoid task.

Alternative behaviors: Ask for a break and work on nonpreferred tasks to earn opportunities to engage in preferred tasks.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

Steege, M. W., & Northup, J. (1998). Functional analysis of problem behavior: A practical approach for school psychologists. *Proven Practice, 1*(1), 4-11.

* http://darkwing.uoregon.edu/~ttobin Click on "Case Book" to find the rest of the summary for your example, including a summary of the actual, successful intervention. *(In the Case Book, your case is Example 24.)*

Example 13. Karen*

Situation: Karen was a 10-year old female who was diagnosed as having attention deficit hyperactivity disorder (ADHD) . . . At the age of 4.5 years, she was placed in the care of a foster family . . . [due to] neglect and physical maltreatment at the hands of her biological parents. . . . She experienced multiple foster family placements. . . . Eventually, she was adopted by her present parents when she was 8 years old. Karen was their only child. . . . Her interactions with peers were poor because she did not respond cooperatively and was disruptive in group contexts. Karen's academic abilities were at a second-grade level.

Stealing behavior was identified by school personnel several months after Karen's enrollment in a public elementary school [placed in a self-contained special education classroom for students with emotional disturbance]. Typically, stolen items included food (e.g., candy, cookies) or personal possessions (e.g., pencil, pad of paper) that were taken from students and adult. (Luiselli & Pine, 1999, pp. 232-233)

Competing Pathway Concepts Summarizing Results of a Functional Assessment:

Desired behaviors: Respect other's property rights / no stealing.

Typical consequences for desired behavior: Typical school day activities.

Setting event: None identified.

Antecedent: None identified.

Problem behavior: Stealing, defined as directly observed or reported to have taken something without permission or "finding another's possession on her person or in her desk" (p. 237)

Maintaining consequence for problem behavior: Each stealing incident was followed by social attention (intended to make the child understand that stealing is wrong), including considerable discussion of the problem behavior at school and at home, an in-school suspension procedure which involved a conference with the principal, and a verbal apology to the victim.

Alternative behaviors: None were identified in the report. (Can you think of any?)

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

Luiselli, J. K., & Pine, J. (1999). Social control of childhood stealing in a public school: A case study. *Journal of Behavior Therapy and Experimental Psychiatry, 30*, 231-239.

* http://darkwing.uoregon.edu/~ttobin Click on “Case Book” to find the rest of the summary for your example, including a summary of the actual, successful intervention. *(In the Case Book, your case is Example 9.)*

Example 14. Eve*

Situation: Eve was in third grade and attended a "school for children with learning disabilities and emotional handicaps [and] had been referred . . . because of behavior problems. . . . Eve was taking methylphenidate and guanfacine. . . . *Off-task behavior* was defined as crying, singing, getting out of seat, playing with other materials in the room, and so forth" (Meyer, 1999, pp. 229-231).

Competing Pathway Concepts Summarizing Results of a Functional Assessment:

Desired behaviors: Stay on-task

Typical consequences for desired behavior: On-going class activities.

Setting event: None identified.

Antecedent: Teacher not paying attention to Eve when she is working on a task.

Problem behavior: Off task (e.g., crying, singing, getting out of seat, playing with other materials)

Maintaining consequence for problem behavior: Obtain adult attention.

Alternative behaviors: Request attention in an acceptable way.

For more information:

O'Neill, R. E., Horner, R. H., Albin, R. W., Sprague, J. R., Storey, K., & Newton, J. S. (1997). *Functional assessment and program development for problem behavior: A practical handbook.* Pacific Grove, CA: Brooks/Cole. This is the classic and original explanation of the Competing Behavior Model for use with Positive Behavior Support Plans and Functional Behavioral Assessment.

Meyer, K. A. (1999). Functional analysis and treatment of problem behavior exhibited by elementary school children. *Journal of Applied Behavior Analysis, 32*, 229-232.

* http://darkwing.uoregon.edu/~ttobin Click on "Case Book" to find the rest of the summary for your example, including a summary of the actual, successful intervention. *(In the Case Book, your case is Example 10.)*

Section 14. Generalization, Maintenance, and Self-Management

Consider the case of a student who had not learned phrases of common curtsey at home and his teacher was trying to teach him to use polite words instead of ignoring others when they helped him or gave him something. In the classroom, he learned to say, "Thanks" when lent a pencil or given a compliment. He was prompted and reinforced for doing this in many situations in the classroom. Eventually, the prompting and reinforcement were faded out, when a pattern of polite behavior in the classroom was established. The teacher wondered if the student would also be polite outside the classroom. Some time later, the student was heard saying, "Thanks" in the cafeteria when offered him an extra treat, demonstrating generalized responding. We will not be able to provide interventions all the time and everywhere. No matter how successfully behavior is changed when an intervention is in place, unless generalized responding occurs when no one is implementing the intervention because the time and place have changed, behavior problems will reoccur. Therefore, it is worthwhile to take time to understand how to plan for generalized responding.

After a successful intervention, what happens next?

Will the student need to use the new behavior skills in other places? or with other people? or with different activities?

When the behavior supports – the reminders, the reinforcers – are discontinued, will the problem behaviors return?

Is the student going to a new school? New foster care home? New job?

Objectives: Learn how to help students --

- Generalize improved behavior to other situations
- Maintain improved behavior after a special intervention is discontinued
- Be successful after a transition

Generalization, also known as "generalized responding," means the student is able to recognize and respond appropriately in many situations when the appropriate behavior should be used, not just in the situation where the behavior support intervention was provided.

