

Functional Assessment

Linking FBA to Function-Based Intervention Plans

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Objectives

Participating teams should be able to:

- Identify the practices that reflect the ideology and values of Positive Behavior Support.
- Identify the 3 levels of continuum of support.
- Demonstrate an understanding of the model of the functional assessment process, including rationales and mechanisms for team establishment.
- Explain the relevance of information gathering and hypothesis development in the process of Positive Behavior Support.
- Define behavior in observable and measurable terms.
- Demonstrate competence in using structured interviews, conducting file reviews, and in utilizing direct observation and data recording strategies.
- Describe the components of comprehensive behavioral support and identify supports that would address these components.
- Describe the dynamic nature of Positive Behavior Support, and the issues associated with making the process work in schools.
- Identify methods for monitoring and evaluating the outcomes of behavioral supports.

Training Focus: Functional Assessment Based Student Support

PBS for individual students is a process of goal setting, functional assessment, plan design and implementation and evaluation. This process is most effective when implemented by a team that includes individuals who provide direct support to the student. The process is intended to promote changes in behavior, as well as overall quality of life for students. This training will focus on systems and strategies needed to provide support for students at the tertiary level. To do this, we must address both (1) the fluency of personnel methodology and (2) the systemic capacity to assessment and provide sustained support for individual students.

Building a System to Conduct & Sustain Function-Based Supports at the Tertiary Level

Step One: Identify the goals of the intervention

To assess and support student, the following must be developed:

- ☐ An identified team
- ☐ A referral form
- ☐ A process to schedule meetings OR regularly scheduled meetings
- ☐ A process to invited relevant stakeholders to the meeting.
- ☐ A system to relieve teachers so they are free to attend meetings

Step Two: Gather relevant information

To efficiently assess the student, the team should have a system in place that enables data to be gathered using the following assessment strategies

- ☐ Record Review *
- ☐ Environmental Inventory*
- ☐ Interviews*
- ☐ Direct Observation*

**Forms Included*

Step Three: Develop summary statement(s)

The team will meet after all the data has been collected to:

- ☐ Analyze patterns of behavior
- ☐ Identify Antecedents (contexts)
- ☐ Identify Consequences (functions)
- ☐ Determine function (function matrix)
- ☐ Generate a summary statement

Step Four: Develop behavioral support plan

After the team has developed the summary statement, they will use that information to develop a support plan. Important considerations in the plan development are:

- ☐ Intervention Decision Model
- ☐ Crisis Management
- ☐ Generalization and Maintenance
- ☐ Contextual Fit

Step Five: Implement and monitor outcomes

The team must develop systems to

- ☐ Identify training and resource needs of those who implement the plan
- ☐ Monitor student outcomes
- ☐ Monitor implementation integrity
- ☐ Regularly review progre

Step One: Identify Goals for Intervention

Based on the available information, the team identifies the specific concerns and goals:

- what the student is doing that is problematic (observable behaviors).
- to what extent (e.g., frequency) these behaviors are occurring.
- what broad goals the team hopes to achieve through intervention

Building the System

To assess and support student, the following must be developed:

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- ☐ A referral form
- ☐ A process to schedule meetings OR regularly scheduled meetings
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- ☐ A system to relieve teachers so they are free to attend meetings

Request for Assistance SOCIAL/ EMOTIONAL/BEHAVIOR CONCERN

Date: _____ Teacher/Team _____
 IEP: Yes No (Circle)
 Student Name: _____ Grade _____
 Grades retained _____ Previous/current service _____
 Parent initiated referral? yes/no

Situations	Problem Behavior	Most Common Result
What have you tried/used? How has it worked?		

What is your behavioral goal/expectation for this student?

What have you tried to date to change the situations in which the problem behavior(s) occur?

<input type="checkbox"/> Modified assignments to match the student's skills	<input type="checkbox"/> Changed seating assignments	<input type="checkbox"/> Changed schedule of activities	Other?
<input type="checkbox"/> Arranging tutoring to improve the student's academic skills	<input type="checkbox"/> Changed curriculum	<input type="checkbox"/> Provided extra assistance	

Have you tried to date to teach expected behaviors?

<input type="checkbox"/> Reminders about expected behavior when problem behavior is likely	<input type="checkbox"/> Clarified rules and expected behavior for the whole class	<input type="checkbox"/> Practiced the expected behaviors in class	Other?
<input type="checkbox"/> Reward program for expected behavior	<input type="checkbox"/> Oral agreement with the student	<input type="checkbox"/> Self-management program	
<input type="checkbox"/> Systematic feedback about behavior	<input type="checkbox"/> Individual written contract with the student	<input type="checkbox"/> Contract with student/with parents	

WHEN ADDRESSING THIS PROBLEM, PLEASE CONSIDER THE FOLLOWING QUESTIONS:

- When is the problem behavior(s) *most* and *least* likely to occur?
 - On particular days of the week (e.g. Monday) or times of day (e.g. right after recess)?
 - During or after interactions with certain people (e.g., during small, cooperative group projects)?

- During certain types of activity or tasks (e.g. during apparently difficult or boring work).
 - In connection with particular features of the physical environment (e.g. noisy, crowded)?
 - Features of routine (e.g. when there are unexpected changes or when a preferred activity is canceled)?
 - Medical or physical factors (e.g. apparent hunger or lack of sleep)?
 - Other influences?
2. What do you think the student(s) may gain from the problem behaviors?
- Attention? What kind of attention? From whom?
 - Avoid an apparently difficult or boring activity?
 - Avoid teacher interaction?
 - Get control of a situation?
 - Avoid embarrassment in front of peers?

Summary of Behavior

Setting Events & Predictors	Behaviors of Concern	Maintaining Consequences

3. Are there appropriate behaviors that the student could use that would make the problem behavior unnecessary?
4. Teacher support team decision
- ☐ Some suggestions regarding interventions to try.
 - ☐ Referral to a different team for assessment (speech hearing, academic): _____
 - ☐ Formation of an action team to conduct a functional assessment and develop a plan of support.
5. Date for follow-up.

Defining Target Behavior

In education, we describe the behavior of our students in various ways; “He’s so moody.” “She’s an angry child.” “He is totally out of control!” While we all pull up certain images based on the words used, the descriptions are frequently vague and based on broad generalization. Such descriptions do not provide us with the precise information we need to understand the behavior or to develop a plan to support the student. A behavioral perspective presents a way of pinpointing behavior by refining these broad generalizations into specific, observable, measurable definitions.

Most behaviors can be classified as either behavior excesses or behavior deficits. ***Behavior excesses*** are behaviors that occur too frequently, with too much force, or last too long. Behavior deficits occur infrequently, with little force, do not last a long time, or occur too quickly after a stimulus. Both excesses and deficits may be described and measured in terms of frequency (rate), intensity (magnitude), duration or latency.

Frequency: how often a behavior occurs

Intensity: the amount of force with which a behavior is performed.

Duration: how long a behavior lasts

Latency: the amount of time between the presentation of a stimulus and the initiation of the behavior.

Behavior is any event or action that is observable and measurable. That means that it can be seen, counted and repeated. Behavior involves the following elements

- Behavior includes actions (what people do).
- Behavior can be seen (it is observable).
- Behavior can be counted (it is measurable).
- Behavior includes events in addition to actions. The term ‘event’ accounts for behavior that does not involve observable action. For example, sitting still requires no overt action, yet is it still a behavior.
- Behavior is repeatable; the person can do it again.

Thus the definition of behavior has 5 elements: Behavior is any action or event that can be seen, counted, and repeated. Using this definition will help you begin thinking and talking very specifically about behavior. Synonyms for behavior include activity, action, performance, response, responding, and reaction.

Writing acceptable definitions of behavior.

The name we give to a particular behavior is not important. It is far more critical that we use objective and precise language to define a target behavior to identify to

those involved in the behavior change program what behavior is under consideration and it should communicate to others the general class or type of behavior in question. Behavior that is operationally defined clearly communicates to all exactly what the behavior of concern looks like. When describing behavior in operational terms, we include statements of frequency (how often the behavior occurs), topography (what it looks like), locus (where it occurs), duration (how long does it last), latency (how long between the prompt or stimuli and occurrence of the behavior) and force of intensity (how much effort is put into the behavior).

For example, a student has been described by a teacher as being physically aggressive. To clarify what behaviors are causing concern, a more specific description of the behavior is needed. With prompting, the teacher was able to more precisely describe “aggressive” behavior as pinching and scratching others. When asked what the behavior looks like (topography), she further clarified that the student will grab the hands and arms of other students and twist their skin or dig his nails into their skin. Prompted further, the teacher reported that the behavior occurs 4 or 5 times a week (frequency). Asked how long it lasts when it does occur (duration), she was able to state that it usually lasts 5 to 10 seconds, until an adult intervenes or the student who is being pinched cries out. Asked about the intensity of the behavior, the teacher stated that it frequently results in bruises and bleeding.

Defining Target Behavior: Testing your definition

Think of a student for whom you would like to develop a support plan and write an operational definition of that student’s behavior. Test your definition by asking yourself the following questions:

1. Can you count the number of times that the behavior occurs in, for example, a 15 minute period, a one-hour period, or one day? Or, can you count the number of minutes that it takes for the child to perform the behavior? That is, can you tell someone that the behavior occurred “x” number of times today? (*your answer should be yes*)
2. Will a stranger know exactly what to look for when you tell him/her the target behavior you are planning to modify? That is, can you actually see the child performing the behavior when it occurs? (*your answer should be yes*)
3. Can you break down the target behavior into smaller behavioral components, each of which is more specific and observable than the original target behavior? (*your answer should be no*)

Step Two: Gather Information

Members of the behavioral support team gather information through a variety of sources:

- a. review of existing records.
- b. interviews of support providers.
- c. direct observation of patterns, antecedents, contexts, and consequences.

Building the System

To efficiently assess the student, the team should have a system in place that enables data to be gathered using the following assessment strategies

- ☐ Record Review *
- ☐ Environmental Inventory*
- ☐ Interviews*
- ☐ Direct Observation*

**Forms Included*

Archival Review

Watson, S.T. & Steege, N.W. (2003)

Data Source	What to look for	Why?	Notes
Attendance History	Patterns of absences and total number of absences	May give clues about antecedents for problem behavior and possible skill deficits from lack of opportunity to receive instruction.	
Standardized test scores	Current and historical results of standardized testing	May indicate academic subjects and activities that are most difficult for the student (skill deficits) and may be helpful for identifying at what age/grade the deficits became more pronounced (useful for planning curriculum based measurements)	
Medical history	Vision and hearing problems as well as other problems that may be related to school performance (e.g. motor difficulties, head traumas, long-term illnesses, current medication use)	Helpful for identifying conditions that may exacerbate existing problematic behavior or increase the likelihood of other problematic use behaviors.	
Social history	Frequent changes in address, foster home placement, recent occurrence of stressful events (e.g. divorce, remarriage of parent, death, number of schools attended)	Points to possible establishing operations or setting events that may be impacting school behavior.	

Disciplinary history	Types of problematic behaviors, times and locations in which they occurred disciplinary penalty imposed, and increase/decrease in frequency/intensity of problem behavior. {e.g., <i>Office Disc Reports, SMC, Buddy Rooms</i> }	Helps to identify patterns of behavior (antecedents), effective and ineffective disciplinary strategies, and possible maintaining consequences, and helps chart the progression of problematic behavior.	
Previous related assessment results	Other assessments that have been conducted that focus on academic skills, behavioral functioning, language skills, etc.	Possible changes in function of behavior, previous antecedents, history of behavior and interventions, and programming decisions.	
Previous Individually developed interventions	Formal and informal interventions that are documented in some way.	Identify interventions that have been successful or unsuccessful and why they were or were not successful: if successful, why are they not currently being used; likewise, why are unsuccessful interventions continuing to be applied?	
IEP	Instructional goals and objectives, how/if they are being taught, how/if they are being monitored, and other data supporting student performance	Provides information on the degree to which the behaviors of concern are being addressed in the classroom and on the extent to which the teacher collects and records behavioral data.	

Watson, S.T. & Steege, N.W. (2003)

Classwide Systems of PBIS Worksheet

- ☐ The teacher has taught the students the classroom rules.
- ☐ Clear routines have been taught and are in evidence.
- ☐ The teacher uses precorrects before transitions.
- ☐ The teacher clearly tells the students what to do one step at a time
- ☐ The teacher gives the students time limits.
- ☐ The class is actively engaged the majority of time, with little down time.
- ☐ The students complete their work on time.
- ☐ The teacher monitors the students as they follow directions
- ☐ The teacher praises students when they follow direction (4:1 ratio of praise statements to correction statements)
- ☐ The teacher provided consequence for students who do not follow directions.

Class Improvement Plan

Problem:

Goal:

Strategies to incorporate:

ENVIRONMENTAL INVENTORY

Rate each feature using the following scale:

1 = inconsistent or unpredictable5 = consistent and predictable

Physical Space: Is physical space organized to allow access to instructional materials?	
• Work centers are easily identified and corresponds with instruction	1 2 3 4 5
• Traffic flow minimizes physical contact between peers and maximizes teacher 's mobility	1 2 3 4 5
Attention: Does the teacher gain the attention of the students prior to instruction?	
• A consistent and clear attention signal is used across instructional contexts	1 2 3 4 5
• Uses a variety of techniques to gain, maintain, and regain student attention to task.	1 2 3 4 5
Time: Does the teacher initiate instructional cues and materials to gain, maintain, and regain student attention?	
• Materials are prepared and ready to go.	1 2 3 4 5
• Pre-corrects are given prior to transitions.	1 2 3 4 5
• Common intrusions are anticipated and handled with a consistent procedure. Unexpected intrusions are minimized with an emphasis on returning to instruction.	1 2 3 4 5
• Students engaged at high rates during individual work	1 2 3 4 5
• Down-time (including transitions) is minimal	1 2 3 4 5
Behavior Management: Does the teacher have universal systems of PBS in place?	
• Rules are posted	1 2 3 4 5
• Rules are referred to at appropriate times	1 2 3 4 5
• Students receive verbal praise for following rules	1 2 3 4 5
• Corrections are made by restating the rule/expectation and stating the appropriate replacement behavior.	1 2 3 4 5
• Continuum of consequences for encouraging expected behaviors	1 2 3 4 5
• Continuum of consequences for discouraging expected behaviors	1 2 3 4 5
• Maintains a 4:1 ratio of positive to negative statements	1 2 3 4 5
Routines: Does the teacher have procedures and routines that are clear and consistently followed?	
• Start of class	1 2 3 4 5
• Working in groups	1 2 3 4 5
• Working independently	1 2 3 4 5
• Special events (movies, assemblies, snacks, parties)	1 2 3 4 5
• Obtaining materials and supplies	1 2 3 4 5
• Using equipment (e.g. computer, tape players)	1 2 3 4 5

• Managing homework and other assignments	1 2 3 4 5
• Personal belongings (e.g. coats, hats)	1 2 3 4 5
• Entering/exiting classroom (e.g. using restroom/drinking fountain, going to library, moving around room)	1 2 3 4 5

Curriculum and Content: Does the teacher implement effective instruction strategies?	
• Assignments can be completed within allotted time period	1 2 3 4 5
• Content presented at student level resulting in high rates of engagement	1 2 3 4 5
• Frequently checks student learning for understanding	1 2 3 4 5
• Instructional focus builds on student's current and past skills	1 2 3 4 5
• Gives clear set-up and directions for task completion	1 2 3 4 5

Based on the observation, summarize strengths and weaknesses of universal PBS implementation.

Adapted from Sugai, 1997; Platt, Tripp, Ogden Fraser, 2000

Brief Functional Assessment Interview

Student: _____ Date: _____

Behavior(s) of concern:

Predictors:(when, where, with whom, with what, routines):

Maintaining Function(s) (attention, objects/food, avoid demands/tasks, avoid social contact, obtain activity):

What makes it worse (setting events: sleep, diet, schedule, home problems, etc.)

