**Implementation Fidelity in Behavior Support Plans**

**The Short Story**

It boils down to this: if a Behavior Support Plan (BSP) is going to work for a student, it better have some good ideas, and it better be implemented as it was designed, and with commitment. This is not different from any other educational approach to student development – after all, what is academic curriculum if not a plan for behavior change?

If you want a BSP to support a change in student behavior, do these things:

1. Use function-based thinking or functional behavior assessment to guide the planning, with an awareness of student skills
2. Include these elements in your team-based planning:
	1. Plan and deliver coaching/training for the Implementer(s) (teacher?)
	2. Plan and deliver coaching/training for the student
	3. Do frequent check-ins with the Implementer(s) to support and modify
	4. Develop a daily checklist of Implementer Steps – which the Implementer will self-monitor and compile ( for implementation data)
	5. Where possible, design interventions to generate artifacts (checklists, tokens, finished work, sticker charts, etc.) which can be collected as data about student behavior and implementation fidelity
	6. Regular (weekly?) collection and compilation of student and implementation data
	7. Regular and frequent discussions with the Implementer(s) about the student and implementation data – with the Plan Manager – faded over time
3. Have one person who cares a lot about all the above and makes it their business to monitor these things and insist that they are done – the Plan Manager.

**Rationale for Our Approach to Implementation**

The Behavior Problem

Classrooms in all areas of education are experiencing an increase in disruptive and non-productive behavior by students of all ages. An increasing number of students are being identified as emotionally or behaviorally disordered (EBD) in Special Education. From 1992 to 2002 that number increased by 20% (Sawka, McCurdy, & Manella, 2002). While schools serve 1% to 2% of the school-age population in programs for students with EBD, there may be as many as 9% to 10% of students who could be in need of similar services in the overall population. These issues may be even more pressing in urban schools subject to the stressors associated with poverty (Sawka, et al., 2002).

Research in Positive Behavior Interventions and Supports (PBIS) looks at the whole school population and typically recognizes from 10 to 20% of students who may be in need of at least some behavioral support in order to maximize their benefit from the school experience (Lane, Menzies, Bruhn, & Crnobori, 2011). The 3-tiered model of prevention and support (the “Triangle”) suggests a continuum of supports for this group of students. The students who are most resistant to intervention, and require the most intensive support are likely to require an individualized behavior support plan (BSP). This group may represent 2 to 7% of a school’s population (Lane, Kalberg, & Menzies, 2009).

School teams such as the Student Intervention Team (SIT – may also be known as the Student Support Team, Student Study Team, etc.) may develop BSP’s for the small number of students that have not responded to less intensive supports. Additionally, the Individuals with Disabilities Education Act (IDEA, reauthorized 2004) has mandated that under certain circumstances that students with challenging behavior in Special Education have BSP’s as part of their Individualized Education Plans (IEP's). These BSP’s would be developed by the students’ IEP Team. The result is that BSP's are being developed and implemented in increasing numbers to meet the needs of students with challenging behaviors, for students in both General and Special Education.

The Implementation Problem

An effective behavior intervention requires a high quality plan and effective implementation (Horner, Sugai, Todd, & Lewis-Palmer, 2000). PBIS and IDEA suggest the use of functional behavior assessment (FBA) to improve the quality of intervention plans. The use of FBA has shown positive results in a convincing body of research (Ingram, Lewis-Palmer, & Sugai, 2005). However, effective implementation has been a more difficult problem (Noell & Witt, 1999).

Intervention plans have typically been evaluated by measuring student outcomes (certainly the goal of any intervention), with an assumption that the plan has been implemented *with* *fidelity* – as designed. Therefore, positive or negative student outcomes have implied strength or weakness in the plan, relying on anecdotal teacher reports of implementation.