Maintenance
Improved behavior is said to **maintain** if it continues to occur after the behavior support intervention is discontinued.

Transitions – changes from familiar environments to unknown ones – are times when plans for generalization and maintenance are very important.
School to adult life
Middle school to high school

Special placements to general education and vice versa
Moving to another town, changing schools
Elementary to middle school
Pre-school to kindergarten to 1st grade

What could prevent generalization and maintenance of behavior gains?

1. Extinction
The intervention is over.
Positive reinforcement is no longer provided by the teacher.
Unless natural reinforcement is available, the new behavior has been put on extinction.

2. Punishment
If the student "falls in with the wrong crowd," deviant peers may make fun of (punish) appropriate behaviors.

3. Competing behaviors
There may be "shortcuts" or easier ways – especially if the student is not fluent with the new skill.
4. Failure to recognize
times & places in new situations when the behavior should occur
changes in the environment that call for modifications in how the behavior is done.
Can anything be done during training to prevent these difficulties from undoing the effects of the intervention?

Overview of Ways to Make Intervention Effects Last
11 strategies in 3 categories
(based on Stokes & Baer, 1977; Stokes & Osnes, 1986; as discussed in Kerr & Nelson, 2002, pp. 368-372)
Do you know these alternatives to "train and hope?"

3 Categories of Generalization Programming:
Plan for Natural Reinforcers (3 strategies)
Train Diversely (5 strategies)
Use Mediators (3 strategies)

I. Plan for Natural Reinforcers:
Teach relevant, useful skills! ☼
Modify environments that support maladaptive behaviors.
Recruit natural communities of reinforcement.

II. Train Diversely:
Use sufficient stimulus examples.
Use sufficient response examples.
Train loosely. ❋
Use indiscriminable contingencies.

Reinforce generalization when it occurs during training.

Train diversely & loosely:
Practice in different places,
with different people,
at different times,
with different materials,
and different activities.
"Variety is the spice of life."
Vary the kinds of reminders,
words of praise, and
types of positive reinforcers you use.

III. Mediators:
Use *common* physical stimuli.
Use *common* social stimuli.
Use self-mediated stimuli. ♫

Self-mediated stimuli
Self-reminders
Self-modeling (video-taped)
Self-monitoring
Self-evaluation
Self-reinforcement – "Pat yourself on the back"

(See "Self-Motivation Action Plan Table" at the end of this section.)

↳ From the following list, select several strategies that you can imagine using.

↳ Be ready to share your ideas.

Teach relevant, useful skills!
Modify environments that support maladaptive behaviors.
Recruit natural communities of reinforcement.
Use *common* physical stimuli.
Use *common* social stimuli.
Use sufficient stimulus examples.
Use sufficient response examples.
Train loosely.
Use indiscriminable contingencies.
Reinforce generalization when it occurs during training.
Use self-mediated stimuli.

The function of aggressive behavior often is to escape from aversive interactions with peers. In cases like this, function-based support could include teaching alternative ways to cope with aversive interactions with peers.

Example: Successful generalization of coping skills that replaced aggressive behavior (Sasso, Melloy, & Kavale, 1990)
The coping skills that were taught included negotiating, responding to teasing, asking permission, walking away from fights, appropriate complaining, responding to complaints from others, and dealing with group pressure.
All useful skills likely to be needed now and in future environments!
How the coping skills were taught:
A real lesson was taught for each skill, and included --
an explanation of the skill,
different examples of how to use it, and
behavioral rehearsal – practice using the skill, practice saying the words, practice walking away, etc.
What happened next?
Students started using the skills outside the classroom, in real life!
Aggressive behaviors declined after the intervention.
In different settings, for the entire school year, the students continued to use their new coping skills.
Appropriate alternative behaviors were replacing problem behaviors.

Preparing for generalization
Plan ahead – look into expected situations and likely future environments
What already is out there that might serve as reminders and reinforcers?
What training, behavior support, services, or interventions are possible in the new setting, both in advance and later?

4 Ways to encourage maintenance:
During the intervention, vary the amounts, types, and timing of the reinforcers.
Gradually fade positive reinforcement so that it is intermittent:
Less predictable
Less frequent
Less teacher-managed & more self-managed

3. Teach for fluency – even for overlearning skills that will be useful – must be fluent enough to gain natural reinforcement easily and without special prompts.
4. Plan ways to build prosocial support networks and to help students make friends who will be a good influence.

Big Ideas for Lasting Effects
Teaching skills that will be useful in the future is a recommended strategy for making sure behavioral gains generalize, maintain, and survive transitions.
Use different examples and variations.
Gradually change the special intervention – the extra reminders and reinforcers – to be more like natural conditions.
Coordinate and communicate with others involved in transitions; share what worked for you.

Ideas for smooth transitions:

Meetings between teachers in different schools.
Information sessions where parents and students can meet staff and learn the new place.
Lessons to teach skills that will be needed.
New students paired with "buddies" or mentors who can help with the transition.
If possible, provide a booster session, additional training, or a modified intervention in the new setting, at least at first.

For More Information:

Clark, L.A., McKenzie, H. S. (1989). Effects of self-evaluation training of seriously emotionally disturbed children on the generalization of their classroom rule following and work behaviors across settings and teachers. *Behavioral Disorders, 14,* 89-98.

Gunter, P. L., Miller, K. A., Venn, M. L., Thomas, K., & House, S. (2002). Self-graphing to success: Computerized data management. *Teaching Exceptional Children, 35,* 30-34.