Summary statement

Setting Event → Predictor → Problem Behavior → Maintaining Function

Functional Assessment Checklist for Teachers and Staff (FACTS-Part A)

March, Horner, Lewis-Palmer, Brown, Crone, Todd & Carr (2000)

Step 1 Student/ Grade: _____ Date: _____
Interviewer: _____ Respondent(s): _____

Step 2 **Student Profile:** Please identify at least three strengths or contributions the student brings to school.

Step 3

Problem Behavior(s): Identify problem behaviors

<input type="checkbox"/> Tardy	<input type="checkbox"/> Fight/physical Aggression	<input type="checkbox"/> Disruptive	<input type="checkbox"/> Theft
<input type="checkbox"/> Unresponsive	<input type="checkbox"/> Inappropriate Language	<input type="checkbox"/> Insubordination	<input type="checkbox"/> Vandalism
<input type="checkbox"/> Withdrawn	<input type="checkbox"/> Verbal Harassment	<input type="checkbox"/> Work not done	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Verbally Inappropriate	<input type="checkbox"/> Self-injury	

Describe problem behavior: _____

Step 4

Identifying Routines: Where, When and With Whom Problem Behaviors are Most Likely.

Schedule (Times)	Activity	Likelihood of Problem Behavior						Specific Problem Behavior
		Low					High	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	

Step 5

Select 1-3 Routines for further assessment: Select routines based on (a) similarity of activities (conditions) with ratings of 4, 5 or 6 and (b) similarity of problem behavior(s). Complete the FACTS-Part B for each routine identified.

Functional Assessment Checklist for Teachers & Staff (FACTS-Part B)

Step 1 Student/Grade: _____ Date: _____
Interviewer: _____ Respondent(s): _____

Step 2

Routine/Activities/Context	Problem Behavior(s)

Step 3 Provide more detail about the problem behavior(s)

What does the problem behavior(s) look like?

How often does the problem behavior(s) occur?

How long does the problem behavior(s) last when it does occur?

What is the intensity/level of danger of the problem behavior(s)?

Step 4 What are the events that predict when the problem behavior(s) will occur? (Predictors)

Related Issues (setting events)	Environmental Features
<input type="checkbox"/> Illness <input type="checkbox"/> Drug use <input type="checkbox"/> Negative social <input type="checkbox"/> Conflict at home <input type="checkbox"/> Academic failure	<input type="checkbox"/> Reprimand/correction <input type="checkbox"/> Physical demands <input type="checkbox"/> Socially isolated <input type="checkbox"/> With peers <input type="checkbox"/> Other
Other: being ignored by peers	<input type="checkbox"/> Structured activity <input type="checkbox"/> Unstructured time <input type="checkbox"/> Tasks too boring <input type="checkbox"/> Activity too long <input type="checkbox"/> Tasks too difficult

Step 5 What consequences appear most likely to maintain the problem behavior(s)?

Things that are Obtained	Things Avoided or Escaped From
<input type="checkbox"/> Adult attention <input type="checkbox"/> Peer attention <input type="checkbox"/> Preferred activity <input type="checkbox"/> Money/things	<input type="checkbox"/> Hard Tasks <input type="checkbox"/> Reprimands <input type="checkbox"/> Peer negatives <input type="checkbox"/> Physical effort <input type="checkbox"/> Adult attention
Other: _____	Other: _____

SUMMARY OF BEHAVIOR

Step 6 Identify the summary that will be used to build a plan of behavior support

Setting Events & Predictors	Problem Behavior(s)	Maintaining Consequence(s)

Step 7 How confident are you that the Summary of Behavior is accurate?

Strategies for preventing problem behavior	Consequences for problem behavior
Problem Behavior(s)	
Not very confident	Very Confident
1	6
2	
3	
4	
5	

Step 8 What current efforts have been used to control the problem behavior?

Strategies for preventing problem behavior	Strategies for responding to problem behavior
<input type="checkbox"/> Schedule change <input type="checkbox"/> Seating Change <input type="checkbox"/> Curriculum change	<input type="checkbox"/> Reprimand <input type="checkbox"/> Office referral <input type="checkbox"/> Detention
Other: _____	Other: _____

March, Horner, Lewis-Palmer, Brown, Crone, Todd & Carr (2000) 4/24/00

The Functional Assessment Checklist for Teachers and Staff (FACTS): Instructions

The FACTS is a two-page interview used by school personnel who are building behavior support plans. The FACTS is intended to be an efficient strategy for initial functional behavioral assessment. The FACTS is completed by people (teachers, family, clinicians) who know the student best, and used to either build behavior support plans, or guide more complete functional assessment efforts. The FACTS can be completed in a short period of time (5-15 min). Efficiency and effectiveness in completing the forms increases with practice.

How to Complete the FACTS-Part A

Step #1: Complete Demographic Information:

Indicate the name and grade of the student, the date the assessment data were collected, the name of the person completing the form (the interviewer), and the name(s) of the people providing information (respondents).

Step #2: Complete Student Profile

Begin each assessment with a review of the positive, and contribution characteristics the student brings to school. Identify at least three strengths or contributions the students offers.

Step #3: Identify Problem Behaviors

Identify the specific student behaviors that are barriers to effective education, disrupt the education of others, interfere with social development or comprise safety at school. Provide a brief description of exactly how the student engages in these behaviors. What makes his/her way of doing these behaviors unique? Identify the most problematic behaviors, but also identify any problem behaviors that occur regularly.

Step #4: Identify Where, When and With Whom the Problem Behaviors are Most Likely

A: List the times that define the student's daily schedule features (e.g. odd/even days) if appropriate.

B: For each time listed indicate the activity typically engaged in during that time (e.g. small group instruction, math, independent art, transition).

C: Use the 1 to 6 scale to indicate (in general) which times/activities are most and least likely to be associated with problem behaviors. A "1" indicates low likelihood of problems, and a "6" indicates high likelihood of problem behaviors.

D: Indicate which problem behavior is most likely in any time/activity that is given a rating of 4, 5 or 6.

Step #5: Select Routines for Further Assessment

Examine each time/activity listed as 4, 5 or 6 in the Table from Step #4. If activities are similar (e.g. activities that are unstructured; activities that involve high academic demands; activities with teacher reprimands; activities with peer taunting) and have similar problem behaviors treat them as "routines for future analysis.

Select between 1 and 3 routines for further analysis. Write the name of the routine, and the most common problem behavior(s). Within each routine identify the problem behavior(s) that are most likely or most problematic.

For each routine identify in Step #5 complete a FACTS-Part B

How to Complete the FACTS-Part B
Step #1: Complete Demographic Information:

Identify the name and grade of the student, the date that the FACTS-Part B was completed, who completed the form, and who provided information for completing the form.

Step #2: Identify the Target Routine

List the targeted routine and problem behavior from the bottom of the FACTS-Part A. The FACTS-Part B provides information about ONE routine. Use multiple Part B forms if multiple routines are identified.

Step #3: Provide Specific about the Problem Behavior(s)

Provide more detail about the features of the problem behavior(s). Focus specifically on the unique and distinguishing features, and the way the behavior(s) is disruptive or dangerous.

Step #4: Identify Events that Predict Occurrence of the Problem Behavior(s)

Within each routine what (a) setting events, and (b) immediate preceding events predict when the problem behavior(s) will occur. What would you do to make the problem behaviors happen in this routine?

Step #5: Identify the Consequences that May Maintain the Problem Behavior

What consequences appear to reward the problem behavior? Consider that the student may get/obtain something they want, or that they may escape/avoid something they find unpleasant.

Identify the most powerful maintaining consequence with a "1", and other possible consequences with a "2" or "3". Do not check more than three options. The focus here is on the consequence that has the greatest impact.

When problems involve minor events that escalate into very difficult events, separate the consequences that maintain the minor problem behavior from the events that may maintain problem behavior in the escalation.

Student FBA Interview*

Student: _____ Grade: _____ Sex: M F IEP: Y N
 Teacher: _____ School: _____
 Interviewer: _____ Date: _____

OPENING

We are meeting today to find ways to change school, so that you like it more. This interview will take about 30 minutes. I can help you best if you answer honestly. You will not be asked anything that might get you in trouble.

STUDENT STRENGTH AND SKILLS

1. What are things you like to do, or do well, while at school? (e.g. activities, helping others).
2. What are classes/topics you do well in?

DEFINE THE BEHAVIORS OF CONCERN

Assist the student to identify specific behaviors that are resulting in problems in the school or classroom. Making suggestions or paraphrasing statements can help the student clarify her or his ideas.

What are the things you do that get you in trouble or are a problem? *Prompts: - late to class?, talk out in class?, don't get work done?, fighting?*

How often do you _____? (Insert the behavior listed by the student)

How long does _____ usually last each time it happens?

How serious is _____? (Do you or another student end up getting hurt? Are other students distracted?)

**Adapted from Crone & Horner, 2004*

DEFINE THE ANTECEDENT COMPLETE STUDENT SCHEDULE AND ROUTINE MATRIX

Assist the student to complete the schedule and routine matrices to show the routines and activities where they have difficulty with the behaviors they talked about. First, have the student complete the schedule column (or have this completed before the interview). Add any routines unique to the teacher's classroom.

Identifying Routines: When, where, and with whom are problem behaviors most likely? Say to the student: "We know that some times and activities are harder and easier for different people. Can you tell me which times during your day are easy and which are difficult? A '6' indicates it is likely that you will have a problem and a '1' indicates that no or few problem(s) occur. (Repeat for routines)

Schedule (Times)	Routine or Activity	Specific Problem Behavior	Likelihood of Problem Behavior	With Whom Does Problem Occur?
			Low High 1 2 3 4 5 6	
			1 2 3 4 5 6	
			1 2 3 4 5 6	
			1 2 3 4 5 6	
			1 2 3 4 5 6	
			1 2 3 4 5 6	
			1 2 3 4 5 6	
			1 2 3 4 5 6	
			1 2 3 4 5 6	
	Getting help		1 2 3 4 5 6	
	Getting material/drink, sharpening pencil		1 2 3 4 5 6	
	Working in groups		1 2 3 4 5 6	
	Working alone		1 2 3 4 5 6	
	Getting permission and going to the restroom		1 2 3 4 5 6	
	Transitions (between activities or locations)		1 2 3 4 5 6	
	Working with substitute teachers/volunteers		1 2 3 4 5 6	

SUMMARIZE ANTECEDENT (AND SETTING EVENTS)

What kind of things make it more likely that you will have this problem? (difficult tasks, transitions, structured activities, small-group settings, teacher's request, particular individuals, etc.).

What kinds of things make it more likely that you will have this problem? (difficult tasks, transitions, structured activities, small-group settings, teacher's request, particular individuals, etc.)

When and where is the problem most likely to happen? (days of week, specific classes, hallways, bathrooms)

When is the problem behavior least likely to occur? (days of week, specific classes, hallways, bathrooms)

Setting Events: Is there anything that happens before or after school or in between classes that makes it more likely that you'll have a problem? (missed medication, history of academic failure, conflict at home, missed meals, lack of sleep, history of problems with peers, etc.)

DESCRIBE THE CONSEQUENCE

What usually happens after the problem occurs? (what is the teacher's reaction, how do other students react, is the student sent to the office, does the student get out of doing work, does the student get in a power struggle, etc.)

**Adapted from Crone & Horner, 2004*

FUNCTIONAL
ASSESSMENT
OBSERVATION
FORM

Date_____

Observer_____

Student_____

School_____

Setting Information

Time	Antecedent	Behavior	Consequence

Conditional Probability Record (CPR)

Watson & Steege, 2003

Student: _____

Date of Observation: _____ Observer _____

Setting: _____ Time of Day _____

Behavior 1: _____ Behavior 2: _____

	ANTECEDENTS			TARGET BEHAVIORS		CONSEQUENCES		
	Academic	Task	Teacher	Behavior 1	Behavior 2	Teacher	Peers	Academic
0:15								
0:30								
0:45								
1:00								
1:15								
1:30								
1:45								
2:00								
2:15								
2:30								
2:45								
3:00								
3:15								
3:30								
3:45								
4:00								
4:15								
4:30								
4:45								
5:00								

Any categories may be coded according to the observer's preferences or the data that currently exist but must remain consistent across observations. Indicate coding scheme below for each of the categories.

Conditional Probability Record (CPR)

Student: Maynard Binglemoose

Date of Observation: 1-10-2005 Observer L. Newcomer

Setting: Regular Classroom Time of Day 1:15 - 1:30

Behavior 1: Out of seat Behavior 2: Not Applicable

	ANTECEDENTS			TARGET BEHAVIORS		CONSEQUENCES		
	Academic	Task	Teacher	Behavior 1	Behavior 2	Teacher	Peers	Academic
0:15	R	ws	W	--	--	W	Wk	Working
0:30	R	ws	W	--	--	W	Wk	Working
0:45	R	ws	W	--	--	W	Wk	Working
1:00	R	ws	Desk	--	--	Desk	Wk	Working
1:15	R	ws	Desk	✓	--	Desk	L	Wk Stop
1:30	R	ws	Desk	✓	--	Desk	L & R	Wk Stop
1:45	R	ws	Desk	✓	--	VR	Wk	Wk Stop
2:00	R	ws	Desk	✓	--	VR	Look	Wk Stop
2:15	R	ws	PP	✓	--	PG	Wk	Wk Stop
2:30	R	ws	PP	✓	--	PG	Wk	Wk Start
2:45	R	ws	PP	--	--	PP	Wk	Working
3:00	R	ws	PP	--	--	PP	Wk	Working
3:15	R	ws	W	--	--	W	Wk	Working
3:30	R	ws	W	✓	--	W	R	Wk Stop
3:45	R	ws	W	✓	--	VR	Look	Wk Stop
4:00	R	ws	PP	✓	--	VR	Wk	Wk Stop
4:15	R	ws	PP	✓	--	VR	Look	Wk Stop
4:30	R	ws	PP	✓	--	PG	Wk	Wk Stop
4:45	R	ws	PP	✓	--	PG	Wk	Wk Stop
5:00	R	ws	PP	--	--	PG	Wk	Wk Start

Codes: Academic: R = Reading Task: WS = Worksheets

Teacher: W = walking around room; PP = proximity to student; VR = verbal reprimand; PG, physical guidance; Desk = sitting at desk.

Peers: Wk = working on task; L = laughing at target student; Look = looking at target student; R = reporting behavior of target student to teacher

	ANTECEDENTS			TARGET BEHAVIORS		CONSEQUENCES		
	Academic	Task	Teacher	Behavior 1	Behavior 2	Teacher	Peers	Academic
0:15	R	WS	W	--	--	W	Wk	Working
0:30	R	WS	W	--	--	W	Wk	Working
0:45	R	WS	W	--	--	W	Wk	Working
1:00	R	WS	Desk	--	--	Desk	Wk	Working
1:15	R	WS	Desk	✓	--	Desk	L	Wk Stop
1:30	R	WS	Desk	✓	--	Desk	L & R	Wk Stop
1:45	R	WS	Desk	✓	--	VR	Wk	Wk Stop
2:00				✓	--	VR	Look	Wk Stop
2:15				✓	--	PG	Wk	Wk Stop
2:30				✓	--	PG	Wk	Wk Start
2:45	R	WS	PP	--	--	PP	Wk	Working
3:00	R	WS	PP	--	--	PP	Wk	Working
3:15	R	WS	W	--	--	W	Wk	Working
3:30	R	WS	W	✓	--	W	R	Wk Stop
3:45	R	WS	W	✓	--	VR	Look	Wk Stop
4:00	R	WS	PP	✓	--	VR	Wk	Wk Stop
4:15	R	WS	PP	✓	--	VR	Look	Wk Stop
4:30	R	WS	PP	✓	--	PG	Wk	Wk Stop
4:45	R	WS	PP	✓	--	PG	Wk	Wk Stop
5:00	R	WS	PP	--	--	PG	Wk	Wk Start

Target Behavior =
60% of Intervals

Watson & Steege, 2003

Watson & Steege, 2003

	STUDENTS			TARGET BEHAVIORS		CONSEQUENCES		
	Student	Behavior	Behavior	Behavior 1	Behavior 2	Teacher	Peers	Academic
					--	W	Wk	Working
0:30					--	W	Wk	Working
0:45						W	Wk	Working
1:00	R					Desk	Wk	Working
1:15	R	WS				Desk	L	Wk Stop
1:30	R	WS	Desk			Desk	L & R	Wk Stop
1:45	R	WS	Desk			VR	Wk	Wk Stop
2:00	R	WS	Desk	✓	--	VR	Look	Wk Stop
2:15	R	WS	PP		--	PG	Wk	Wk Stop
2:30	R	WS				PG	Wk	Wk Start
2:45						PP	Wk	Working
					--	PP	Wk	Working
					--	W	Wk	Working
				✓	--	W	R	Wk Stop
	R	WS	W	✓	--	VR	Look	Wk Stop
4:00	R	WS	PP	✓	--	VR	Wk	Wk Stop
4:15	R	WS	PP	✓	--	VR	Look	Wk Stop
4:30	R	WS	PP	✓	--	PG	Wk	Wk Stop
4:45	R	WS	PP	✓	--	PG	Wk	Wk Stop
5:00	R	WS	PP	--	--	PG	Wk	Wk Start

Out of the 60% of intervals where the target behavior occurred, 41% resulted in verbal reprimand

33% resulted in the teacher guiding him back to his seat.

