

Improving Implementation of Classroom Instruction Through Teacher-Directed Behavioral Consultation: A Single-Case Demonstration

Jennifer A. Mautone, James K. Luiselli & Marcie W. Handler

Abstract

In an illustrative case study we describe the process and outcome of class wide behavioral consultation with a public school teacher to improve her implementation of instructional procedures. Consultation emphasized formulation of a classroom behavior support plan, selection of mutually determined intervention objectives, data-based decision making, and performance feedback. Evaluation conducted in an AB design showed that consultation was associated with improved teacher and student behaviors. Elements of effective consultation and the delivery of behavior support intervention in public schools are discussed.

Keywords: behavioral consultation, behavior support, public schools.

Public school classroom teachers frequently require technical assistance consultation from psychologists and behavior analysts (Luiselli & Diament, 2002). One objective of consultation is to improve how teachers conduct instruction with their students. The benefit from such consultation is that more effective instruction should facilitate learning and academic achievement (Skinner, 1998). Consultants also assist teachers in developing and implementing behavior support interventions. In this regard, *Positive Behavior Support (PBS)* (Sugai & Horner, 2002) posits a three-tiered implementation approach. At the whole-school level, “universal” procedures address the entire student population in both classroom and in non-classroom (e.g., cafeteria, outdoor areas, corridors) settings. The second tier, selected “targeted” interventions, concentrates on at risk students who can benefit from group-oriented supports (e.g., social skills instruction, checking in and out with a significant adult) or class-wide programs that may be established with individual teachers. Finally, “intensive” or individualized, student-specific programs are designed for students who require more intensive support. Research demonstrates that PBS practices within this three-tiered model can reduce reliance on punitive (exclusionary) discipline methods, facilitate academic achievement, and improve school climate (Luiselli, Putnam, Hander, & Feinberg, 2005; Putnam, Luiselli, Handler, & Jefferson, 2003; Sugai, Sprague, Horner, & Walker, 2000), as well as increase task engagement and proper implementation of effective instructional practices (Luiselli, Putnam, and Handler, 2001).

In many situations, consultants and teachers produce written plans that delineate instructional and behavior support procedures (Coddling, Feinberg, Dunn, & Pace, 2005; Garrity & Luiselli, 2005). Even when an intervention plan is developed, it will only be effective if implemented accurately. Studies suggest that providing teachers with direct training and performance feedback related to intervention implementation is one approach to increase procedural integrity (Mortenson & Witt, 1998; Noell, Witt, Gilbertson, Rainer, & Freeland, 1997; Sterling-Turner, Watson, & Moore, 2002; Witt, Noell, LaFleur, & Mortenson, 1997). Specifically, it appears that integrity is compromised when teachers are not monitored during intervention implementation and do not receive corrective feedback. Conversely, when teachers set intervention objectives and are informed accordingly, procedural integrity and desirable outcomes are produced (Mortenson & Witt, 1998; Noell et al., 1997).

The following study illustrates a model of behavioral consultation that was used with a public school teacher to improve her implementation of instructional procedures in the classroom. We describe

the process of consultation and resulting effects on the teacher's performance as well as on-task behavior of her students. As a case demonstration, our findings have relevance for behavior specialists providing consultation to public schools and the type of technical assistance that may be necessary to promote evidence-based instructional practices.

Method

Participant and Setting

Consultation was conducted with Ms. Jones, a sixth-grade science teacher at a public middle school (grades 6-8) located in an urban community. The setting for the study was Ms. Jones's science classroom comprised of approximately 25 students.

During the academic year preceding the study, Ms. Jones was a member of a Behavior Support Team (BST) with other teachers and administrative staff. The BST developed and implemented a school-wide behavior support plan that was in effect at the time of the study. Following implementation of the school-wide plan, Ms. Jones volunteered to receive additional training and consultation that focused on the second level of the PBS model: targeted class-wide behavior support.

Measurement

The *Classroom Observation System* (Handler & Putnam, 2002) was used to measure teacher and student behaviors. *Teacher Instructional Activity* was recorded when Ms. Jones presented academic content or solicited academic responses from students. *Teacher Proactive Monitoring* was defined as Ms. Jones moving around the classroom and/or visually "scanning" students. *Teacher Positive Reinforcement* consisted of Ms. Jones praising students when they demonstrated expected behaviors such as completing assignments and following directives. *Teacher Behavior Correction* was Ms. Jones verbally correcting inappropriate behaviors performed by students. Finally, *Student On-Task/Off-task* was scored as engagement in an academic activity (e.g., listening to teacher instruction, reading, writing an assignment) or non-engagement in an academic activity for at least 3s respectively.