Sasso, G. M., Melloy, K. J., & Kavale, K. A. (1990). Generalization, maintenance, and behavioral covariation associated with social skills training through structured learning. *Behavioral Disorders, 16*, 9-22.

Stokes, T. F., & Baer, D. M. (1977). An implicit technology of generalization. *Journal of Applied Behavior Analysis, 10*, 349-367.

Stokes, T. F., & Osnes, P. G. (1986). Programming the generalization of children's social behavior. In P. S. Strain, M. J. Guralnick, & H. M. Walker (Eds.), *Children's social behavior: Development, assessment, and modification* (pp. 407-443). Orlando, FL: Academic Press.

Self-Motivation Action Plan

Name:

	Goals	**Motivations**	Methods	Times	Needs
	What am I trying to do?	**Why?**	How can I do this?	When?	Assistance? Materials?
Long Term					
Short Term					

Check-Up	Did I achieve my goal? Do I still want this goal?	Was I motivated? Do I need different motivations?	Did I follow my plan? Did it work? Why or why not?	Did I do things on time? Do I need to change the time plan?	Did I have the resources I needed? Do I need other resources?
Adjustments, if any					
Outcomes					

APPENDIX A: Answers

FBA KNOWLEDGE TEST RELIABILITY STUDY: ANSWERS

1. C
2. D
3. C (Discussed in comments at end)

For the essay questions, acceptable responses may include variations in wording if the same concepts as those listed below are presented. In terms of points, give the full number of points possible for answers most completely express the concepts in the answers below and fewer points if partial or incomplete match.

4. Has to really be about **functional behavioral assessment (FBA)**, with some indication that the person really knows what this is about. Good guesses from some one who clearly has not heard of it but is good with words in general should be given ZERO points. Acceptable definitions of functional behavioral assessment would express the main ideas found in the following definitions (note the emphasis on process for understanding function of the behavior and environmental variables, especially antecedents and consequences):

"Functional assessment is process of identifying specific environmental factors that have an influence on when a particular behavior will occur" (Tobin, 1994, p. 1)

"*Functional assessment* is the process of identifying establishing operations, antecedent variables, and consequent events that control target behaviors. . . . a functional assessment identifies when, where, and why problem behavior occur *and* when, where, and why they do *not* occur" (Sugai, Horner, & Sprague, 1999, pp. 253-254).

"Functional assessment is a process that allows you to identify the function that problem behaviors serve for students" (Liaupsin, Scott, & Nelson, 1999, p. 60).

"Functional assessment is an assessment and intervention process that assists educators in identifying the factors that produce and support challenging behavior . . . educators assess the environmental conditions that set the occasion for and maintain challenging behavior and appropriate behavior" (Chandler et al., 1999, p. 102)

5. Has to be about **FBA**, with some indication that the person knows what this is about. Good guesses from some one who clearly has not heard of it but is good with words in general should be given ZERO points. Look for ideas that are emphasized (emphasis added) in the following expert opinions:

The purpose of conducting a functional behavioral assessment prior to developing a behavior support plan is "**to generate information that improves the effectiveness and efficiency of behavioral interventions** . . . a strong empirical foundation exists to support the

contention that the information generated from FBAs is of direct value in the design of behavior interventions" (Sugai et al., 1999, p. 254).

"One of the benefits of functional assessment is that it allows for **pinpointing of the most pertinent variables maintaining the behaviors, and therefore interventions should focus only on those variables**. Intervention plans should not require teachers to do unnecessary things that are unlikely to have a significant impact on the problem behavior" (from McEvoy, 1999, "Guidelines for Conducting Functional Assessments and Developing Behavioral Intervention Plans including Samples" on the Internet at http://www.resa.net/behavior_interventions/contacts.htm

McEvoy credits Lennox and Miltenberger (1989) with specifying three benefits to conducting a Functional Assessment (FA) before planning an intervention: (a) if the FA **identifies the consequences that reinforce the inappropriate behavior, the educator might be able to eliminate or reduce them**, (b) if the FA **identifies antecedent events that evoke the behavior, the plan could call for altering these**, and (c) as a result of the FA, the educator may be able to **think of appropriate, functionally equivalent, alternative behaviors** that the child could learn to use to access the reinforcers that used to maintain the problem behavior.

The information gained in the functional assessment can be used to design interventions that make it possible to **tailor an intervention to fit the situation** precisely, often including teaching needed skills, often called "replacement behaviors," that will serve the student well not only in the current situation but also in other situations, rather than attempting to overpower a situation that is not understood with either (a) excessive consequent manipulations (in the past, often restrictive, punitive, and sometimes expensive) which sometimes temporarily suppressed the problem behavior but seldom resulted in behavioral gains that generalized and maintained or (b) in some cases, actually make the misunderstood situation worse by unintentionally reinforcing an inappropriate behavior (e.g., giving a "time out" to a child who prefers the time out to the classroom demands). When an FA is conducted first, it is possible to **develop an intervention directly related to the function of the problem behavior**. "For example, if running out of the classroom functioned to produce attention, the intervention would teach the child a more appropriate and efficient means of obtaining attention, such as calling the teacher's name. If the function was to avoid an activity, intervention might focus on (a) changing aspects of the activity that are aversive for the child such as the materials or length of the task, and also (b) providing reinforcement for engaging in the activity. If the function say sensory regulation, intervention might increase the activity level of the task" (Chandler et al., 1999, p. 102)

"Various functional assessment and analysis methodologies have been used to develop **logical** interventions designed to (a) weaken an operant relationship between stimuli and problem behavior and (b) establish or strengthen an operant relationship between stimuli and concurrently available alternatives in a target context (Mace, 1994; Mace & Roberts, 1993) by **manipulating antecedent or consequent events**. For example, if problem behavior is maintained by escape from difficult tasks, an antecedent manipulation might involve the

presentation of a modified curriculum to increase rates of correct responding" (Lee, Sugai, & Horner, 1999, p. 196).