	ANTECEDENTS			TARGET BEHAVIORS		CONSEQUENCES		
	Academic	Task	Teacher	Behavior 1	Behavior 2	Teacher	Peers	Academic
0:15	R	WS	W	--	--	W	Wk	Working
0:30	R	WS	W	--	--	W	Wk	Working
0:45	R	WS	W	--	--	W	Wk	Working
1:00	R	WS	Desk	--	--	Desk	Wk	Working
1:15	R	WS	Desk	✓	--	Desk	L	Wk Stop
1:30	R	WS	Desk	✓	--	Desk	L & R	Wk Stop
1:45	R	WS	Desk	✓	--	VR	Wk	Wk Stop
2:00	R	WS	Desk	✓	--	VR	Look	Wk Stop
2:15	R	WS	PP	✓	--	PG	Wk	Wk Stop
2:30	R	WS	PP	✓	--	PG	Wk	Wk Start
2:45	R	WS	PP	--		PP	Wk	Working
3:00	R	WS	PP				Wk	Working
3:15	R	WS					Wk	Working
3:30	R	WS						Wk Stop
3:45	R	WS						Wk Stop
4:00	R	WS						Wk Stop
4:15	R	WS					Wk	Wk Stop
4:30	R	WS	PP				Wk	Wk Stop
4:45	R	WS	PP	✓		PG	Wk	Wk Stop
5:00	R	WS	PP	--	--	PG	Wk	Wk Start

The target behavior
resulted in some form
of teacher attention
74% of the intervals

Watson & Steege, 2003

	ANTECEDENTS			TARGET BEHAVIORS		CONSEQUENCES		
	Academic	Task	Teacher	Behavior 1	Behavior 2	Teacher	Peers	Academic
0:15	R	WS	W	--	--	W	Wk	Working
0:30	R	WS	W	--	--	W	Wk	Working
0:45	R	WS	W	--	--	W	Wk	Working
1:00	R	WS	W	--	--	W	Wk	Working
1:15	R	WS	W	--	--	W	Wk	Working
1:30	R	WS	W	--	--	W	Wk	Working
1:45	R	WS	W	--	--	W	Wk	Working
2:00	R	WS	W	--	--	W	Wk	Working
2:15	R	WS	W	--	--	W	Wk	Working
2:30	R	WS	W	--	--	W	Wk	Working
2:45	R	WS	W	--	--	W	Wk	Working
3:00	R	WS	W	--	--	W	Wk	Working
3:15	R	WS	W	--	--	W	Wk	Working
3:30	R	WS	W	--	--	W	Wk	Working
3:45	R	WS	W	--	--	W	Wk	Working
4:00	R	WS	W	--	--	W	Wk	Working
4:15	R	WS	W	--	--	W	Wk	Working
4:30	R	WS	W	--	--	W	Wk	Working
4:45	R	WS	W	--	--	W	Wk	Working
5:00	R	WS	W	--	--	W	Wk	Working

Working resulted in no verbal or physical attention from teacher

The teacher was in close proximity in only 33% of the intervals he was working

Watson & Steege, 2003

	ANTECEDENTS			TARGET BEHAVIORS		CONSEQUENCES		
	Academic	Task	Teacher	Behavior	Behavior	Teacher	Peers	Academic
							Wk	Working
							Wk	Working
							Wk	Working
							Wk	Working
							L	Wk Stop
							L & R	Wk Stop
							Wk	Wk Stop
2:00	R	WS	DSR	✓	--	VR	Look	Wk Stop
2:15	R	WS	PP	✓	--	PG	Wk	Wk Stop
2:30	R	WS						
2:45	R	WS						
3:00	R	WS						
3:15	R	WS						
3:30	R	WS						
3:45	R	WS						
4:00	R	WS	PP	✓	--	VR	Wk	Wk Stop
4:15	R	WS	PP	✓	--	VR	Look	Wk Stop
4:30	R	WS	PP	✓	--	PG	Wk	Wk Stop
4:45	R	WS	PP	✓	--	PG	Wk	Wk Stop
5:00	R	WS	PP	--	--	PG	Wk	Wk Start

Hypothesis: The out of seat behavior is maintained by teacher attention because doing so is twice as likely to result in teacher attention than working.

There may be some peer influence in the form of looking at him (25%) or laughing at him (16%), but these consequences are not as probable as teacher attention

Watson & Steege, 2003

	ANTECEDENTS			TARGET BEHAVIORS		CONSEQUENCES		
	Academic	Task	Teacher	Behavior 1	Behavior 2	Teacher	Peers	Academic
0:15	R	WS	W	--	--	W	Wk	Working
0:30	R	WS	W	--	--	W	Wk	Working
0:45	R	WS	W	--	--	W	Wk	Working
1:00	R	WS	Desk	--	--	Desk	Wk	Working
1:15	R	WS	Desk	✓	--	Desk	L	Wk Stop
1:30	R	WS	Desk	✓	--	Desk	L & R	Wk Stop
1:45	R	WS	Desk	✓	--	VR	Wk	Wk Stop
2:00	R	WS	Desk	✓	--	VR	Wk	Wk Stop
2:15	R	WS	PP	✓	--	PP	Wk	Working
2:30	R	WS	PP	✓	--	PP	Wk	Working
2:45	R	WS	PP	--	--	PP	Wk	Working
3:00	R	WS	PP	--	--	PP	Wk	Working
3:15	R	WS	W	--	--	W	Wk	Working
3:30	R	WS	W	✓	--	W	R	Wk Stop
3:45	R	WS	W	✓	--	VR	Look	Wk Stop
4:00	R	WS	PP	✓	--	VR	Wk	Wk Stop
4:15	R	WS	PP	✓	--	VR	Look	Wk Stop
4:30	R	WS	PP	✓	--	PG	Wk	Wk Stop
4:45	R	WS	PP	✓	--	PG	Wk	Wk Stop
5:00	R	WS	PP	✓	--	PG	Wk	Wk Stop

Physical proximity of teacher was antecedent during 50% of the intervals in which the target behavior occurred

Antecedent and Consequent possibilities are easily verified through further observation & analysis

Watson & Steege, 2003

Behaviors:

a) Scream, throw, break

b) Leave setting

c) Physical Aggression

Days

Routines		M	T	W	Th	F	Sat	Sun	M	T	W	Th	Fr	
<i>Rise</i>														20
<i>Breakfast</i>														19
<i>Ride to work</i>							Na	Na						18
<i>9:00-10:30</i>		a	a	a		a			a	a	a	a	a	17
<i>Break</i>														16
<i>10:45-12:00</i>		a		a					a	a				15
<i>Lunch</i>														14
<i>1:00-2:40</i>		a	a	a	a				a		a			13
<i>Break</i>		b	b							b				12
<i>3:00-4:45</i>										a				11
<i>4:45-5:00</i>			a											10
<i>Ride home</i>							Na	Na						9
<i>Rest</i>														8
<i>Aft outing</i>														7
<i>Meal prep</i>					c	c			c					6
<i>Dinner</i>														5
<i>Clean up</i>														4
<i>Choice</i>														3
<i>Evening routine</i>														2
<i>Bed</i>														1

Routines														
														17
														16
														15
														14
														13
														12
														11
														10
														9
														8
														7
														6
														5
														4
														3
														2
														1

Scatter Plot Assessment

Student Name: _____ Start
Date: _____

Behavior not observed



Observer: _____

Target Behavior:

[illegible]

Step Three: Develop And Test The Hypothesis

The team uses the information to create statements that describe relationships between the student's behaviors of concern and aspects of the environments. These statements include:

- a. when, where, and with whom the behavior is most/least likely to occur.
- b. what happens following the behavior (what they get or avoid).
- c. other variables that appear to be affecting the person's behavior.

Building the System

The team will meet after all the data has been collected to:

- ☐ Analyze patterns of behavior
- ☐ Identify Antecedents (contexts)
- ☐ Identify Consequences (functions)
- ☐ Determine function (function matrix)
- ☐ Generate a summary statement

Developing a Hypothesis

Consider these questions:

1. Does the hypothesis specify an environmental event that can be altered to for an intervention?
2. Is the hypothesis based on the data that have been gathered?
3. Is there team consensus that the hypothesis is reasonable?

Questions to identify variables associated with problem behavior:

1. What antecedent events reliably precede problem behavior?
 - a. When does the behavior occur?
 - i. What activities are taking place?
 - ii. What people are present?
 - iii. How is the environment arranged?
2. Are there antecedent events that are reliably associated with desirable behavior?
 - a. When is the problem behavior absent?
 - i. What activities are taking place?
 - ii. What people are present?
 - iii. How is the environment arranged?
3. Are there setting events that reliably precede problem behavior?
 - a. What earlier events seem to make the behavior more likely?
 - i. Is the student experiencing physiological symptoms?
 - ii. Is the behavior cyclic?
 - iii. Have there been changes at home?
 - iv. Is the student having interpersonal problems?
4. Do people respond to problem behavior in a way that is likely to encourage it?
 - a. What happens following problem behavior?
 - i. Does the student escape or avoid a particular assignment or activity?
 - ii. Does the student obtain a particular activity or item?
 - iii. Does the student appear to receive sensory stimulation?

Bambara, L.M. & Kern, L (2005). Individualized supports for students with problem behaviors: Designing Positive Behavior Plans. NY: Guilford Press.

After completing a Functional Behavior Assessment (FBA), the Function Matrix is used to review the data collected during interviews and observations and consider each possible function of the target behavior.

There are two functions of behavior:

1. Positive Reinforcement - *provide access*
2. Negative Reinforcement - *provide escape*

There are three types of reinforcers:

1. Attention
2. Tangibles/Activities
3. Sensory Stimulations

FUNCTION MATRIX	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
Attention		
Tangible/Activities		
Sensory		

There are six unique possibilities to identify as the function of a behavior:

1. Positive Reinforcement (Access): Attention
2. Negative Reinforcement (Escape): Attention
3. Positive Reinforcement (Access): Tangible/Activities
4. Negative Reinforcement (Escape): Tangible/Activities
5. Positive Reinforcement (Access): Sensory Stimulation
6. Negative Reinforcement (Escape): Sensory Stimulation

FUNCTION MATRIX	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
Attention	Positive Reinforcement: Attention	Negative Reinforcement: Attention
Tangible/Activities	Positive Reinforcement: Tangible/Activities	Negative Reinforcement: Tangible/Activities
Sensory	Positive Reinforcement: Sensory Stimulation	Negative Reinforcement: Sensory Stimulation

Writing a Statement of Function

The purpose of a statement of function is (1) to provide information relevant to making effective intervention decisions, and (2) to clearly communicate the function of the behavior to other persons in crafting and implementing the intervention. A statement of function should contain much of the information you will need to move forward with the creation of a function-based intervention.

NOT Functions of Behavior

Power
Control
Revenge
Medical Conditions

Examples

Positive Reinforcement

The student who raises her hand frequently during independent seat work just so the teacher will come check on her; the student who makes funny noises in class because all the kids laugh at him when he makes noise. In both instances, the behavior continues because the students are getting positive reinforcement in the form of attention from others.

Negative Reinforcement

The student who, when given an assignment, gets up to sharpen her pencils, then walks around the classroom twice, then comes to the teacher's desk to ask for more information is delaying (avoiding) getting started on her work; the student who, when working on a difficult task that greatly exceeds his skill level, suddenly throws his paper to the ground and sits sullenly in his seat does so to escape the difficult task.

Tangibles

The child who pushes another child away so as to get the last dictionary on the shelf does so because he gets a *tangible* object (the dictionary); the kindergartner who cries upon coming to school until the principal gives her a piece of gum does so in part because of receiving a *tangible* item (chewing gum).

Automatic reinforcement/sensory stimulation

A child with a severe visual impairment gouges her eyes with her thumbs because doing so produces bright lights in her visual field, a type of *automatic positive reinforcement (arousal induction)*. A student suddenly begins engaging in self-injurious behavior (SIB) that consists of slapping the left side of his face with an open hand; further assessment reveals that he is probably doing so because the slapping results in a decrease in the pain on that side of his face associated with a severely abscessed tooth, a type of *automatic negative reinforcement (arousal reduction)*.

Watson & Steege, 2004

Common Problem Behaviors and Some Usual Suspects for Functional Antecedents and Consequence

	Antecedents	Behaviors	Consequences
Grades K-2	<ul style="list-style-type: none"> • Teacher demand • Task difficulty • Lack of supervision • Lack of classroom rules • Little structure • No planned consequences • Transitions 	<ul style="list-style-type: none"> • Talking • Making noises • Moving around • Attention seeking • Fighting • Crying • Taking others' things 	<ul style="list-style-type: none"> • Teacher attention • Peer attention • Escape from work • Tangibles
Grades 3-5	<ul style="list-style-type: none"> • Teacher demand • Confrontation • Task difficulty • Lack of supervision • Lack of classroom rules • Little structure • No planned consequences • Transitions 	<ul style="list-style-type: none"> • Talking • Making noises • Moving around • Attention seeking • Noncompliance • Fighting 	<ul style="list-style-type: none"> • Teacher attention • Peer attention • Escape from work
Grades 6-12	<ul style="list-style-type: none"> • Teacher demand • Confrontation • Task difficulty • Lack of supervision • Lack of classroom rules • Little structure • No planned consequences • Transitions 	<ul style="list-style-type: none"> • Disrespect of authority • Talking • Moving around • Attention seeking • Noncompliance • Fighting • Leaving school 	<ul style="list-style-type: none"> • Escape from school • Escape from task • Peer attention • Status among peers • Teacher attention • Access to tobacco • Access to drugs • Access to alcohol

Witt, Daly & Noell, 2000

An Example To Consider...

Watson & Steege, 2003

Maxwell is an adolescent who was identified for bullying behavior at school. He typically bullies his male peers in the hallway during class changes by bumping into them, calling them names, and using verbal threats. The team conducted interviews with Maxwell and his victims and concluded, prematurely and incorrectly, that the primary function of his bullying was to gain power for himself and control over his peers. Issues of power and control suggest cognitively mediated events. A more precise analysis of the observable variables will be needed to identify how those variables serve to directly reinforce bullying.

A closer look with careful observations yielded the following information:

- A small circle of friends provided both immediate and delayed positive social reinforcement for Maxwell's bullying by laughing at him and by talking at length about his bullying several hours after the event.
- The victims exhibited behavior that Maxwell reported in an interview to be reinforcing (e.g., looking scared, moving away from him, avoiding him in the hallway)
- Maxwell reported he "liked" the reputation of being a "tough guy" and was especially pleased when he overheard someone say that about him.

Given these variables, what is the function of the behavior?

What variables will need to be addressed?