When researchers began to look more closely at implementation, however, findings suggested that historically there was little research attention paid to measuring the fidelity of implementation, as well as few investigations into finding effective ways to increase the level of implementation (Gresham & Gansle, 1993; Gresham, Gansle, & Noell, 1993; Lane, Pierson, & Robertson, 2004). The science of behavioral intervention assumed that effective communication between the behavior interventionist and implementer was all that was necessary, and assumed that teacher reports of implementation were accurate (Watson, Sterling, & McDade, 1997; Wickstrom, Jones, LaFleur, & Witt, 1998; Witt, 1997; Witt, Gresham, & Noell, 1996)

Implementation of a behavior plan most often happens in a context where a teacher as implementer is following a plan developed by a support team. In this context, the plan-writing support team, or a member of the team, functions in the role of “interventionist” or “consultant” (hereafter referred to as the Plan Manager). The Plan Manager supports the implementers (teacher[s]), collects and compiles data, organizes meetings, coordinates resources, and is otherwise the person who is “in charge” of the intervention plan. Such plans will be enacted across multiple settings and multiple staff members, and over a minimum period of several weeks, and require coordination. The Plan Manager and the implementers share responsibility for the outcomes of the plan.

The quality of the plan is a key element in successful intervention, but outcomes are wholly dependent on the extent to which the plan is implemented as intended – i.e., implemented with fidelity. Research has suggested that in the absence of consultative support, such as the actions of a Plan Manager (or other intervention specialist), teachers and other implementers may do little to implement intervention plans after their initial attempts (DiGennaro, Martens, & McIntyre, 2005; Noell, Duhon, Gatti, & Connell, 2002; Noell et al., 2005).

Moreover, it is nearly impossible to draw conclusions and plan next steps for interventions that don’t seem to be working when we have no idea if the plan was implemented as intended. We cannot say that a student is resistant to intervention unless we can show that the intervention happened as designed.

The Implementation Data Solution

The first question that arises is what kind of information, or data, can we gather about the execution of the plan? First, d*irect observation* is effective, but is usually too time-consuming for ongoing monitoring. Second, researchers have explored the use of *permanent products* to monitor the actions of the implementer regarding the intervention each day (Gresham, MacMillan, Beebe-Frankenberger, & Bocian, 2000; Lane, Bocian, MacMillan, & Gresham, 2004; Noell, Witt, Gilbertson, Ranier, and Freeland, 1997). Interventions can be designed to generate artifacts (permanent products) such as checklists, reward tokens or token boards, student self-monitoring sheets, or student work folders, student work, etc. that can be collected and quantified each day. These permanent products (artifacts), reflect actions taken by the implementer and student. Collectively they can tell the story of the enactment of the BSP – implementation data.

A third method of generating implementation data involves the use of an implementer *self-monitoring checklist*. Such a list is generated by task analyzing the parts of the intervention that the implementer is asked to do. The implementer monitors her/himself each day for which steps are completed according to plan. This tracking easily converts to a percentage of implementation by day, week or month: steps completed divided by steps planned. Implementers often benefit by having a daily “to-do” list (Mortenson & Witt, 1998; Noell et al, 2002; Allinder & Beckbest, 1995).

Increasing Implementation Levels

Having established ways for measuring implementation, research has looked at strategies that might increase the level of implementation such as:

* training and coaching for the implementer
* increasing contextual fit (how the plan fits in the classroom environment)
* daily or weekly meetings to discuss implementation questions
* alternate methods of communication between Plan Manager and teacher (phone, email, etc.)
* daily or weekly review of student progress
* increasing the teacher’s commitment by emphasizing the importance of the intervention (guilt…?)
* citing upcoming progress meetings with families or administrators (responsibility…?)
* using negative reinforcement (“You don’t have to meet with me if implementation levels are high…”)
* performance feedback.