6. Accept any reason that makes sense, even if not included on list of answers and even if not specifically about FBA. It is difficult to develop behavior support plans based only on a child's diagnosis (e.g., autism or ADHD) because (a) children with the same diagnosis may have very different behavioral situations and needs and (b) the diagnosis does not identify specific environmental variables that are functionally related to the child's problem behavior: "Effective intervention is dependent upon knowledge of the function of behavior and how that behavior is both prompted and reinforced by the environment" (Scott & Nelson, 1999, p. 243).

7. Does not have to mention FBA but has to really be about definitions for observing behavior scientifically. Nice tries from some one who is good with words in general should be given ZERO points. A good operational definition is (a) objective, (b) measurable, (c) clear enough that another person would be able to recognize the behavior without a doubt, and (d) includes examples and nonexamples.

"In general, behaviors are defined by their physical characteristic (what they look like) and at least one of the following: how often they occur, how long they occur, when/where they occur, and/or the intensity with which they occur (i.e., measurable characteristics such as distance, loudness, etc.)" (Scott & Nelson, 1999, p. 244).

8. Does not have to mention FBA but has to be about using operational definitions for observing behavior scientifically. Nice tries from some one who is good with words in general should be given ZERO points. It is important to use good operational definitions to (a) facilitate clear communication; (b) reduce disagreements at team meetings arising from personal opinions; (c) increase reliability and accuracy of observations and measurements of the behavior; (d) provide sufficient detail about aspects of the behavior, such as frequency, intensity, topography, etc.;and (e) provide a focus for the functional assessment and the behavior support plan.

9. Give 1 point if they indicate that time and amount of effort or number of steps is the difference, even though any one could guess that. For more than 1 point, need to show that they really understand what functional assessment is about. The preliminary is simple, brief, usually a short interview about antecedents and consequences, basic information, general idea about what might be the function of the behavior, what might prevent it. Doesn't require verification or confirmation. Full, according to the workshops that go with this program, includes interviewing teacher, student, and parent; developing a testable hypothesis; conduction direct observations; developing a "Competing Behavior Summary," a behavior support plan (BSP); implementing the plan; monitoring and evaluating the plan; and modifying it if necessary. They don't have to list all those items though, just show that they have the general idea. Watch our for the term "manipulation." Manipulation is not the difference! We don't ask for manipulation of variables at all for either. (See "other information" in comments section at end if you need more information on this.)

10. Reasons for conducting direct observations as part of an FBA:
    - To clarify or confirm information found by indirect methods
    - To verify (or reject) hypothesis; to test explanations
    - To obtain information that could not be provided by informants
    - To collect baseline information
    - To quantify or measure objectively the behaviors
    - To see if there really is a problem (peer comparisons – maybe not that different from others in the class)
    - To determine what environmental re-arrangements may be necessary
    - To identify environmental influences on behavior
    - To avoid making decisions based solely on subjective opinion
    - To see how the student's interacts with others
    - To see what the teacher and other students are doing that may be affecting the student's behavior

Do not give credit for guesses such as "to develop a relationship with the child" because the observer is supposed to avoid being noticed as much as possible and is not to be starting an intervention. Can give one point for vague answers like "to help develop an effective plan" but we really wanted something more specific here.

11. Factors to consider when planning to conduct direct observations:
    - School districts and other agencies have regulations about systematically observing an individual student as a part of a functional assessment; parental permission, teacher's permission, and/or other permissions may be needed or expected.
    - Method of data collection (e.g., time or event recording) and record keeping procedure or which type of form to use (e.g., handwritten A-B-C chart or a published form).
    - When and where are the problem behaviors most and least likely to occur, according to initial information? Will it be possible to make arrangements to observe at those times?
    - Has the behavior been operationally defined well enough for collecting reliable data in an observation?
    - To minimize reactivity, how can the observer collect the data unobtrusively and avoid unnecessary interactions with the students?
    - Who should observe?
    - How much time is available for observations? (Although it is customary to keep them short, according to O'Neill et al., 1997, in order to recognize a pattern, it may be necessary to observe for some time. The exact number of minutes or hours or days cannot be given but a <u>minimum</u> recommendation is for however long it takes to observe at least 2 occurrences of the behavior of interest.)

We are looking here for evidence that the person understands how to get ready to do a direct observation for an FBA. Don't give more than one point for a series of vague guesses that are sort of reasonable but don't really address any of the items listed above (e.g., "surroundings, age of the child, child's attitude").