Step Four: Design the Support Plans

A plan is developed, based on the summary statements, to address the behavioral concerns and fit within the environments in which it will be used. The behavioral support plan (for students who have IEPs this may also serve as the Behavior Intervention Plan (BIP) includes:

- a. adjustments to the environment that reduce the likelihood of problem.
- b. teaching replacement skills and building general competencies.
- c. consequences to promote positive behaviors and deter problems.
- d. a crisis management plan (if needed).

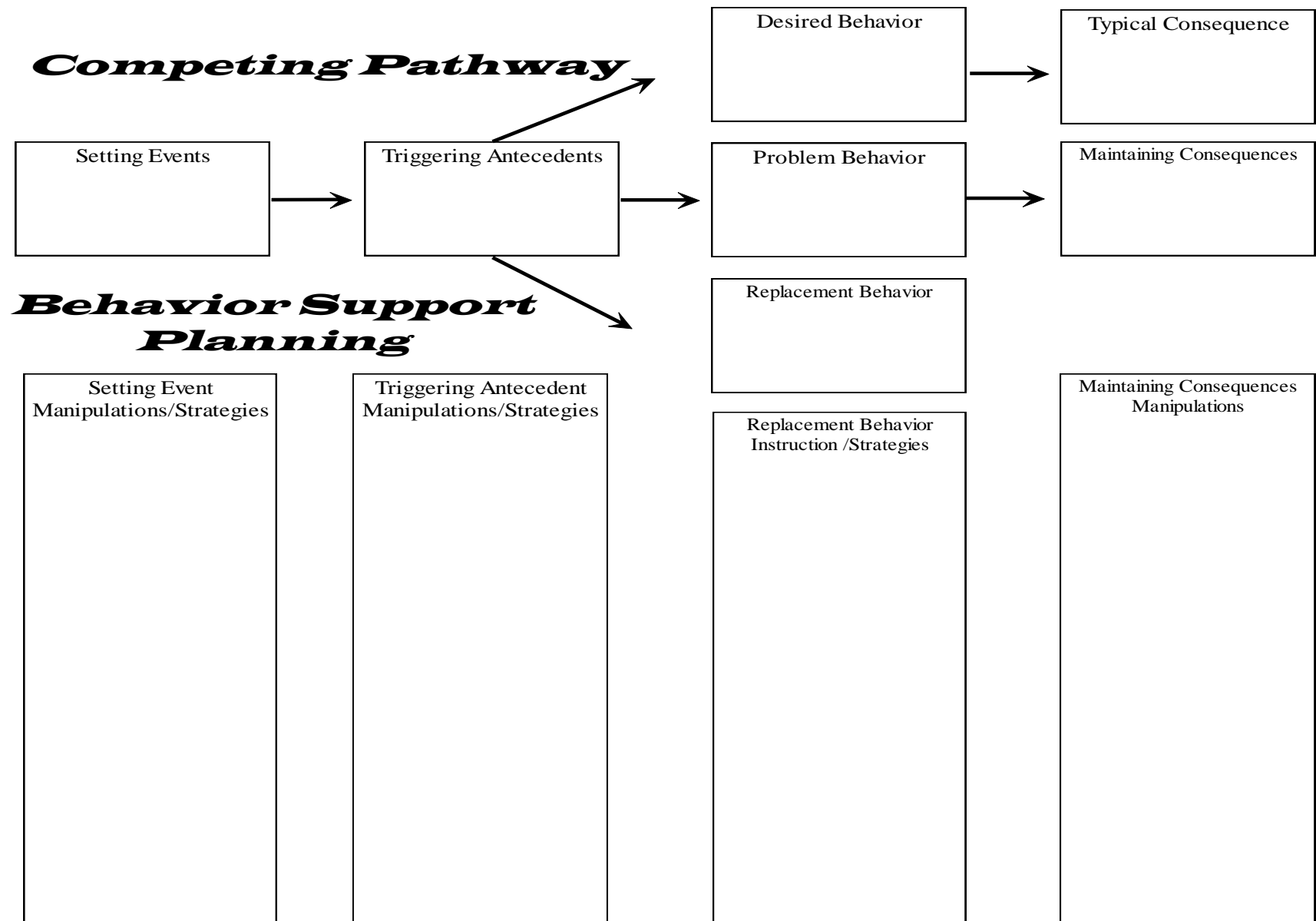
Building the System

After the team has developed the summary statement, they will use that information to develop a support plan. Important considerations in the plan development are:

- ☐ Intervention Decision Model
- ☐ Crisis Management
- ☐ Generalization and Maintenance
- ☐ Contextual Fit

Components of Behavioral Intervention Plans

- ☐ Behavioral definitions
 - Target & Replacement
- ☐ Baseline Data
- ☐ Function of the Behavior
- ☐ Behavioral Objective
- ☐ Intervention Procedures
- ☐ Data to be collected
- ☐ Program Review Date
- ☐ Personnel and Roles
- ☐ Emergency Procedures



The Intervention Decision Model

(Umbreit, Ferro, Liaupsin & Lane, 2006)

The Intervention Decision Model is a straightforward and specific technique developed by Umbreit, Ferro, Liaupsin & Lane (2006) for directly linking interventions to the identified function of the problem behavior. The technique employs a series of questions to identify which of three methods will most directly address the behavioral function, decrease the problem behavior, and increase the replacement behavior.

There are three basic intervention strategies and methods (Sugai, et al., 2000):

1. Adjustments to the environment that reduce the likelihood of problems
2. Teaching replacement skills and building general competencies
3. Manipulating consequences to promote positive behaviors and deter problems

These three categories make up the methods used in the Function-Based Intervention Model.

Method 1: Teach the Replacement Behavior(s)

Key Elements	<ul style="list-style-type: none"> • Adjust antecedent conditions so new behaviors are learned and aversive conditions avoided. • Provide appropriate reinforcement for replacement behavior • Withhold the consequence that previously reinforced the target behavior
--------------	---

Method 2: Improve the Environment

Key Elements	<ul style="list-style-type: none"> • Adjust antecedent variables so the conditions that set the occasion for the target behavior are eliminated and new conditions are established in which the replacement behavior is more likely to occur. • Provide appropriate positive reinforcement for replacement behavior • Withhold the consequence that previously reinforced the target behavior
--------------	--

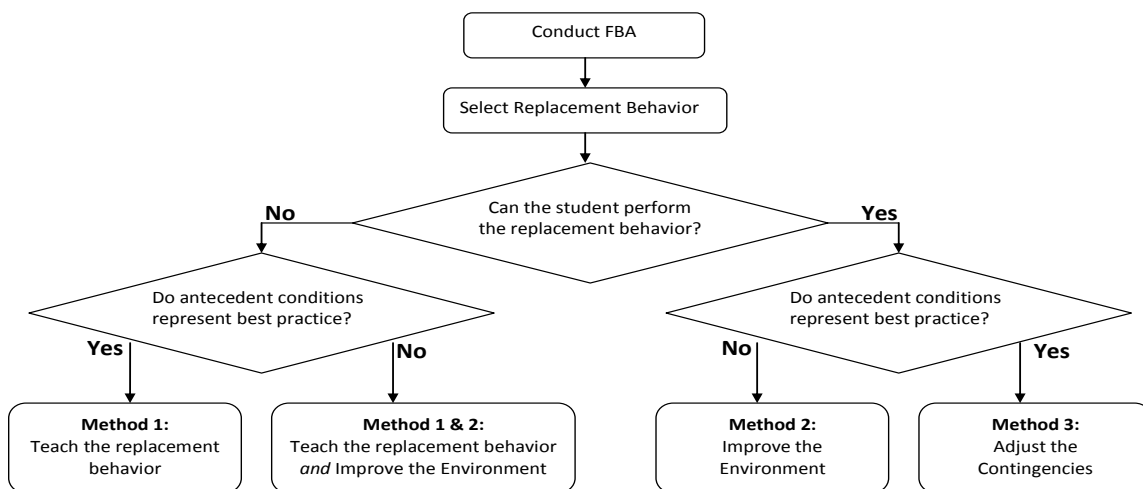
Method 3: Adjust the Contingencies

Key Elements	<ul style="list-style-type: none"> • The consequence that previously reinforced the target behavior is provided for the replacement behavior; • The consequence that previously reinforced the target behavior is withheld when the target behavior occurs (extinction); and • The antecedent conditions are adjusted to make it more likely that the replacement behavior will occur.
--------------	---

Step One: Review the FBA results

Step Two: Ask two questions to identify the intervention method or methods that are appropriate to use for the target behavior and antecedents identified in the FBA.

1. Can the individual perform the replacement behavior?
 - If the answer is “NO”, use Method 1: Teach the Replacement Behavior, and
 - Ask the next question
2. Do antecedent conditions represent effective practices for the environment in which the behavior occurs?
 - If the answer is “NO”, use Method 2: Improve the Environment
 - If the answer to both questions is “YES”, use Method 1 *and* Method 2



Step Three: Develop an intervention based on strategies described in the method you identified in step 2.

Intervention Method 1: Teaching the Replacement Behavior

Method 1 Elements	Resulting Intervention Elements
Adjust antecedent conditions so new behaviors are learned and aversive conditions avoided	
Provide appropriate reinforcement for replacement behavior	
Withhold the consequence that previously reinforced the target behavior	

Intervention Method 1 and Method 2: Teaching the Replacement Behavior & Improve the Environment

Method 1 and 2 Elements	Resulting Intervention Elements
Adjust the antecedent conditions so new behaviors are learned and aversive conditions avoided. (Method 1)	
Adjust the antecedent conditions so that the conditions that set the occasion for the target behavior are eliminated and the replacement behavior is more likely to occur. (Method 2)	
Provide positive reinforcement for the replacement behavior. (Method 1 and 2)	
Withhold the consequence that previously reinforced the target behavior when it occurs. (Method 1 and 2)	

Intervention Method 2: Improve the Environment

Method 2 Elements	Resulting Intervention Elements
Adjust the antecedent conditions so that the conditions that set the occasion for the target behavior are eliminated and the replacement behavior is more likely to occur;	
Provide appropriate reinforcement for the replacement behavior.	
Withhold the consequence that previously reinforced the target behavior when it occurs.	

Intervention Method 3: Adjust the Contingency

Method 3 Elements	Resulting Intervention Elements
Provide positive reinforcement for the replacement behavior.	
Adjust the antecedent conditions to make it more likely that the replacement behavior will occur.	
Withhold the consequence that previously reinforced the target behavior when it occurs.	

Antecedent Interventions

Function	Intervention Strategy	Example
Attention	Schedule adult attention	<ul style="list-style-type: none"> • Have adult work with student • Have adult provide periodic attention
	Schedule peer attention	<ul style="list-style-type: none"> • Pair student with peer • Use peer tutoring
	Increase proximity to student	<ul style="list-style-type: none"> • Move seating arrangement • Periodically move about classroom
	Provide preferred activity	<ul style="list-style-type: none"> • When adult is occupied assign more preferred activity
Escape	Adjust demand difficulty	<ul style="list-style-type: none"> • Provide easier work
	Offer choices	<ul style="list-style-type: none"> • Allow student to choose: Task to complete Sequence of tasks to be completed Materials to use Where to complete task When to complete task With whom to complete task
	Increase student preference/interest in activity	<ul style="list-style-type: none"> • Incorporate student hobbies/interests into activities
	Assure that activities have functional or meaningful outcomes	<ul style="list-style-type: none"> • Provide activities with valued outcome
	Alter length of task	<ul style="list-style-type: none"> • Shorten activity • Provide frequent breaks
	Modify mode of task completion	<ul style="list-style-type: none"> • Change medium/materials • Replace pencil and paper with computer, etc.
	Use behavioral momentum, task dispersal	<ul style="list-style-type: none"> • Present easy requests prior to difficult request
	Increase predictability	<ul style="list-style-type: none"> • Provide cues for upcoming or change in activities (instructional, visual, auditory)
	Modify instructional delivery	<ul style="list-style-type: none"> • Use pleasant tone of voice
Tangible	Provide a warning	<ul style="list-style-type: none"> • Indicate activity is about to end
	Schedule a transitional activity	<ul style="list-style-type: none"> • Schedule a moderately preferred activity between highly preferred and highly nonpreferred activities.
	Increase accessibility	<ul style="list-style-type: none"> • Put highly preferred items within students' reach
Sensory	Provide alternative sensory reinforcement	<ul style="list-style-type: none"> • Offer radio to student seeking auditory reinforcement, or visual stimuli to a student seeking visual reinforcement
	Enrich environment	<ul style="list-style-type: none"> • Fill environment with interesting and stimulating activities

Bambara, L.M. & Kern, L (2005). Individualized supports for students with problem behaviors: Designing Positive Behavior Plans. NY: Guilford Press

Three Types of Alternative Skills

Alternative Skill type	Guiding Questions	Purpose and Limitations
Replacement Skills	What will serve exactly the same function as the problem behavior?	<p><i>Purpose</i></p> <ul style="list-style-type: none"> • To provide student with an effective way of achieving the same outcome as the problem behavior. <p><i>Limitations</i></p> <ul style="list-style-type: none"> • The function of problem behavior cannot always be honored. • A single replacement skill rarely addresses the skills needed to prevent or change problem situations (e.g., work is too difficult)
Coping & tolerance skills	What skills will help the student cope or deal with difficult or unpleasant situations?	<p><i>Purpose</i></p> <ul style="list-style-type: none"> • To teach socially acceptable ways of coping with situations that should not or cannot be changed. <p><i>Limitations</i></p> <ul style="list-style-type: none"> • Usually not effective alone. Works better when student have alternative ways of achieving desired outcomes or can modify problem situations by themselves (e.g., have the skills to address difficult work situations). • Caution: Expecting a student to tolerate unpleasant situations without teaching replacement skills, teaching general adaptive skills, and/or making antecedent/setting event changes may be unethical
General adaptive skills	What related skills will prevent the need for problem behavior? What skills will result in meaningful lifestyle improvements for the student?	<p><i>Purpose</i></p> <ul style="list-style-type: none"> • To expand social, communicative, and academic competence, in order to prevent problem situations and help the student pursue preferences and interests. <p><i>Limitations</i></p> <ul style="list-style-type: none"> • Instruction is more labor-intensive than teaching replacement skills. • A student may need to learn replacement skills first to address immediate needs.

Bambara & Kern, 2005

Teaching Coping & General Adaptive Skills:

- Anger control training
- Relaxation training
- Social problem solving
- Goal setting, self-monitoring and self-evaluation
- Self-cueing

Example: Teaching Replacement Behavior

Student: Dusty Winds

Hypothesis:

When Dusty works alone or when he is not engaged with peers during recess or lunch, he will act silly (e.g., make silly noises, facial expressions, burp, shake his butt), to gain peer attention or social interaction.

Replacement Skill:

Dusty will ask permission to work with a peer.

- At beginning of an independent work period, remind Dusty of his option to work with a peer.
- Model, if necessary (e.g., say “Can Regina sit next to me?”).
- Delay reminders. Praise self-initiations.

Coping and Tolerance Skills

Dusty will work quietly and independently for up to 20 minutes.

- Have Dusty self-monitor working quietly.
- Slowly raise criterion for intervals of quiet work.
- Reward working quietly and completing work with praise and special stickers; hang completed worksheet in the “hall of fame” (encourage peer celebration).

General Adaptive Skills

Dusty will use his brag book to initiate and maintain peer conversation.

- Have Dusty practice initiating, asking questions, and responding to peer questions, using the brag book in the classroom.
- Encourage Dusty to use the brag book during lunch and recess
- Dusty will learn to play a variety of age-appropriate games interesting to peers.
- Have peers teach Dusty how to play tabletop and recess games (e.g., Uno, I Spy, Trouble, tag, kickball).