The senior author recorded data during 20-minute observation periods prior to and during consultation. Using the *Classroom Observation System*, she scored teacher and student behaviors during alternating 15-s intervals for the duration of the observation period. Students were observed systematically in random order (i.e., moving up and down rows of desks). Recording intervals were timed on a hand-held stopwatch. Observations were conducted while Ms. Jones performed individual seatwork, small group, and large group instruction with her students.

Procedures

Baseline

One baseline observation period was conducted before the introduction of teacher-directed consultation. At baseline, Ms. Jones had completed 12 hours of didactic training with several other teachers. Doctoral-degreed consultants presented the workshops, which focused on classroom behavior support and at the conclusion of training, Ms. Jones and the other teachers developed class-wide plans. The primary components of these plans were (1) establishing a maximum of five, positively stated, behavior-specific classroom expectations (e.g., "Raise your hand for help."), (2) instituting procedures to facilitate classroom routines (e.g., making transitions, collecting completed assignments), (3) teaching directly the classroom expectations and routines, (4) strategically monitoring student performance, (5) positively reinforcing exemplary behavior through praise, approval, and acknowledgement, and (6)

correcting student behavior as warranted. Once formulated, Ms. Jones and the other teachers implemented their classroom behavior support plans.

Teacher-Directed Consultation

The teacher-directed consultation evaluated in the study was introduced after Ms. Jones developed her classroom behavior support plan. The senior author provided consultation services by meeting with Ms. Jones during 6, 45-minute sessions over a 15-week span. Each consultation session followed a classroom observation period during which the teacher and student behaviors were recorded. Sessions began with the consultant reviewing the objectives of observation and previously identified intervention goals. The consultant discussed how Ms. Jones had implemented the classroom behavior support plan, provided graphs of respective observational data, and answered questions. The results of each observation also were presented through a written summary using the *Teacher Feedback Form* (Table 1) that was completed by the consultant and retained by Ms. Jones when the session concluded. In summary, the basis of consultation was to observe Ms. Jones implementing instruction, document her performance objectively, report results to her visually, set goals collaboratively, and present recommendations. The consultant had received approximately four hours of training on use of the *Teacher Feedback Form*, how to review each step, and strategies to guide Ms. Jones towards identifying goals and areas requiring improvement.

Table 1
Teacher Feedback Form

Teacher: _____ Date: _____

Consultant: _____

1. Rationale for observations.
 - a. Systematic and objective way to observe the environment
 - b. Provides a baseline and method of monitoring progress
2. Use of data/information from observations.
 - a. "Supportive" rather than "evaluative"
 - b. Information will be confidential
3. Description of observation tool.
 - a. Teacher and Student categories
 - b. Observe a different student every 15 seconds in order to be objective
 - c. Research indicates that these behaviors are essential for classroom management
4. Area(s) that are strengths:

<input type="checkbox"/> Instructional Activities	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Reinforcement	<input type="checkbox"/> Behavior Correction
<input type="checkbox"/> Ratio of Instruction to Behavioral Correction	<input type="checkbox"/> On-Task
<input type="checkbox"/> Ratio of Reinforcement to Behavior Correction	<input type="checkbox"/> Off-Task
5. Area(s) that need improvement:

<input type="checkbox"/> Instructional Activities	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Reinforcement	<input type="checkbox"/> Behavior Correction
<input type="checkbox"/> Ratio of Instruction to Behavioral Correction	<input type="checkbox"/> On-Task
<input type="checkbox"/> Ratio of Reinforcement to Behavior Correction	<input type="checkbox"/> Off-Task

6. Area(s) that the teacher and consultant agree to target between now and next meeting:
7. Plan for improving the targeted areas:
8. Plan for monitoring implementation of strategies:
9. Plan to determine plan effectiveness:

Results

Figure 1 displays the percentage of intervals in which teacher and student behaviors were recorded during the baseline observation period and with consultation in effect (average of 6 observation sessions). These results indicate that during consultation Ms. Jones spent more time conducting instructional activities and positively reinforcing students, while reducing her behavior correction. Compared to baseline, students were more attentive within the consultation phase.