12. Accept any reason that makes sense, even if not included on the following list of answers and even if not specifically about FBA. Data should be used to make decisions in order to:

- Make decisions based on what is actually happening rather than a guess or an opinion that may be biased or misinformed
- Compared to data over time, to monitor and report progress
- Objectively determine if progress is being made
- Reduce bias, testimonials, and disagreements at team meetings
- Evaluate the effectiveness of the intervention and compare with alternatives
- Document student performance and staff effort
- Monitor behavior change and implementation fidelity
- Demonstrate professionalism and accountability
- Avoid lawsuits and/or be prepared to defend oneself

13. For Elijah, accept any ideas that makes sense, even if not included on the following list of answers and even if not specifically about FBA

Desirable:

- Wait turn, take turns
- Use other equipment; find something else to do
- Keep hands to self -- use polite words, not pushes
- Share

Alternative:

- Ask to use equipment
- Ask an adult or peer mediator for help in seeking equipment
- Express his desire for a turn now with words (e.g., "It's my turn now; you get off.") or some type of socially acceptable signal (e.g., gentle tap on the shoulder instead of pushing)
- Cooperates with a new behavior support plan in which (a) he learns to do something else in this situation, such as play a different game or talk to someone or use a special piece of equipment or toy provided for this support plan, (b) he learns a self-monitoring system where he records these situations and his responses, (c) he and the other children cooperate to use a timer or other systematic new way to take turns or share, (d) he follows a new plan where he can go to a special place if he feels like pushing someone so that he avoids the pushing incident. (See comments section.)

14. A good behavior support plan can be identified by features that make it likely to be effective and acceptable:

- based on an FBA
- changes environmental factors, such as antecedents and consequences, that are related to the problem behavior
- has contextual fit – is a good match for the situation and people involved; specifically addresses the problem behavior
- includes ways to teach and/or increase desirable and alternative behaviors
- includes shaping, moving gradually from a short term objective (STO) to long term objectives (LTO), "baby steps" or "one step at a time," attainable goals

- clearly explains who is responsible for carrying out which parts of the plan (and when)
- builds in ways to measure progress, evaluate and modify the intervention, provide follow-up, and document results.

We are looking here for evidence that the person understands how to plan a behavioral intervention that is based on a functional assessment. Don't give more than one point for a series of vague guesses that are sort of reasonable but don't really address any of the items listed above (e.g., "encouragement, open communication, self-determination, discipline").
See also expert descriptions, below:

"Behavioral support plans . . . should
- indicate how staff, family, or support personnel will change and not just focus on the person of concern, . . .
- be directly based on the functional assessment information, . . .
- be technically sound – that is, consistent with the principles and laws of human behavior;
- and . . . be a good fit with the values, resources, and skills of the people responsible for implementation" (O'Neill et al., 1997, p. 65).

"A positive, individualized intervention plan [based on functional assessment information] that (a) changes the environmental variables that contribute to challenging behavior and, at the same time, (b) provide support for appropriate behavior that achieves the same function as the challenging behavior" (Chandler et al., 1999, p. 102)

"The positive behavior support plan often includes:
- finding ways to prevent the behavior by changing some of the people and situations which set up the behavior,
- teaching new skills to help the child communicate and interact with others, develop self control and/or to use their time in more positive ways, and
- reacting to the behavior when it does occur in more positive ways.. . . .

The plan would spell out all the details and routines of an intervention to change behavior by teaching new skills or changing the circumstances surrounding the behavior"
(From the web page found at: http://www.hawaii.gov/health/cpd/cpdspfas.htm).

The behavior support plan (ideally) "eliminates the student's need to engage" in the problem behavior (Liaupsin et al., 1999, spoken on the cd-rom).

"The student's behavior intervention plan . . . should include positive strategies, program or curricular modifications, and supplementary aids and supports required to address the disruptive behaviors in question" (from CEPC, 1998, "an IEP Team's Introduction to Functional Behavioral Assessment,"which goes on to provide many specific suggestions for behavior support plans based on FA, and is available on the Internet at
(http://cecp.air.org/resources/problembehavior/main.htm)

15. Student performance and progress should be monitored during the implementation of an intervention and/or Behavior Support Plan (BSP) in order to:
- have data for deciding if changes are needed (including modifications, fading,

discontinuing)

- find out if the intervention plan is being implemented as planned or if it needs adjustment
- decide if the intervention is working, is effective in (a) reducing the problem behavior and (b) increasing desired and/or alternative behaviors and if it should be continued
- know when the goals have been met
- to communicate with parents and with others
- demonstrate that the educator is doing a good job and being responsible.

Comments on Specific Questions, by Number

3. Legal Requirements

C is the best option here but doesn't really capture the issue since the law is about students who have Individual Education Plans (IEPs) [or who should have them if you want to get into potential lawsuits for failing to conduct adequate "child-find" procedures] and are suspended for 10 or more days and/or are at risk for a change in placement due to disciplinary action for dangerous or illegal behaviors.

4. Meaning of *function*:

Other words may be used instead of "function." The meaning of the "function" of a behavior has been explained in various ways, which seem to need to be taken together to clarify the term:

- It has been equated with the maintaining consequence: "the consequences that maintain the problem behaviors (that is, what functions the behaviors appear to serve for the person)" (O'Neill et al., 1997, p. 3).
- Another term used to explain it is "effect" as in the following statement: " Functional assessment would determine if, when a child runs out of the classroom, the function or effect is to obtain attention (positive reinforcement), avoid an activity (negative reinforcement), or to change activity level (sensory regulation)" (Chandler et al., 1999, p. 102).
- Others have explained "function of the behavior" in terms of what the student is trying to gain or avoid: "For the purposes of functional assessment, we will consider that behavior serves one of two functions: (a) to get something they want, (b) to avoid aversives" (Liaupsin et al., 1999, p. 57).

9. Other information:

Systematically presenting and/or withdrawing variables in this way is called a "functional analysis" which is a term reserved (in the literature on this topic) for experimental manipulations to test the hypothesis. **We have differed from some experts by not required functional analysis (experimental manipulations) as a part of our definition of a "full" FBA**, but we do ask for direct observations in natural conditions and a descriptive analysis of the situation and interactions. Often, even with just natural events and no deliberate manipulation, variables hypothesized to predict the behavior will be present or absent.