Most of these strategies have shown some positive impact on implementation fidelity. Some of these ideas should be part of all behavior support planning, such as implementer training and coaching, consideration of contextual fit of interventions, and ongoing communication between implementers and stakeholders in the intervention process. However, *performance feedback* has emerged as the single most effective strategy for increasing implementation levels, consistently demonstrating more impact than other support strategies (Codding, Feinberg, Dunn, & Pace, 2005; DiGennaro, Martens, & McIntyre, 2005; Mortenson & Witt, 1998; Noell et al., 2002; Noell & Witt, 1999; Noell, Witt, LaFleur, Mortenson, Ranier, & LeVelle, 2000; Noell et al., 2005; Witt, Noell, LaFleur, & Mortenson, 1997).

Performance feedback has been a tool in business, education, and health care management before it appeared in the behavioral consultation paradigm. Performance feedback means monitoring a behavior that is a focus of concern and then giving feedback to the person regarding their behavior. Teachers do this when they grade and comment on student work. Elements such as goal setting, performance contingencies, and graphics (charts) have increased the effects of performance feedback (Noell et al., 2005). In this case, the behavior being considered is the implementer’s actions in enacting the BSP.

Studies have typically introduced performance feedback when teacher implementation levels begin to drop after training and initial implementation (this could be as little as 2 days). Feedback is usually supplied briefly (2 - 5 minutes) on a daily basis and faded when teacher implementation levels appear to stabilize at their highest level (DiGennaro, Martens, & McIntyre, 2005; Noell et al., 2002; Noell & Witt, 1999; Noell et al., 2000; Noell et al., 2005). Research has also shown that teachers have maintained positive regard for the consultants and the process when performance feedback has been employed (Noell et al., 2002; Noell et al., 2005). This is not an evaluative interaction, but a collaborative peer review of the challenges and successes of enacting the BSP.

Locally, the findings and ideas in this research were explored and developed by the Collaborative Supports Team (CST) in Portland Public Schools between 2006 and 2008. The CST realized a sharp improvement in student outcomes when applying these ideas. Implementation levels typically exceeded 90% and significant student progress was consistently recognized in 3 to 6 weeks.

The practice came down to the elements cited at the beginning:

1. Use function-based thinking or functional behavior assessment to guide the planning, with an awareness of student skills
2. Include these elements in your team-based planning:
	1. Plan and deliver coaching/training for the Implementer(s) (teacher?)
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	3. Do frequent check-ins with the Implementer(s) to support and modify
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Maybe simpler yet: train, support, monitor student and teacher, consistently confer on the data.

Implementers were typically very positive about the checklist because it provided them the outline and reminders of exactly what their role was. Checklists were developed by *task analyzing* the steps necessary for the intervention in that environment. Task analysis is an important support for the implementer in executing the intervention and in planning for it. The more complex an intervention, the greater is the need to identify and plan for the details (Carroll et al., 2007). The task analysis and identification of steps and routines provide the context and menu for coaching and supporting implementers. As we identify each step of an intervention, all professionals involved can more clearly identify the prescribed actions that are now in, or not yet in, of their skill set.

Recent research in the field of implementation fidelity is looking at additional ways to view and monitor the implementation of both behavior plans and broader intervention programs. Generic assessment tools are being tested (Schulte, Easton, & Parker, 2009). Researchers are expanding the view of implementation fidelity to include not only *adherence* to the plan (what we would be measuring in a checklist – are the steps being done?), but *dosage* (amount of exposure to intervention for the student?), *quality of intervention delivery* (how skillfully delivered?), *differentiation* (are the critical components that identify this intervention present?) as well as *participant responsiveness* (the extent to which the participant engaged with and benefitted from the intervention) (Schulte et al.,2009; Carroll et al., 2007; Century, Rudnick, & Freeman, 2010).

For now, we should see improved student outcomes by attending to adherence to interventions as designed. It is important, however, that we develop our competencies and deepen our understanding in this area. The BSP resource, and broader behavior support programs in general, are too expensive and our kids are too valuable to stop asking questions and seeking effectiveness.

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