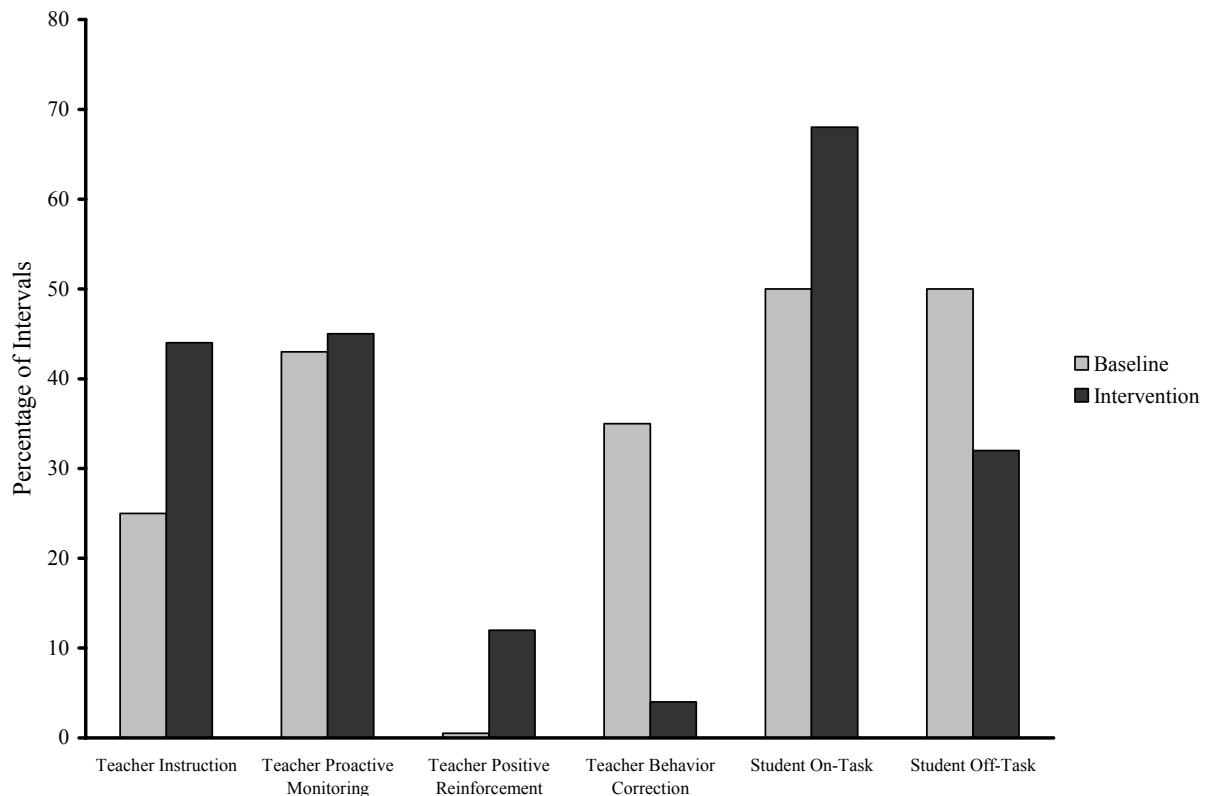


Figure 1: Teacher and student behaviors (percentage of recording intervals).

Figure 2 represents Ms. Jones's ratio of instruction-to-behavior correction and the ratio of positive reinforcement-to-behavior correction. Relative to baseline, consultation was associated with nine times more instruction-to-behavior correction and three times more positive reinforcement-to-behavior correction.