A testable hypothesis is an "explanation of the connection between the antecedents, behaviors, and consequences" (Liaupsin et al., 1999, p. 55) that can be verified. According to Liaupsin et al., it should be a sentence, based on FA data, and should include the student, the behavior, and the conditions that appear to predict the behavior. The testable hypothesis is used

to evaluate the summary statement of the FBA data, and, if, confirmed, them it can be used as the foundation for an intervention. If the behavior is not dangerous, the hypothesis can then be tested by presenting and withdrawing (manipulating) the variables said to predict the behavior. If the behavior is dangerous, Liaupsin et al. state that these variables should only be withdrawn. (See also Scott & Nelson, 1999, pp. 245-246, for more about this.)

13. "Acceptable alternative behavior"

When teachers hear the word, "acceptable," they are very likely to think of what is acceptable or not from the point of view of the school rules. We have accepted answers here that reflect that type of thinking, however, in actual situations, it would be necessary to also determine if that alternative is, in fact, able to compete successfully with the problem behavior in terms of accessing the maintaining consequence. School personnel tend to have a very difficult time understanding the concept of competing behaviors (O'Neill et al., 1997) and may confuse this concept with "incompatible" behaviors. In order for function-based support to be effective, the alternative will need to access, in this case, something for Elijah to do that is as fun for him as pushing the other kids to get the equipment, even when it is not his turn. This example does not provide the results of a functional assessment so we don't know if the maintaining consequence is getting to use the equipment or the attention from the other kids when they are pushed. To really decide on an effective acceptable alternative, we would need to know that.

Desired and acceptable alternatives to problem behavior are called "competing behaviors" because the person of concern will be affected by how efficiently, effectively, and satisfactorily each potential course of action will lead to the reinforcer that has been maintaining the problem behavior. If a student has a disruptive behavior that is considered a problem by school staff, yet that behavior easily, quickly and reliably leads to attention the student craves, whereas the behaviors suggest as desired and alternative replacements bring attention inconsistency, slowly, and only after considerable effort, the child is likely to continue with the easier, quicker, and more dependable method of obtaining attention. "Human behavior follows certain empirical principles, and any clinical plan of behavioral support should be consistent with those principles. . . . Plans of behavioral support will be technically sound if they make the problem behaviors *irrelevant, inefficient*, and *ineffective*. . . The efficiency of a behavior refers to the combined effects of (a) the physical effort required for a person to perform the behavior, (b) the number of times the person must perform the behavior before he or she is reinforced . . . and (c) the time delay between the first problem behavior and reinforcement. . . . When feasible, the support plan should define an alternative, socially appropriate and *more efficient* way for the person to achieve the same reward (O'Neill et al., 1997, pp. 66-67).

APPENDIX B: STAR-FSI

Sugai-Tobin Archival Review with

Functional Support Information (STAR-FSI)

CONFIDENTIAL

Student _____

ID# _____ Student's Date of Birth: ___ \ ___ \ ___
(Month \ Day \ Year)

Today's Date: ___ \ ___ \ ___
(Month \ Day \ Year)

School(s) _____

Table 1. STAR-FSI Record for On-Going Assessments:

Date of Review	Name of Person Completing This Form	Student's Homeroom Teacher	Functional Assessment Coordinator

For years completed:

	DAYS PRESENT:	ABSENT:	RETAINED?
Kindergarten:	_____	_____	yes = 1
Grade 1: (or Kindergarten repeated)	_____	_____	yes = 1
Grade 2: (or 1st grade repeated)	_____	_____	yes = 1
Grade 3: (or 2nd grade repeated)	_____	_____	yes = 1
Grade 4: (or 3rd grade repeated)	_____	_____	yes = 1
Grade 5: (or 4th grade repeated)	_____	_____	yes = 1
Grade 6: (or 5th grade repeated)	_____	_____	yes = 1
Grade 7: (or 6th grade repeated)	_____	_____	yes = 1
Grade 8: (or 7th grade repeated)	_____	_____	yes = 1
If repeated, Grade 8, 2nd yr.:	_____	_____	yes = 1
Grade 9: (or 8th grade repeated)	_____	_____	yes = 1
If repeated, Grade 9, 2nd yr.:	_____	_____	yes = 1
Grade 10: (or 9th grade repeated)	_____	_____	yes = 1
If repeated, Grade 10, 2nd yr.:	_____	_____	yes = 1
Grade 11: (or 10th grade repeated)	_____	_____	yes = 1
If repeated, Grade 11, 2nd yr.:	_____	_____	yes = 1
Grade 12: (or11th grade repeated)	_____	_____	yes = 1
If repeated, Grade 12, 2nd yr.:	_____	_____	yes = 1

Records about attendance or truancy:

(a) Formal letters to parents
(b) Truant officer's reports
(c) Informal communication from school staff to parents (notes, calls, etc.)
(d) Communication from parents to school explaining absences
Main reasons given, if any:

(e) Other:

Note any records of health or medical conditions of the student that would be a concern for school staff (e.g., medicine to be taken at school, special needs)?