Response Strategies

Goals:

1. Reduce desirable outcomes for problem behavior.
2. Prevent escalation of problem behavior
3. Provide natural or logical consequences
4. Teach alternative appropriate behavior

Description of Response Strategies

Strategy	How it works	Examples	Cautions
Instructional procedure	Teaches an alternative behavior	<ul style="list-style-type: none"> • Peer praise • Prompting • Discussion • Problem solving • Restitution 	<ul style="list-style-type: none"> • Attention provided for problem behavior • Skills must be part of behavioral repertoire
Extinction	Discontinues reinforcement for inappropriate behavior	<ul style="list-style-type: none"> • Planned ignoring 	<ul style="list-style-type: none"> • Increase in frequency of behavior • Escalation in severity of behavior
Differential reinforcement	Provides reinforcement for appropriate behavior	<ul style="list-style-type: none"> • Scheduled attention 	<ul style="list-style-type: none"> • Reinforcement may not be delivered when student wants or needs it
Negative punishment	Removes preferred items or activities	<ul style="list-style-type: none"> • Time owed • Removal of privileges or preferred activities 	<ul style="list-style-type: none"> • Escalation in severity of behavior
Positive punishment	Provides something unpleasant	<ul style="list-style-type: none"> • Feedback • Reprimand • Phone call home 	<ul style="list-style-type: none"> • Counter-aggression • Escalation in severity of behavior.

Juanita's Behavior Support Plan

Hypotheses:

1. When Juanita is given written assignments, she engages in off-task behavior, to escape.
2. When Juanita is given lengthy assignments, she engages in off-task behavior, to escape.
3. When Juanita has visited her father over the weekend, she engages in off-task behavior, to escape work (because of fatigue)
4. When Juanita is in unstructured situations with unfamiliar peers, she engages in inappropriate interactions, to gain their attention.

Antecedent/Setting Event Interventions	Alternative Skills	Responses to Problem Behavior	Long-term supports
<p>Minimize amount of written work; provide alternative strategy for work completion (e.g., tape recorder)</p> <p>Break work into small increments.</p> <p>Makes sure instructions are clear and explicit</p> <p>Seat her near classmates in cafeteria; gradually introduce new people while prompting appropriate interactions.</p> <p>Have her return home earlier on Sundays after visiting her father.</p> <p><i>Bambara & Kern, 2005</i></p>	<p>Replacement: When independent assignments are given, teach her to request assistance when she feels overwhelmed with assignments or does not understand what she is supposed to do.</p> <p>General adaptive skills: Provide social skills instruction, and prompt her to engage in appropriate interactions.</p> <p>Tolerance skills: Gradually introduce her to new people.</p>	<p>At the first sign of off-task behavior, prompt her to request help; if behavior continues, brainstorm with her to determine why the assignment is problematic.</p> <p>Require her to apologize to peers for inappropriate comments.</p> <p>Provide all feedback quietly and discreetly.</p>	<p>Lifestyle changes:</p> <ul style="list-style-type: none"> • Enroll her in an after school sports program. • Identify a Big Sister for her who can spend time with her and serve as a role model. • Pair her with a “study buddy” whom she can phone for homework help. <p>Strategies to sustain support:</p> <ul style="list-style-type: none"> • Make sure future teachers implement classroom supports. • Meet monthly with her Mom to review progress and problem solve issues that occur at home.

Meaningful Outcomes	What do we expect to happen?	How will we measure?
Long-term and acceptable reductions in problem behaviors	<p>Juanita will decrease off-task behaviors during academics to less than 10%</p> <p>Juanita will engage in no inappropriate interactions with peers</p>	<p>Momentary time sampling of engagement every 10 minutes daily until goal reached; then fade to monthly observations thereafter.</p> <p>Two 5-minute observations, using a frequency count during lunchtime, daily until goal is reached; then fade to monthly observations thereafter.</p>
Increases in alternative skills	<p>Juanita will engage in academic activities and request assistance as needed.</p> <p>Juanita will complete all homework assignments</p> <p>Juanita will engage in appropriate interactions with new peers.</p>	<p>Record daily frequency of hand raising, until satisfied with progress.</p> <p>Teacher will determine number of assignments completed and missing, and report to parent biweekly.</p> <p>See above.</p>
<p>Improvements in quality of life</p> <p><i>Bambara & Kern, 2005</i></p>	<p>Juanita will participate in sporting or other activities she enjoys</p> <p>Juanita will develop friendships</p> <p>Juanita will be responsible for her home job list.</p>	<p>School counselor will monitor during scheduled meetings with Juanita and will contact volleyball coach and parent monthly.</p> <p>Counselor will ask Juanita to self-report and will contact mother and Big Sister monthly</p> <p>Counselor will contact mother monthly.</p>

Behavior Intervention Plan for Juanita

Behavioral Definitions

1. The *target behavior* is *off-task behavior*, which is defined as engaging in behavior that is incompatible with work completion, such as talking to classmates during seatwork, leaving her seat to roam the room, playing with objects, refusing to do her work, touching, pushing, yelling, complaining, and attempting to engage the teacher or aide in irrelevant discussion.
The *replacement behavior* is *on-task behavior*, which is defined as completing assigned work without disturbing others, and raising her hand to ask for assistance.
2. The *target behavior* is *harassing peers*, which is defined as name calling, taking other peoples things or asking irrelevant questions using sarcasm.
The *replacement behavior* is social skills to initiate conversations.

Baseline Data

During two observation periods of 10 minutes each, using a 30-second time sample, Juanita was off-task 65% of the intervals.

Function of the Behavior

5. When Juanita is given written assignments, she engages in off-task behavior, to escape.
6. When Juanita is given lengthy assignments, she engages in off-task behavior, to escape.
7. When Juanita has visited her father over the weekend, she engages in off-task behavior, to escape work (because of fatigue)
8. When Juanita is in unstructured situations with unfamiliar peers, she engages in inappropriate interactions, to gain their attention.

Behavioral Objective

Juanita will decrease off-task behaviors during academics to less than 10%
Juanita will engage in no inappropriate interactions with peers

Intervention Procedures

Antecedent Strategies

- Minimize amount of written work; provide alternative strategy for work completion (e.g., tape recorder)
- Break work into small increments.
- Makes sure instructions are clear and explicit
- Seat her near classmates in cafeteria; gradually introduce new people while prompting appropriate interactions.
- Have her return home earlier on Sundays after visiting her father

Behavior Instruction

- Replacement: When independent assignments are given, teach her to request assistance when she feels overwhelmed with assignments or does not understand what she is supposed to do.
- General adaptive skills: Provide social skills instruction, and prompt her to engage in appropriate interactions.
- Tolerance skills: Gradually introduce her to new people

Consequence Strategies

- At the first sign of off-task behavior, prompt her to request help; if behavior continues, brainstorm with her to determine why the assignment is problematic.
- Require her to apologize to peers for inappropriate comments.
- Provide all feedback quietly and discreetly.

Data to be Collected

On Task: Momentary time sampling of engagement every 10 minutes daily until goal reached; then fade to monthly observations thereafter.

Peer Interactions: Two 5-minute observations, using a frequency count during lunchtime, daily until goal is reached; then fade to monthly observations thereafter.

Program Review Date

The Behavior Intervention Plan will be reviewed on May 20, 2005.

Personnel and Roles

K. E, the Special Education teacher, will conduct the observations. Juanita's classroom teacher will assign her work, and determine the amount to be done before a break. She will instruct Juanita that she will be allowed to have a break to go to the Resource Room to play math computer games after the required work is done and when she asks politely for a break.

Emergency Procedures

Should Juanita becomes disruptive or refuses to do her work, she will be sent to the Resource Room or the office to complete her assignment away from her peers. She will not be allowed to play computer games or go to recess that day.

Step Five: Implementing and Monitoring Outcomes

The team works together to ensure that the plan is implemented with consistency and is effective in achieving the identified goals. The team identifies the training and resources needed, determines who is responsible for monitoring implementation, evaluates outcomes (via continued data collection), and communicates periodically, making adjustments in the plan, as needed.

Building the System

The team must develop systems to

- ☐ Identify training and resource needs of those who implement the plan
- ☐ Monitor student outcomes
- ☐ Monitor implementation integrity
- ☐ Regularly review progress

Self-Assessment of Contextual Fit in Schools

Horner, Salentine, & Albin, 2003

The purpose of this form is to assess the extent to which the elements of a behavior support plan fit the contextual features of your school environment. Plan participants are asked to rate (a) personal knowledge of the elements of the plan, (b) perception of the extent to which the elements of the behavior support plan are consistent with their personal values, and skills, and (c) the school's ability to support implementation of the plan. The survey can be completed as a group when completing or reviewing the plan, or completed individually and turned into the support team.

Name of Plan Participant: _____ Role : _____

Support plan reviewed: _____

Knowledge of elements in the Behavior Support Plan.

1. I am aware of the elements of this behavior support plan.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

2. I know what I am expected to do to implement this behavior support plan.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Skills needed to implement the Behavior Support Plan

3. I have the skills needed to implement this behavior support plan.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

4. I have received any training that I need to be able to implement this behavior support plan.

No training needed _____

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Values are consistent with elements of the behavior support plan

5. I am comfortable implementing the elements of this behavior support plan

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

6. The elements of this behavior support plan are consistent with the way I believe students should be treated.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Resources available to implement the plan

7. My school provides the faculty/staff time needed to implement this behavior support plan.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

8. My school provides the funding, materials, and spaced needed to implement this behavior support plan.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Administrative Support

9. My school provides the supervision support needed for effective implementation of this behavior support plan.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

10. My school administration is committed to investing in effective design and implementation of behavior support plans.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Effectiveness of Behavior Support Plan

11. I believe the behavior support plan will be (or is being) effective in achieving targeted outcomes.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

12. I believe the behavior support plan will help prevent future occurrence of problem behaviors for this child.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Behavior Support Plan is in the best interest of the student

13. I believe this behavior support plan is in the best interest of the student.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

14. This behavior support plan is likely to assist the child to be more successful in school.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

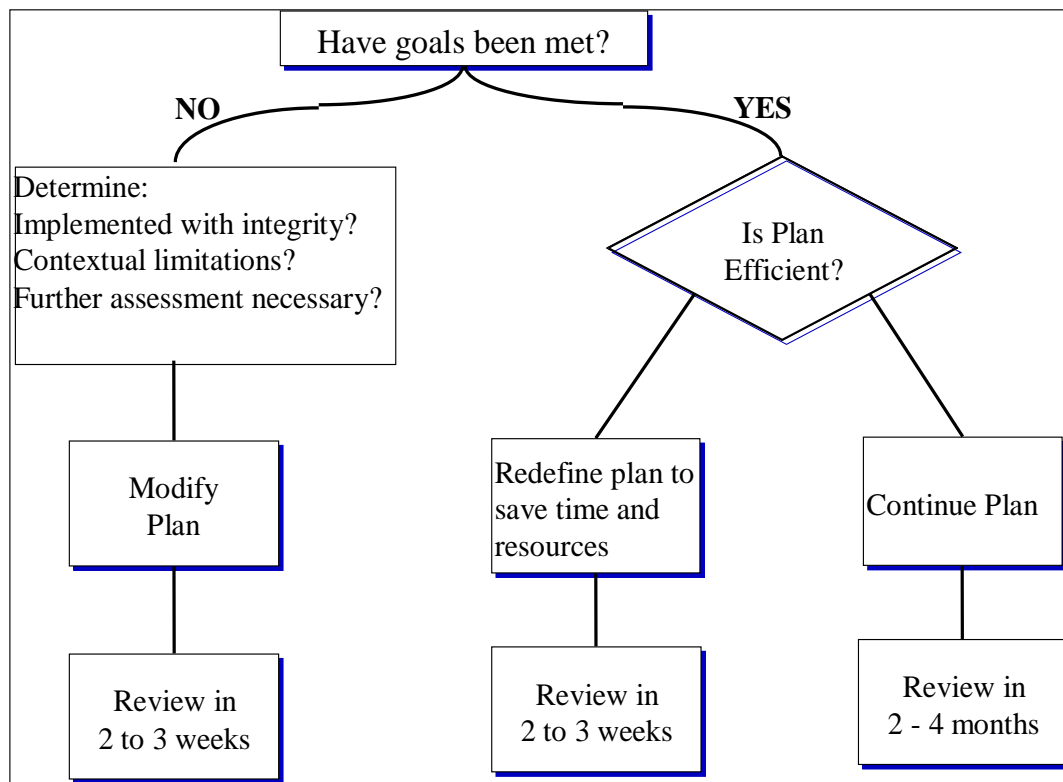
The Behavior Support Plan is efficient to implement

15. Implementing this behavior support plan will not be stressful.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

16. The amount of time, money and energy needed to implement this behavior support plan is reasonable.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree



Monitor the Plan

- Evaluate the effects of interventions comparing baseline data to intervention data. Is your plan working?
- If your plan is not working, consider some reasons why it might not be working. What changes are needed in your plan? Make those changes.
- Is more assessment needed?
- Was implementation done consistently and with integrity?
- If your plan is working, consider what you will do next. Will you simplify the plan to make it more efficient? Will you fade, change or terminate your interventions?
- Continue to implement your interventions until you feel they are no longer needed or no longer working.
- After terminating the plan, continue to collect data to determine whether any positive effects are maintained following plan-termination.

Data Collection

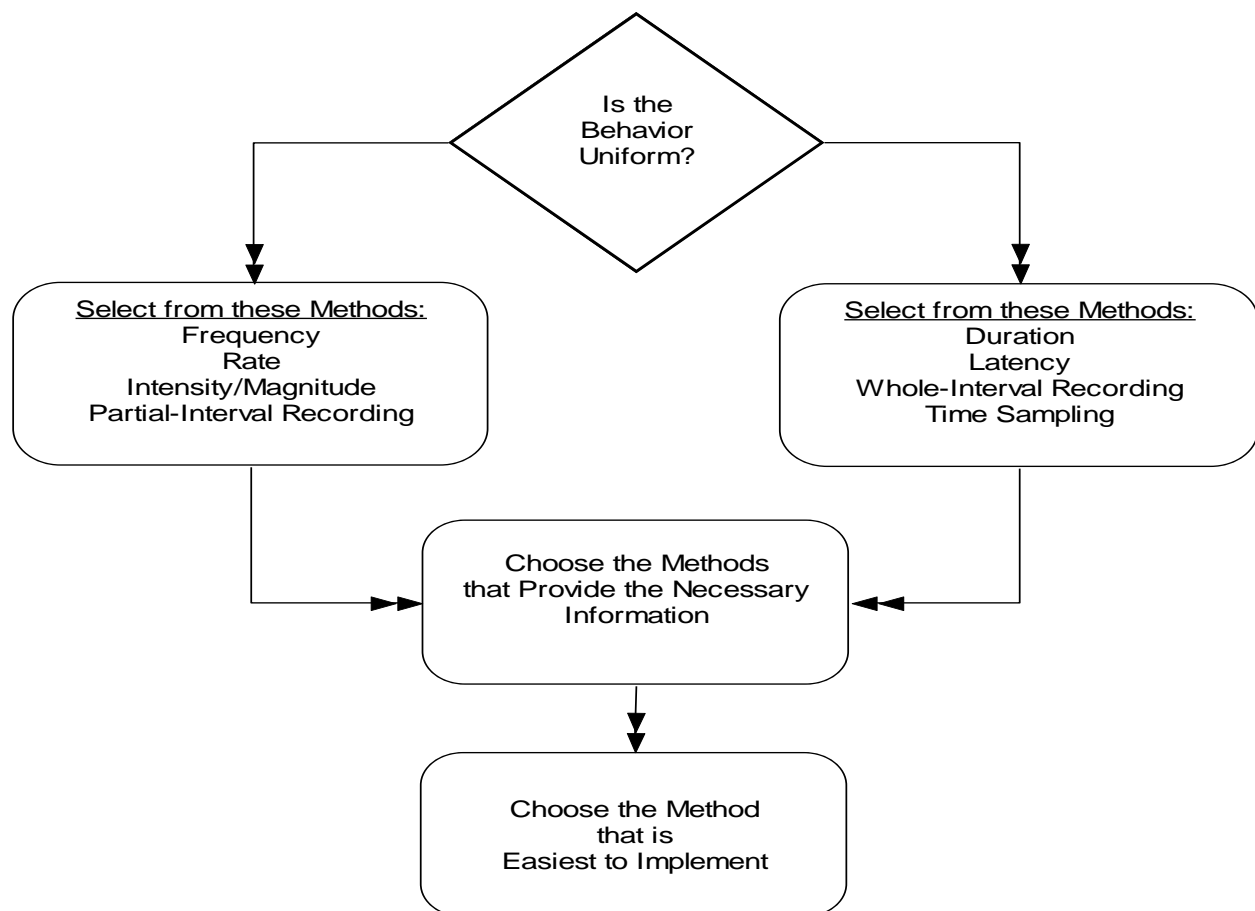
Data provide the only objective way to know whether or not an intervention is effective.