ACADEMIC ACHIEVEMENT AND BEHAVIORAL ADJUSTMENT

1. What indication of the student's academic performance is given by the **most recently completed term (or semester)**?

(a) Doing very poorly (if GPA given, less than 1.6).
(b) Generally low marks (if GPA given, between 1.6 and 2.5).
[Grades typically run much higher in middle school than in high school.]
(c) Performing typically or satisfactory progress in general (if GPA given, between 2.6 and 2.99).
(d) Generally high marks (if GPA given, between 3.0 and 3.50).
(e) Doing very well (if GPA given, between 3.51 and 4.0).

1. Underline areas of strength, if any, in the following classes (even if not recently doing well but has in the past): (a) Music (b) Art (c) Science (d) Social Studies (e)Technology/Computer Skills (f) Physical Education (PE)
(g) Other _____

2. Many schools regularly report social behavior in areas such as "citizenship, self-management, co-operation, respects others." For **the most recently completed term (or semester)**, estimate how many of the symbols indicate that the child's behavior is considered **acceptable** (e.g., Average or above average, developing normally, satisfactory or outstanding, etc.): (a) none (b) some but less than half (c) about half, (d) more than half but not almost all (e) almost all (f) all

3. If teachers have written comments on report cards regarding the student's behavior that may be pertinent to the current functional assessment (FA), record main points here:

4. If standardized, norm-referenced, or CBM measures of **reading** achievement are

reported, note most recent percentiles or scores here and indicate type of measure.

5. If standardized, norm-referenced, or CBM measures of **math** achievement are reported, note most recent percentiles or scores here and indicate type of measure.

6. If standardized, norm-referenced, or CBM measures of **language arts** achievement are reported, note most recent percentiles or scores here and indicate type of measure.

7. If recent positive referrals, awards, or letters, are on file, record date(s) and reason(s).

BACKGROUND

If the child has changed schools, fill in the table, count the number of changes and record below.

Table 2. Mobility

Grade	Date Starts	Name of School	Location	Date Leaves

1. Number of school changes?

2. Reason(s) for most recent change schools given? If yes, explain or check:

3. Potential setting events indicated in descriptions of family or neighborhood situation? If yes, explain:

SPECIAL EDUCATION AND RELATED EVENTS

4. Ever received any Title 1 (or Chapter 1) services?
If yes, note date or grade level:

5. Student has an IEP for --

Grade 1 (and/or is receiving special education services in Kindergarten):

	1 = Yes	0 = No
Grade 2:	1 = Yes	0 = No
Grade 3:	1 = Yes	0 = No
Grade 4:	1 = Yes	0 = No
Grade 5:	1 = Yes	0 = No
Grade 6:	1 = Yes	0 = No
Grade 7:	1 = Yes	0 = No
Grade 8:	1 = Yes	0 = No

6. First or primary special education disability:

Label:	Code:	Label:	Code:
Learning Disability (LD)	90	Hearing Impaired	20
Emotionally Disturbed (ED)	60	Deaf	30
Speech Impaired	50	Language Impaired	51
Educable Mentally Retarded (EMR)	10	Visually Impaired	40
Trainable Mentally Retarded (TMR)	12	Deaf-Blind	43
Orthopedic Impairment (OI)	70	Autistic	82
Other Health Impaired (OHI)	80	Other: _____ __	

7. If there is a 2nd special education label, or a change, what is it? _____

8. Identified for TAG?

9. If the student has other types of labels related to behavior (not special education categories, but medical, psychological, or other labels, such as “Attention Deficit Hyperactive Disorder” or “delinquent”), please indicate here and note situation.

10. Is there evidence of an FA being conducted in the past? If yes, first fill in the table on the next page and then add here any additional comments that might facilitate the current FA (for example, describe materials, activities, and arrangements that were useful, hypotheses that may still be relevant, persons/team involved, social validity):

Codes are listed below to save time in completing this chart and to standardize responses.

Table 3. Functional Behavioral Assessment (FBA) Records

Date Started (Student's grade level at the time)	**Functional Behavioral Assessment Procedures**	**Date FBA Completed**	**Behaviors of Concern**	**Functions** Enter Code and indicate if stated (S) or implied (I)	**Types of Interventions Developed by Part of Behavioral Sequence Affected** Enter Code and indicate if stated (S) or implied (I)	**In your opinion, was an understanding of concepts of competing behaviors (CB)and/or functional match (FM) evident?** (Yes, No, Unclear)

Attach additional pages as needed.

Note. **FA Procedures:** IS = Interviewed student, IT = Interviewed teacher/staff, IP = Interviewed parent, R = Rating scale, AR = Archival review, S = Scatter plot, DEv = Direct observations with event recording (O'Neill et al. type, ABC, etc.), DIn = Direct observations with interval recording, FAN = Functional analysis with experimental manipulations, O = Other (explain); **Behaviors of Concern:** DIS = Disruption (includes talk outs and making unnecessary noises in class), SS = Skipping School (includes running away from class, hiding), TH = Theft, VA = Verbal Abuse (includes threatening, profanity, obscene gestures, namecalling, teasing, screaming), W = Weapons (explain), NON = Noncompliance, OFF = Off task, INC = Incomplete work (includes other academic activity problems), PA = Physical Abuse (includes fighting, hitting, kicking, etc.), O = Other (Explain); **Function:** ATP = Attention, peer, ATAD = Attention, adult, EST = Escape or avoid task, ESS = Escape or avoid social, SEN = Sensory stimulation, TAN = Tangible material reinforcer, UN = Unknown or unclear, O = Other (explain); **Types of Interventions:** SET = Setting events neutralized or changed, ANT = Antecedents changed, BEH = Behaviors taught, CSQ = Consequences changed.

1. Are any behavioral support programs or interventions that were **implemented** documented? If yes, fill in the table below first and then add here any additional comments that might facilitate the current effort (for example, describe factors affecting success or failure, contextual variables that still need to be considered).

Table 4. Implementation of Behavior Support Interventions

Date started? (Student's grade level at the time)	**Type(s) of behavior support provided:** (Examples: FBA-based program described in Table 3 (↗), Check In/Out (✔), Wraparound (W), Self-management (SM), Social Skills Instruction (SSI), Curricular Modification (CM), Other – please describe)	**Who provided the support?** (e.g., Teacher (T), Educational Assistant (EA), Peer (PR), Other -- please describe)	**Number of sessions** (or activities -- per day or week) **and length of sessions** (i.e., about how many minutes per activity or session)?	**Is it still being used?** (If not, when and why was it discontinued?)

Attach additional pages as needed.

Directions: *Indicate any changes in placement (including termination of services) by placing an X in the matrix to show type of placement by grade levels and number the placement changes in each grade level to show which one was first, which second, etc. If any are official "Interim Alternative Educational Settings" (e.g., for 45 day removals due to unsafe behavior at school), write "IAES" beside the X.*

Table 5. Placement Records

	General Education All Day	**One Special Class**	**Resource Room (RR), Extended Resource Room (ERR)**	**Self-Contained Class**	**Special Ed. Day School**	**Homebound or Home Instruction (provided by the district)**	**Residential Placement**	**Other (Explain)**
Kindergarten								
Grade 1								
Grade 2								
Grade 3								
Grade 4								
Grade 5								
Grade 6								
Grade 7 (Table continues)								

	General Education All Day	**One Special Class**	**Resource Room (RR), Extended Resource Room (ERR)**	**Self-Contained Class**	**Special Ed. Day School**	**Homebound or Home Instruction (provided by the district)**	**Residential Placement**	**Other (Explain)**
Grade 8								
Grade 9								
Grade 10								
Grade 11								
Grade 12								

1. Total number of placement changes:
2. Look over the following list of supportive, school-based interventions and, if any are documented, record date and/or grade level to show when provided for this student.

(a) Conflict resolution instruction
(b) Counseling at school
(c) Interagency collaboration (e.g., FACTeam, Wraparound, IWEBS)
(d) Mental health referral
(e) Peer mediation
(f) Peer support (e.g., structured friendship group, buddy for transfer student)
(g) Personal help (e.g., finding a safe place)

(h) Section 504 Plan of Assistance
Reason needed?

(i) Tutor
(other than formal homebound Special Ed. placement with IEP listed above)
(j) English as a Second Language or Bilingual Class
(k) Behavioral intervention based on a functional assessment

(l) Daily school-based mentoring and point system
(e.g., "Check and Connect" type program)

(m) Taught to use a systematic self-management program

(n) Other:

1. Look over the following list of supportive activities for teachers and, if documented for this student's teacher, record date and/or the student's grade level at the time.

(a) Specific staffing or meetings of in-building staff or teams
(b) Consultation and assistance provided by district level staff
(c) Consultation and assistance provided by university personnel
(d) Consultation and assistance provided by staff from community agencies
(e) Consultation and assistance provided by other professionals (e.g., private psychologists or educational consultants from outside the school district)
(d) Inservice training relevant to behavior management
(e) Help with developing a behavioral intervention based on a functional assessment
(f) Given an assistant to work with this student
(g) Other:

2. If problem behavior incidents are documented (other than formal discipline referrals involving a school administrator, which will be recorded later), for recent incidents, note date, place or situation (e.g., recess, class), persons involved, antecedents, behavior, and immediate consequences:

Table 6. Minor Incidents Records

Date	Place	Persons*	Antecedents	Behaviors	Consequences

*T = Teacher, St = Other staff, C = Other child or peer, S = Student alone, O = Other (Explain)

1. Report made by school staff regarding abuse or neglect documented? If yes, record date and/or student's grade level at the time.

DISCIPLINE REFERRALS

GRADE	DATE	STUDENT'S BEHAVIOR	ADMINISTRATIVE ACTION

Attach additional pages as needed.

Note. **Student's Behavior Codes:** HB = Habitual Minor, DEF = Defiance, DSC = Discrimination, ILS = Illegal Substance, PA = Physical Abuse, DIS = Disruption, SS = Skipping School, TH = Theft, VA = Verbal Abuse, H = Harassment, W = Weapons, O = Other (Explain). **Administrative Action Codes:** C = Conference with student, PC = Parent contact (phone, note), OS# = Out of School Suspension, # of days (includes "sent home"), IN# = In School Suspension, # of days, TAT = Referred to TAT (or other) team, EX = Principal's hearing, CTS = Principal confers w/ teacher and student, CP = Principal requests and/or has conference with parents, RD = Recess detention, LuD = Lunch detention, ASD = After School Detention, COM = Community Service, PoL = Police, AP = Apology, official, O = Other (explain).

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For more information:

http://pbis.org Positive Behavior Interventions and Supports

http://www.swis.org School Wide Information System
http://five.uoregon.edu Project FIVE
http://darkwing.uoregon.edu/~ttobin Positive Behavior Support at School
http://www.behavior-analyst-online.org/JEIBI/ *Journal of Early and Intensive Behavior Intervention* (online!)
http://www.cde.state.co.us/pbs – go to *Resources and Links*, Presentations, 2004 PBS Summer Institute, select Rob March: Strategies for Elementary School Educators, Strategies for Secondary School Educators.