Methods of measurement can be grouped into “event-based” or “time-based.”

Uniform behaviors are those in which every performance takes about the same length of time as every other (e.g., hitting) and are usually measured by event-based methods.

Non-uniform behaviors are those which vary in length (e.g., off-task) and are usually measured by time-based methods.

Selecting A Management Method



Techniques for Measuring Behavior

Amount or Frequency

Event recording

Behaviors that have a discrete beginning and end

Advantage

- Easily converted into a graph
- Can be reported in terms of rate to standardize for unequal observation times

Limitations

- Requires behavior that occurs at a relatively stable level and is easy to count
- Not useful when behavior occurs at high rates or for extended period of time

Student: Jimmy Observer: Mrs. Robbins
 Setting: Math Class Date: 2-1-06
 Behavior: Profanity
 Start: 10:05 Stop: 10:25

/// /// //

Total = 12 or .6

Student: Jimmy Observer: Mrs. Robbins
 Setting: Math Class Date: 2-2-06
 Behavior: Profanity
 Start: 10:05 Stop: 10:25

/// /// ///

Total = 14 or .7 per minute

Student: Jimmy Observer: Mrs. Robbins
 Setting: Math Class Date: 2-3-06
 Behavior: Profanity
 Start: 10:05 Stop: 10:25

/// /// /

Total = 11 or .55 per minute

Interval recording

Behavior happens very frequently and lasts for a discrete period of time

- Requires undivided attention during intervals
- Watch student during entire interval
- Record whether behavior occurred
- Intervals are approximately 10 to 30 seconds each

Advantages

- Applies to virtually any target behavior
- Can be converted to percent
- Yields data of relative frequency and duration

Disadvantages

- requires accurate measure of behavior in relation to a small amount of time
- requires undivided attention

Student: Jimmy Observer: Ms. Smith
 Setting: Math Class Date: 2-1-06
 Behavior: Profanity
 Start: 10:05 Stop: 10:15

10 minutes: 30-second intervals

1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1	1	1	1	2
0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
+	+	+	-	-	-	-	-	-	+	-	+	-	-	+	+	-	+	-	+

+ = occurrence

- = non-occurrence

Summary

Profanity occurred during 9/20 = 45% of the intervals

Measures of Time Passage

Duration recording

How long the behavior lasts

- Start timing when behavior starts
- Stop when behavior ends

Advantages

- produces a percentage
- measures behaviors that occur at extremely high rates and/or extended periods of time

Limitations

- requires discrete behaviors
- requires a stopwatch

Latency recording

How long before the behavior starts

- Measures how long it takes for behavior to begin
- use a stopwatch or watch with a second hand
- start timing when request for behavior is given
- stop timing when behavior is initiated

Advantages

- can easily be converted to an average

Limitations

- requires discrete behavior
- requires a stopwatch

Momentary Time Sampling

- Set up time intervals
- Observe behavior only at the end of the time interval
- Record whether the behavior is or is not occurring at that particular time.

Advantages

- Data can easily be converted to percent
- Does not interrupt the delivery of instruction

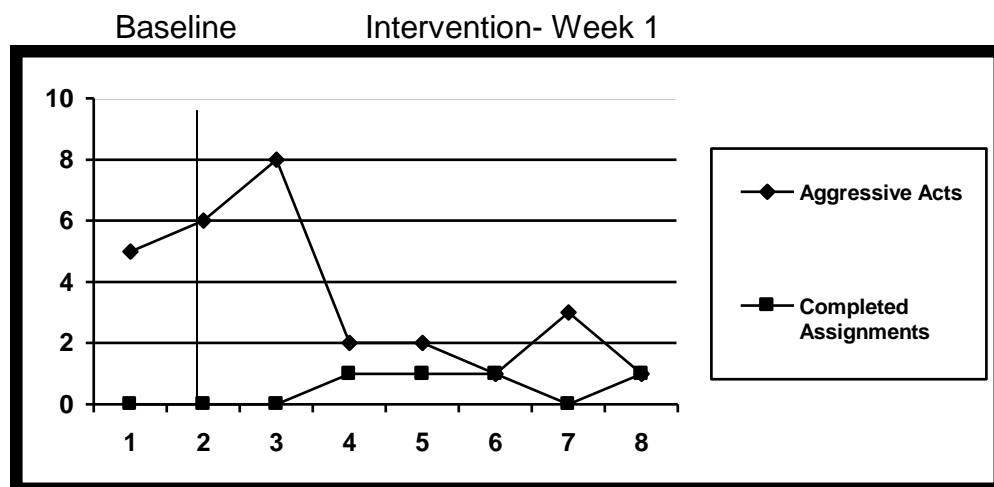
Limitations

- requires a large number of observations to allow for interpretation of data

MONITOR THE BEHAVIOR INTERVENTION PLAN

Week One

Analysis of Aggressive Behaviors/ Completed Assignments



The behavior intervention plan for Mitchell appears to be working according to the data from week one. His assignments have been modified to reduce the number of written responses required and he has been allowed to take brief breaks upon request. His aggressive behaviors have ranged from only 1 to 3 per day during the intervention phase, versus 5-8 during the baseline phase. He completed the written assignment 4 out of 5 days during week one. On the 4th day of intervention (Thursday), Mitchell started to bite his 1:1 aide and he was taken to the office. He did not complete the assignment at that time, although he was required to complete the assignment later in the day when he returned to class.

Mitchell's teacher and aide both agree that Mitchell's behavior when given a written assignment has improved since the plan began. We will continue to implement the plan as written during week two.

Program Checklist- Week One

Student	Mitchell
Instructor	Smith/Jones
Period	Language Arts
Evaluator	Robbins
Date	4/25/03

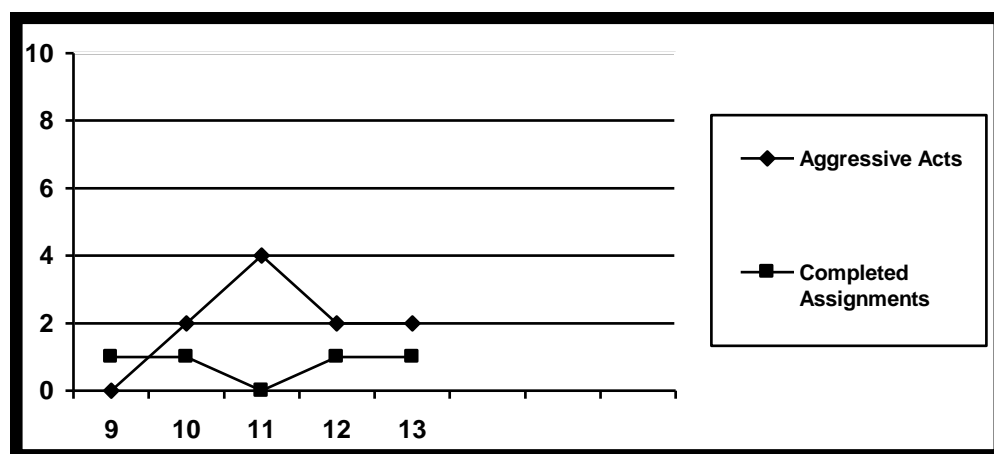
C= Step done correctly
SI= Step done incorrectly
ND= Step not done
N/O= No opportunity to observe

100% Implemented

1. Provide Mitchell with specific praise when he is completing written academic assignments.	C
2. Allow Mitchell to take brief (1-3 minutes) breaks from academic assignments that involve written responses.	C
3. Modify Mitchell's assignments to reduce the number and/or length of written responses required for academic tasks.	C
4. Collect data at least once daily regarding Mitchell's acts of physical aggression and his completion of academic assignments.	C
5. Initiate emergency procedures only when necessary.	N/O
6. Train Mitchell to request breaks from academic assignments that require written responses.	C
7. Check in once a week with Mitchell's teacher and aide to keep abreast of progress or concerns.	C
8. Principal- be prepared for the possibility of Mitchell coming to the office when he is engaged in acts of physical aggression that require emergency procedures to be implemented.	N/O

Week Two

Analysis of Aggressive Behaviors/ Completed Assignments



Mitchell's plan continues to appear to be working. During week two of the intervention, Mitchell's aggressive acts ranged from 0-4 per day (still down from the baseline range of 5-9 per day). Again, this week on Wednesday, Mitchell had an episode that led to him being removed from the classroom. The aide said Mitch tried to hit him 3 times, then again tried to bite him while they were working on writing sentences in his journal. Mitchell completed the assignment later in the day during Sustained Silent Reading time. During the intervention phase this week, Mitchell completed 4 out of 5 written assignments, compared to 0 completed assignments during baseline.

We will continue to implement the plan as written. Mitchell's teacher and aide feel that Mitchell's behavior has improved when he has been given written academic tasks to complete. We believe it is too soon to make any significant changes to the plan at this time. We are going to monitor spikes in Mitchell's aggression to see if any pattern emerges (middle of the week?, when asked to write sentences?, etc.). There are only 3 weeks left in school (with field trips and field days scheduled), so we intend to continue the plan for the remainder of the school year.

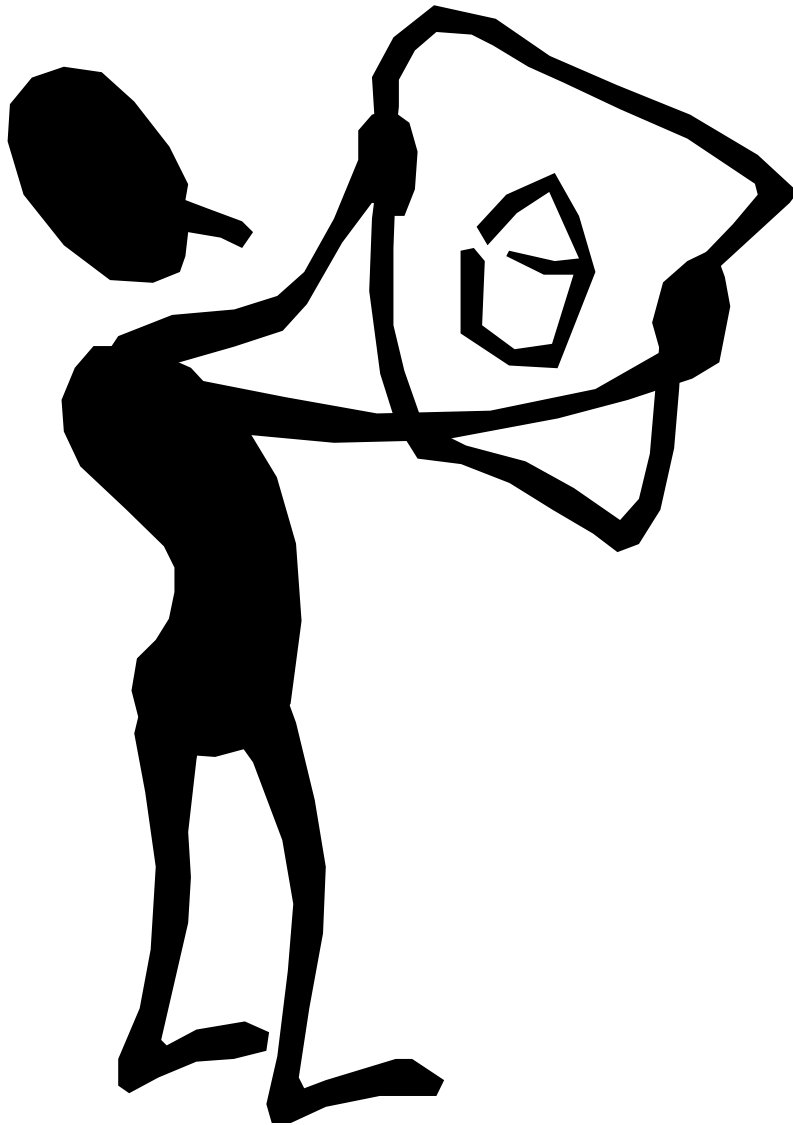
Program Checklist- Week Two

Student	Mitchell
Instructor	Smith/Jones
Period	Language Arts
Evaluator	Robbins
Date	5/2/03

C= Step done correctly
SI= Step done incorrectly
ND= Step not done
N/O= No opportunity to observe
SC= Step completed

100% Implemented

1. Provide Mitchell with specific praise when he is completing written academic assignments.	C
2. Allow Mitchell to take brief (1-3 minutes) breaks from academic assignments that involve written responses.	N/O
3. Modify Mitchell's assignments to reduce the number and/or length of written responses required for academic tasks.	C
4. Collect data at least once daily regarding Mitchell's acts of physical aggression and his completion of academic assignments.	C
5. Initiate emergency procedures only when necessary.	N/O
6. Train Mitchell to request breaks from academic assignments that require written responses.	SC
7. Check in once a week with Mitchell's teacher and aide to keep abreast of progress or concerns.	C
8. Principal- be prepared for the possibility of Mitchell coming to the office when he is engaged in acts of physical aggression that require emergency procedures to be implemented.	N/O



Activity Pages

ACTIVITY ONE

Defining Target Behavior: Testing your definition

Think of a student for whom you would like to develop a support plan and write an operational definition of that student's behavior.

Test your definition by asking yourself the following questions:

- Can you count the number of times that the behavior occurs in, for example, a 15 minute period, a one-hour period, or one day? Or, can you count the number of minutes that it takes for the child to perform the behavior? That is, can you tell someone that the behavior occurred "x" number of times today? (*your answer should be yes*)
- Will a stranger know exactly what to look for when you tell him/her the target behavior you are planning to modify? That is, can you actually see the child performing the behavior when it occurs? (*your answer should be yes*)
- Can you break down the target behavior into smaller behavioral components, each of which is more specific and observable than the original target behavior? (*your answer should be no*).

Defining Replacement Behavior

For each example, determine if the replacement behavior is correct. If the replacement behavior is an error, rewrite the replacement behavior so that it is appropriate.

- Target Behavior:** Disrupting class during group discussions, which includes talking out and talking with peers. **Replacement Behavior:** Sitting quietly and raising a hand to be called on during group discussions
☐ No error
☐ Revision: _____
- Target Behavior:** Off-task activities during math class, which include behaviors such as rearranging materials, sharpening pencils, and digging in a backpack. **Replacement Behavior:** a grade of "A" in the class.
☐ No error
☐ Revision: _____
- Target Behavior:** Pushing peers while waiting in line. **Replacement Behavior:** Not pushing peers when in line.
☐ No error
☐ Revision: _____
- Target Behavior:** Hitting staff, which includes open slaps and closed fist hits. **Replacement Behavior:** not identified.
☐ No error
☐ Revision: _____

ACTIVITY TWO: Functional Assessment Checklist for Teachers and Staff (FACTS-Part A)

Step 1 Student/ Grade: _____ Date: _____
Interviewer: _____ Respondent(s): _____

Step 2 **Student Profile:** Please identify at least three strengths or contributions the student brings to school.

Step 3 **Problem Behavior(s): Identify problem behaviors**

<input type="checkbox"/> Tardy	<input type="checkbox"/> Fight/physical Aggression	<input type="checkbox"/> Disruptive	<input type="checkbox"/> Theft
<input type="checkbox"/> Unresponsive	<input type="checkbox"/> Inappropriate Language	<input type="checkbox"/> Insubordination	<input type="checkbox"/> Vandalism
<input type="checkbox"/> Withdrawn	<input type="checkbox"/> Verbal Harassment	<input type="checkbox"/> Work not done	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Verbally Inappropriate	<input type="checkbox"/> Self-injury	

Describe problem behavior: _____

Step 4 **Identifying Routines: Where, When and With Whom Problem Behaviors are Most Likely.**

Schedule (Times)	Activity	Likelihood of Problem Behavior						Specific Problem Behavior
		Low					High	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	
		1	2	3	4	5	6	

Step 5 Select 1-3 Routines for further assessment: Select routines based on (a) similarity of activities (conditions) with ratings of 4, 5 or 6 and (b) similarity of problem behavior(s). Complete the FACTS-Part B for each routine identified.

Functional Assessment Checklist for Teachers & Staff (FACTS-Part B)

Step 1 Student/ Grade: _____ Date: _____
Interviewer: _____ Respondent(s): _____

Step 2 **Routine/Activities/Context:** Which routine(only one) from the FACTS-Part A is assessed?

Routine/Activities/Context	Problem Behavior(s)

Step 3 **Provide more detail about the problem behavior(s):**

What does the problem behavior(s) look like?

How often does the problem behavior(s) occur?

How long does the problem behavior(s) last when it does occur?

What is the intensity/level of danger of the problem behavior(s)?

Step 4 **What are the events that predict when the problem behavior(s) will occur? (Predictors)**

Related Issues (setting events)	Environmental Features
<input type="checkbox"/> illness Other: _____ <input type="checkbox"/> drug use _____ <input type="checkbox"/> negative social _____ <input type="checkbox"/> conflict at home _____ <input type="checkbox"/> academic failure _____	<input type="checkbox"/> reprimand/correction <input type="checkbox"/> structured activity <input type="checkbox"/> physical demands <input type="checkbox"/> unstructured time <input type="checkbox"/> socially isolated <input type="checkbox"/> tasks too boring <input type="checkbox"/> with peers <input type="checkbox"/> activity too long <input type="checkbox"/> Other <input type="checkbox"/> tasks too difficult

Step 5 **What consequences appear most likely to maintain the problem behavior(s)?**

Things that are Obtained	Things Avoided or Escaped From
<input type="checkbox"/> adult attention Other: _____ <input type="checkbox"/> peer attention _____ <input type="checkbox"/> preferred activity _____ <input type="checkbox"/> money/things _____	<input type="checkbox"/> hard tasks Other: _____ <input type="checkbox"/> reprimands _____ <input type="checkbox"/> peer negatives _____ <input type="checkbox"/> physical effort _____ <input type="checkbox"/> adult attention _____

Step 6

SUMMARY OF BEHAVIOR

Identify the summary that will be used to build a plan of behavior support.

Setting Events & Predictors	Problem Behavior(s)	Maintaining Consequence(s)

Step 7

How confident are you that the Summary of Behavior is accurate?

Not very confident						Very Confident
1	2	3	4	5	6	

What current efforts have been used to control the problem behavior?

Strategies for preventing problem behavior		Strategies for responding to problem behavior	
___ schedule change	Other: _____	___ reprimand	Other: _____
___ seating change	_____	___ office referral	_____
___ curriculum change	_____	___ detention	_____

ACTIVITY THREE: FUNCTIONAL ASSESSMENT OBSERVATION FORM

Date _____

Observer_____

Student _____

School _____

Setting Information

Time	Antecedent	Behavior	Consequences

ACTIVITY FOUR

Determining the function of behavior

To determine the function of a behavior, carefully review the interview and observation data for recurring patterns of behavior that include the target behavior. Decide whether the target behavior provides access or escape to a specific reinforcer.

The Function Matrix simplifies the process by allowing the user to systematically consider each possible combination of function and reinforcer type. By dealing with each combination individually, the user is aided in identifying whether multiple functions are responsible for maintaining the target behavior.

The Function Matrix

	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
Attention	Positive Reinforcement – Attention	Negative Reinforcement – Attention
Tangibles / Activities	Positive Reinforcement – Tangibles / Activities	Negative Reinforcement – Tangibles / Activities
Sensory	Positive Reinforcement – Sensory Stimulation	Negative Reinforcement – Sensory Stimulation

Example: When called on to complete a math problem on the board, Justin tells the teacher he left his homework in his locker. He argues with his teacher until she allows him to go to his locker.

	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
Attention		
Tangible / Activities		X
Sensory		

Function statement: When asked to complete math tasks at the board in front of his peers, Justin asks to leave the room and argues with the teacher to escape the task/activity. In other words, Justin engages in disruptive behavior to avoid tasks which are difficult for him (negative reinforcement – tangible/activity).

For each of the examples listed below, use the function matrix and determine if the behavior appears to be maintained by

- a. Positive Reinforcement – attention
- b. Negative Reinforcement – attention
- c. Positive Reinforcement – tangibles / activities
- d. Negative Reinforcement – tangibles / activities
- e. Positive Reinforcement – sensory stimulation
- f. Negative Reinforcement – sensory stimulation

Tia

Tia is a 10th grade student with autism and limited verbal skills. Her teacher is concerned about her ***destructive behavior, which consists of tipping over her chair or desk in the classroom***. You interview Tia's special education teacher and a classroom assistant. The teacher is concerned about the behavior because it is dangerous and causes time to be lost from engagement in academic tasks. A review of both interviews suggests that Tia's behavior occurs when she is working on tasks with a specific classroom assistant. The special education teacher and assistant note that the consequence for this behavior has been a reprimand from the assistant and the requirement that Tia place the chair or desk back in its original position. The teacher suggests that the behavior does not occur during her interactions with Tia because she allows frequent breaks from the task. The assistant is new to the classroom and does not have much experience dealing with students who have autism. The fact that Tia has a very limited set of functional words for communication prevents you from interviewing her.

You observe in the special education classroom at times when Tia is scheduled to work with the classroom assistant. During three observations, you witness 4 occurrences of the behavior. Prior to each instance of flipping over a chair or desk, you note that Tia has been engaged in an academic task with the classroom assistant for at least 15 minutes. Immediately after each occurrence, the assistant scolds Tia and assists as they both spend several minutes putting the furniture back into place and gathering the task materials.

Armed with your collected data, you consider the following questions posed by the Function Matrix: Does the interview and observational data suggest that the behavior is maintained by:

- 1. Access to attention?
- 2. Escape from attention?
- 3. Access to tangibles or activities?
- 4. Escape from tangibles or activities?
- 5. Access to sensory stimulation?
- 6. Escape from sensory stimulation?

	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
Attention		
Tangible / Activities		
Sensory		

Given the insight gained through data collection and use of the *Function Matrix*, create a statement of function:

Bernard

Bernard is a 6th grade boy who has few friends. He has been referred for his tendency to exhibit **aggressive verbal behavior in unsupervised settings. This behavior includes yelling at peers and making threatening comments**. Interviews with two teachers suggest that Bernard's behavior occurs immediately after peers tease him. These teachers also agree that, in most cases, the consequence of Bernard's behavior is that the peers stop teasing. Your interview with Bernard confirms the antecedent and the consequence; Bernard tells you that other students make fun of his weight and his clothes and that he yells or says things to scare them so they will stop. After reviewing the interview data, you decide that you would have the best opportunity to observe this behavior during lunch and transition periods.

You observe on three occasions during the time that Bernard leaves class, goes to lunch, and returns to class. During these A-B-C observations, you record two instances of Bernard's verbally aggressive behavior. In both cases, you observe that, prior to the behavior, peers are facing Bernard and talking, though you cannot hear the words clearly. You also observe that, immediately after the behavior, the peers leave the area.

As you review your data in relation to the *Function Matrix*, ask the same series of 6 questions you used in the previous example.

	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
Attention		
Tangible / Activities		
Sensory		

Given the insight gained through data collection and use of the *Function Matrix*, create a statement of function:

Charlie

Charlie is a 9 year-old boy in the 2nd grade. Given his problems with handwriting, Charlie's classroom teacher has referred him for special education services, though Charlie has not yet been identified as eligible for services. Charlie's teacher is also worried about his **off-task behavior. This behavior includes talking with peers, walking around the room, repeatedly re-starting assignments, and rooting around in his desk or backpack.** The teacher is concerned that Charlie is off-task far more often than other students and that the behavior is interfering with his ability to learn and complete his work.

The teacher describes two different situations in which Charlie's behavior occurs. First, she notes that Charlie's off-task behavior tends to occur shortly after he is presented with a task that calls for extended writing, such as developing three or more complete sentences around a single theme. The teacher explains that this behavior seems to result in Charlie's failure to complete his work. She also suggests that, in other situations, the off-task behavior tends to occur when Charlie is seated next to certain classroom peers whom the teacher reports are Charlie's friends. When Charlie does attempt to socialize with his friends during class, they often happily reciprocate.

Your interview with Charlie confirms the teacher's perceptions and adds other details. Charlie reports that P.E. and being with his friends are probably his favorite activities in school and that he most dislikes the morning writing tasks that students are expected to complete each day. Charlie recognizes his off-task behavior as a problem only in that he "gets in trouble" more than other students.

You conduct observations on three separate occasions during morning classroom routines, a time when the teacher reports much of the off-task behavior occurs. You witness several occurrences of off-task behavior during each observation. As suggested by the teacher, you observe that the antecedents of Charlie's off-task behavior include the presentation of handwriting tasks and proximity to specific peers. You also discern that the consequences do indeed include failure to complete work and social responses from peers around him.

Armed with the *Function Matrix*, systematically consider your data in light of the six questions.

	Positive Reinforcement (Access Something)	Negative Reinforcement (Avoid Something)
Attention		
Tangible / Activities		
Sensory		

Given the insight gained through data collection and use of the *Function Matrix*, create a statement of function(s):

These examples , and the function matrix, are presented in Umbreit, J., Ferro, J.B., Liaupsin, C.J., & Lane, K.L. (2007). *Functional behavioral assessment and function-based intervention: an effective, practical approach*. Upper Saddle River, NJ: Pearson.

ACTIVITY: Case Study - Ronald

Umbreit, Ferro, Liaupsin, Lane (2007)

Summary: Record Review, Interview, and Observation

Ronald, a 6th grade student, exhibits behaviors that include demanding to join groups and loud talking that has escalated to pushing, yelling, and attempts to leave the area. During interviews, you are told that Ronald primarily exhibits these behaviors during gym class. In fact, no one has ever seen him behave in this manner in another class. However, Ronald indicates that he also has problems on the playground with kids who won't let him join their games.

You observe Ronald during gym on two occasions and during recess on two occasions each. During the two gym observations, Ronald talks in a very loud voice (identified as yelling by the coach) and criticizes the coach and other players 20 times, pushes 4 times, and, on one occasion, walks to the gym door where he says he is going to leave. Ronald was sent to sit on the bench for each incidence of pushing and for three of the incidences of yelling. Seventeen incidents of yelling were ignored. When Ronald said he was leaving, the coach went to get him and spent five minutes telling him that his behavior was going to get him in trouble. In all cases prior to exhibiting the target behavior, Ronald had asked for the basketball and the other students had refused to give it to him. Ronald says he likes to play basketball but the other kids don't like him and he gets tired of waiting.

Although Ronald also exhibited the target behavior at recess, it was less severe, other students exhibited similar behaviors, and neither the students nor the monitor responded in the same manner as the coach and players in gym class. This was the reason that Ronald's teachers were unaware that the behavior also occurred during recess. In fact, Ronald yelled at other students 15 times and pushed another student twice. Antecedents included two attempts to join the group playing basketball and 15 requests for the ball, all of which were initially refused. The consequence for 15 incidences of yelling was that Ronald got the ball or was allowed to join the group. The consequence for pushing was that Ronald was placed next to the playground monitor who talked to him for a couple of minutes and then sent him back to the group.

Statement of Function

Based on the interview and observations, you identify the function of the behavior as follows: When peers refuse to allow Ronald to join a game and/or take control of the ball, he pushes, yells, and threatens to leave the area until he is allowed to join, is given the ball, or receives one-on-one attention from the adult supervising the area. Ronald's target behaviors are maintained by *positive reinforcement - attention* and *positive reinforcement – tangible/ activity*.

Behavior Definitions

The target behavior is *disruptive and aggressive* behavior that includes pushing, yelling, and attempts to leave the area.

In consultation with Ronald's teachers and parents, you define the replacement behavior as *socially acceptable requests* to join and play in a group that include: asking politely to join the group or to get the ball while playing, waiting for a reply, and following game rules.

Function-based Intervention

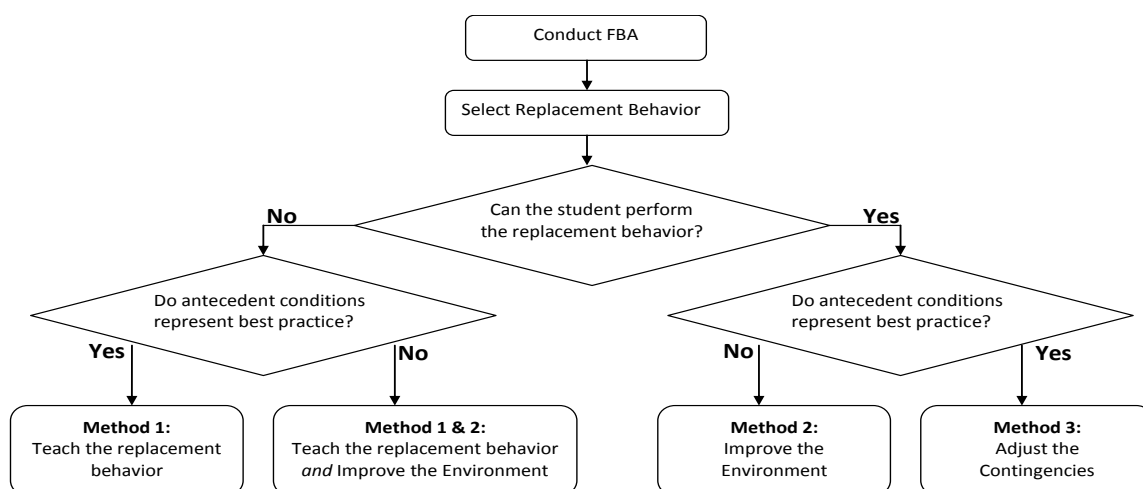
Ask the Key Questions:

1. *Can Ronald perform the replacement behavior?*

In this situation, you determine that Ronald does not have the prerequisite skills needed for appropriate social interaction in the two environments in which the athletic games are a component. He cannot perform the replacement behavior.

2. *Do the antecedent conditions represent effective practice?*

In this situation, you determine that antecedent conditions do represent effective practice. There are rules posted on the playground and in the gym. Students are given reminders before the class begins and the playground monitor provides reminders when the students enter the playground. In both gym class and on the playground, students are praised and receive "good behavior" tickets (are positively reinforced) for following rules. In gym class, students are taught how to play the games and reinforced for playing correctly.



Which method should be used to develop the intervention plan for Ronald?

ACTIVITY: Case Study - Dina

Umbreit, Ferro, Liaupsin, Lane (2007)

Summary: Record Review, Interview, and Observation

Dina, a four-year-old girl in an early childhood education setting, leaves “morning circle” on a daily basis. During “morning circle,” the teacher and assistant gather all 20 children in the classroom in a circle on the floor while the teacher presents instructional information such as months of the year, days of the week, numbers, etc. The circle is scheduled for 35 minutes, but Dina usually stays for approximately 10 minutes, then runs to the dramatic play area and begins dressing and feeding the dolls. When the teacher attempts to get her back to the circle, she resists by throwing a tantrum (*target behavior*). Specifically, she screams very loudly, kicks anyone who tries to get near, and lies on the floor.

The teacher tells you that morning circle is important and Dina must participate. If she leaves Dina alone, other children begin watching her instead of the teacher. If the teacher tries to get Dina to come back to the circle, Dina throws a tantrum and no one can hear the teacher.

During your observations, you notice that Dina readily comes to “morning circle” and stays in the circle for 12 to 15 minutes. After that time, she leaves the circle, goes to a play area, and ignores the teacher. You also confirm that the children watch Dina instead of the teacher and that Dina resists returning to circle by screaming, kicking and lying on the floor. In all cases, the consequence of Dina’s behavior is that she does not sit in circle. When you try to interview Dina, she tells you that her mother told her not to talk to strangers.

Statement of function

Based on the interview and observations, you identify the function of the behavior as follows: After sitting in a large group activity for 12 minutes, Dina leaves the activity and resists returning by throwing a tantrum. Dina’s problem behaviors are maintained by *negative reinforcement - activity*.

Behavior Definitions

In consultation with the teacher, you define Dina’s *target behavior* as tantrums, which include kicking, screaming, and rolling on the floor. You define the *replacement behavior* as on-task, which includes sitting in circle, looking at the teacher, and responding to questions for the length of the activity.

Function-based Intervention

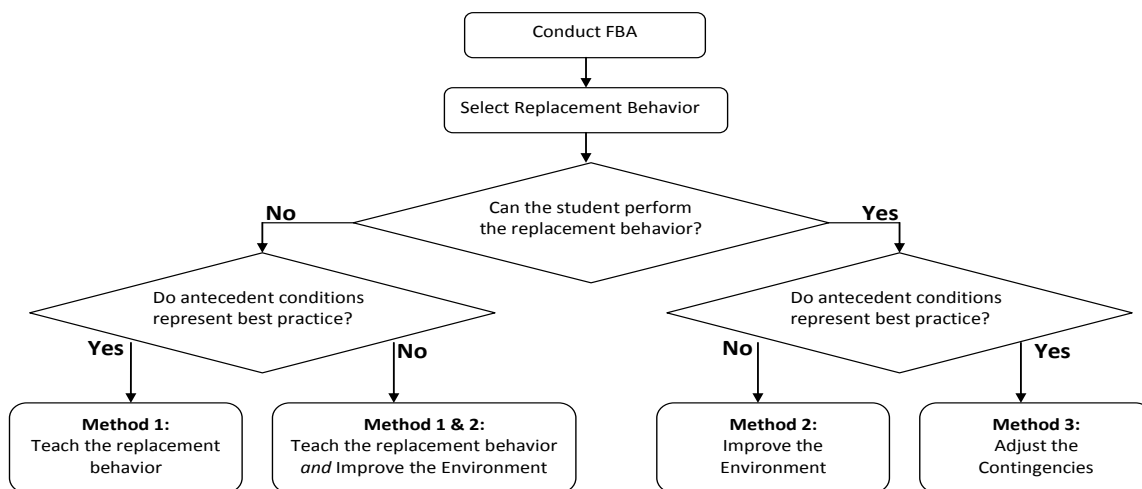
Ask the Key Questions:

1. *Can Dina perform the replacement behavior?*

Dina has demonstrated she can participate in the morning circle for 12 to 15 minutes, but not for the 30 minutes the circle is scheduled.

2. *Do the antecedent conditions represent effective educational practice?*

The answer to Question 2 is that the antecedent conditions do *not* represent effective practice. First, all 20 children are in circle at the same time. Good practice suggests the groups should be smaller (maybe two groups with no more than 10 students in each). Second, group instruction for children Dina's age should be time limited. Dina cannot sit for 30 minutes, and she shouldn't have to. You believe that Dina will stay in the group and participate (*replacement behavior*) if the size of the group is reduced and if the activity is limited to 15 minutes.



Which method should be used to develop the intervention plan for Dina?

ACTIVITY: Case Study - Charlie

Umbreit, Ferro, Liaupsin, Lane (2007)

Summary: Record Review, Interview, and Observation

Charlie is a 9 year-old boy in the 3rd grade. His classroom teacher referred him for special education services because he has problems with handwriting. He has not yet been found eligible for services. She identified Charlie's problem as off-task behavior that includes talking with peers, walking around the room, repeatedly re-starting assignments, and rooting around in his desk or backpack. The behavior interferes with his ability to learn and complete his work.

During the interview she explained that the behavior occurs under two conditions: (1) shortly after he is presented with a task that calls for extended writing, such as developing three or more complete sentences around a single theme, and (2) when he is seated next to certain classroom peers, who the teacher reports are Charlie's friends. The consequence of condition one is that Charlie fails to complete his work. The consequence of condition two is his friends attend to him with the result they are all off-task.

Your interview with Charlie confirms the teacher's perceptions and adds other details. Charlie reports that P.E. and being with his friends are probably his favorite activities in school and that he most dislikes the morning writing tasks and doesn't really understand how to write paragraphs. Charlie recognizes his off-task behavior as a problem only in that he "gets in trouble" more than other students.

Three observations are conducted during morning classroom routines, when much of the off-task behavior occurs. You witness several occurrences of off-task behavior during each observation. The antecedents of Charlie's off-task behavior include (a) the presentation of handwriting tasks that involve developing paragraphs (b) and proximity to specific peers. You also discern that the consequences do indeed include failure to complete work and social responses from peers around him.

Statement of function

Review of the Function Matrix produces two function statements.

(1) When seated in the proximity of certain peers, Charlie engages in off-task behavior, (including talking with peers, walking around the room, repeatedly re-starting assignments, and rooting around in his desk or backpack), to access peer attention (*positive reinforcement – attention*).

(2) When asked to complete tasks that require writing paragraphs, Charlie engages in off-task behavior, (including talking with peers, walking around the room, repeatedly re-starting assignments, and rooting around in his desk or backpack), to escape the activity (*negative reinforcement – activity*).

Behavior Definitions

In consultation with the teacher, you define Charlie's *target behavior* as off-task, which includes talking with peers, walking around the room, repeatedly re-starting assignments, and rooting around in his desk or backpack. His *replacement behavior* is on-task, which includes working on and completing assignments, attending/listening to the teacher's instruction, and remaining in his seat

Function-based Intervention

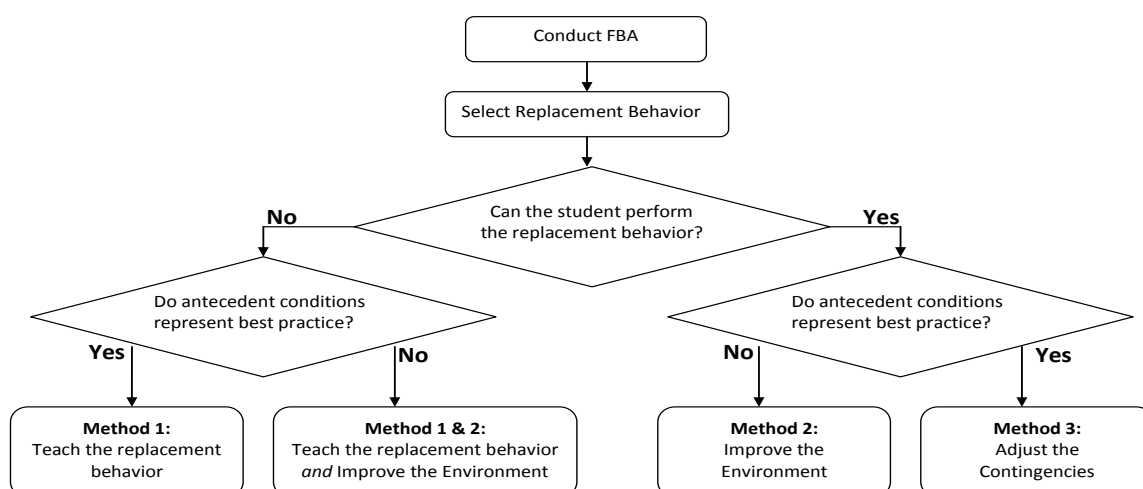
Ask the Key Questions:

1. *Can Charlie perform the replacement behavior?*

There are two answers to this question that conform to the two functions identified for Charlie's off-task behavior. First, Charlie knows how to obtain peer attention at appropriate times and in appropriate areas. When he sits with other students and is not given a writing assignment, he focuses on and completes his work. He exhibits socially appropriate behavior when he is outside the classroom. However, when the question refers Charlie's writing assignment, the answer is 'No', he does not have the necessary prerequisite skills to complete the extended writing assignment.

2. *Do the antecedent conditions represent effective educational practice?*

The answer is 'No', the antecedent conditions do not represent effective practice. Charlie's teacher has posted classroom rules, but does not remind students about expected behavior prior to an activity and does not consistently enforce expectations. The teacher has also not addressed Charlie's seating arrangement and has allowed him to remain seated with friends who disrupt his learning.



Which method should be used to develop the intervention plan for Charlie?

ACTIVITY: Case Study - Annie

Umbreit, Ferro, Liaupsin, Lane (2007)

Summary: Record Review, Interview, and Observation

Annie, an 8th grade student diagnosed with an emotional and behavioral disorder, has been referred for disruptions in her math class that include cussing, tearing or breaking her materials, reading unrelated material, talking to students sitting next to her, and making loud noises. Annie's teacher says that these behaviors occur most frequently when she asks Annie to solve a problem in front of the class, when she presents new material to the class, and occasionally when she has the class practice new material, even though she provides lots of assistance, feedback, and support.

She attempted to intervene first by ignoring the behavior and later by increasing consequences for both appropriate and problem behavior. She also discussed this behavior with Annie to get her input about why the behavior occurs, but didn't get a clear answer. She uses a token system that is tied to the classroom rules. Students can exchange tokens for preferred items and activities at the end of the week. The teacher believes that Annie has the necessary skills and knowledge to complete the tasks and cites her high math scores on standardized tests. However, Annie is failing math because she is sent to the office an average of twice per week.

Annie tells you that she can do the math but thinks it's "really stupid," that she doesn't think she'll use it in real life, and she hates talking in front of the other students. She likes the teacher but doesn't care whether she earns the tokens because she can't ever earn enough to get what she wants. She prefers time on the computer, favorite reading material (consisting primarily of comics), and time to draw.

During three hours of observation occurring on Monday, Wednesday, and Friday of one week, the antecedents and consequences relating to 15 instances of target behavior were recorded. Annie's behavior occurred (a) when she was asked to recite in front of the class (6 instances), (b) when the teacher presented a new lesson (2 instances), and (c) when she was given a practice assignment to complete with a peer or group (7 instances). In every case, the consequence of her behavior was that she avoided doing the assigned task.

Statement of function

Based on the interview and observations, you identify the function of the behavior as follows: When presented with a math assignment that requires her to present in front of others or work in a group with others, Annie engages in disruptive behavior to escape the activity. Annie's behaviors are maintained by *negative reinforcement - activity*.

Behavior Definitions

The *target behavior* is disruptions, which include cussing, tearing or breaking her materials, reading unrelated material, talking to students sitting next to her, and making loud noises.

The *replacement behavior* is *on-task*, defined as sitting in her seat, working on practice material either in a group or individually, looking at the teacher when she presents new material, and complying with requests to complete a problem in front of the class.

Function-based Intervention

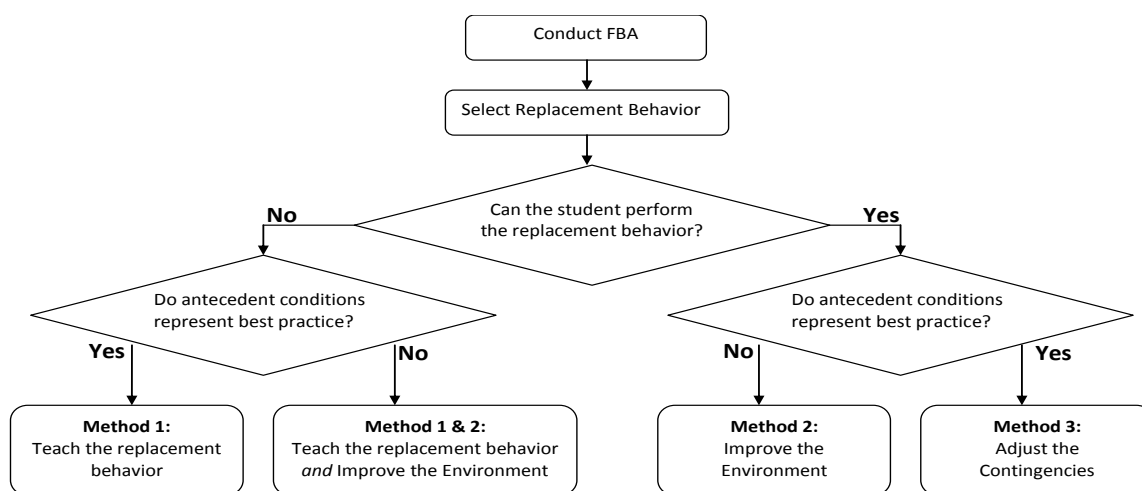
Ask the Key Questions:

1. *Can Annie perform the replacement behavior?*

Annie has demonstrated she can complete the math assignments as homework and on curriculum-based and standardized tests. She has also worked with a group, presented in front of the class, and focused on the teacher when learning new material without displaying the target behavior. The answer to this question is “Yes”, Annie can perform the replacement behavior.

2. *Do the antecedent conditions represent “best educational practice?”*

The answer to this question would also appear to be “Yes”. The material is at the appropriate level for the student, teacher expectations are clearly conveyed, the lesson is well designed with functional and interesting materials and activities, and the classroom environment is designed to maximize productive use of time.



Which method should be used to develop the intervention plan for Charlie?

Intervention Method 1: Teaching the Replacement Behavior

Method 1 Elements	Resulting Intervention Elements
Adjust antecedent conditions so new behaviors are learned and aversive conditions avoided	
Provide appropriate reinforcement for replacement behavior	
Withhold the consequence that previously reinforced the target behavior	

**Intervention Method 1 and Method 2:
Teaching the Replacement Behavior & Improve the Environment**

Method 1 and 2 Elements	Resulting Intervention Elements
Adjust the antecedent conditions so new behaviors are learned and aversive conditions avoided. (Method 1)	
Adjust the antecedent conditions so that the conditions that set the occasion for the target behavior are eliminated and the replacement behavior is more likely to occur. (Method 2)	
Provide positive reinforcement for the replacement behavior. (Method 1 and 2)	
Withhold the consequence that previously reinforced the target behavior when it occurs. (Method 1 and 2)	

Intervention Method 2: Improve the Environment

Method 2 Elements	Resulting Intervention Elements
Adjust the antecedent conditions so that the conditions that set the occasion for the target behavior are eliminated and the replacement behavior is more likely to occur;	
Provide appropriate reinforcement for the replacement behavior.	
Withhold the consequence that previously reinforced the target behavior when it occurs.	

Intervention Method 3: Adjust the Contingency

Method 3 Elements	Resulting Intervention Elements
Provide positive reinforcement for the replacement behavior.	
Adjust the antecedent conditions to make it more likely that the replacement behavior will occur.	
Withhold the consequence that previously reinforced the target behavior when it occurs.	

References

- Bambara, L.M. & Kern, L. (2005). *Individualized supports for students with problem behaviors: Designing positive support plans*. New York: Guilford.
- Crone, D.A. & Horner, R.H. (2003). *Building positive behavior support systems in schools: Functional behavioral assessment*. New York: Guilford.
- O'Neill, R., Horner, R., Albin, R., Sprague, J., Storey, K., Newton, J.S. (1997). *Functional assessment and program development for problem behavior: A practical handbook*. Pacific Grove, CA: Brooks/Cole.
- Umbreit, J., Ferro, J., Liaupsin, C. & Lane, K (2006). *Functional behavioral assessment and function-based interventions: An effective, practical approach*. Columbus, OH: Pearson
- Watson, T.S. & Steege, M.W. (2003). *Conducting school-based functional behavioral assessments: A practitioner's guide*. New York: Guilford.
- Witt, J.C., Daly, E.M., Noell, G. (2000). *Functional assessments: A step-by-step guide to solving academic and behavior problems*. Longmont, CO: Sopris West.
- Wolery, M., Bailey, D.B., & Sugai, G.M. (1988). *Effective teaching: Principles and procedures of applied behavior analysis with exceptional students*. Boston: Ally & Bacon.