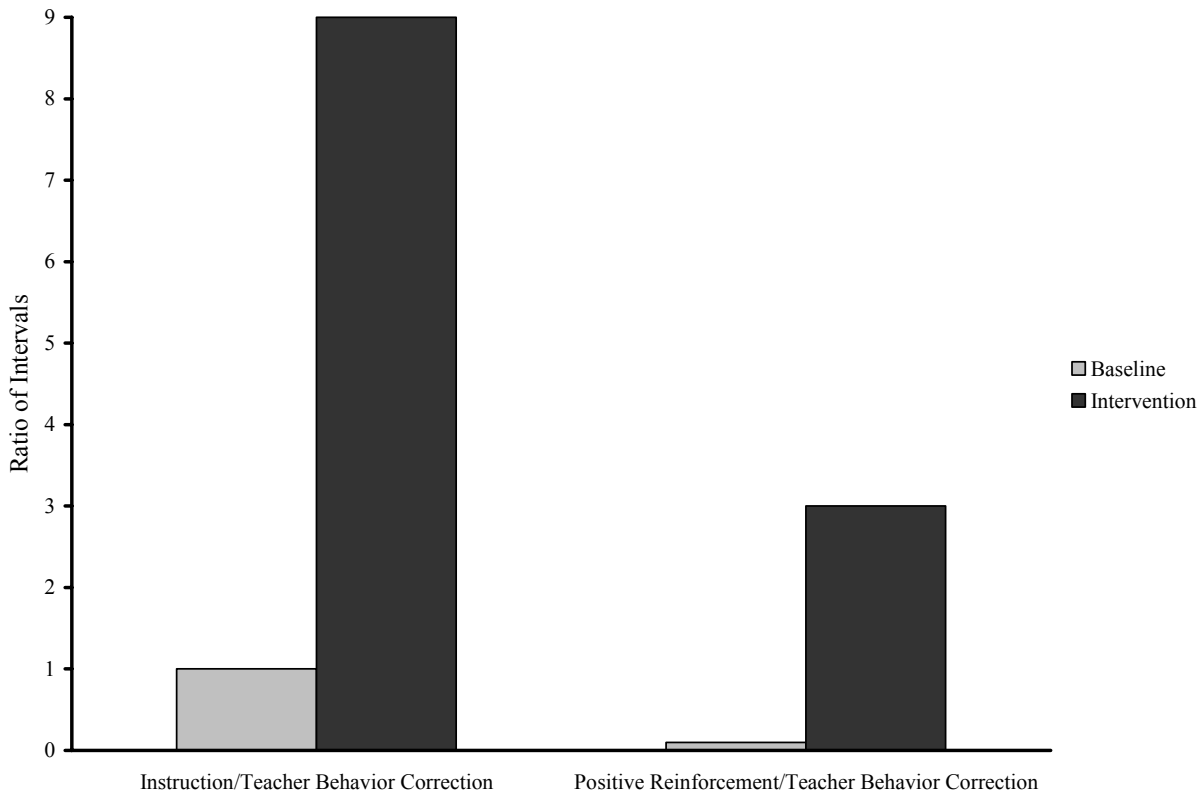


Figure 2: Teacher instruction-to-behavior correction and positive reinforcement-to-behavior correction (ratio of recording intervals).

Discussion

Our evaluation illustrates how systematic consultation emphasizing performance feedback and data-based decision making can improve teacher and student classroom behavior. The teacher and consultant entered into a collaborative problem solving relationship driven by observational outcomes and refinement of evidence supported intervention procedures. Although the teacher had received training in whole-school and classroom focused behavior support, baseline observation revealed that her instruction could be enhanced. With the exception of proactive monitoring (which did not change), Ms. Jones became a more effective teacher with consultation, as reflected in her implementation of specific procedures and associated increases in student on-task behavior.

Although Ms. Jones's satisfaction with consultation services was not assessed formally, we can report anecdotally that she was pleased with the process and results. Consultation acceptability can be influenced by several factors including a teacher's motivation to receive technical assistance from an "outside" professional, the interpersonal manner by which consultation is delivered (Luiselli, 2002), and the feasibility of recommended intervention procedures. In the present case, Ms. Jones expressed a desire to learn additional skills, the consultant was consistently supportive, and there were mutually determined intervention objectives. These features likely contributed to the positive interactions between Ms. Jones and the consultant.

The consultative relationship with Ms. Jones relied heavily on performance feedback. Although feedback alone can improve performance (Balcazar, Hopkins, & Suarez, 1985), it generally is more effective when combined with positive reinforcement (Alvero, Bucklin, & Austin, 2001). Performance

enhancement interventions also are more effective when feedback is provided graphically and frequently (Balcazar et al., 1985). Others have posited that giving people feedback about their performance may be most successful when they are highly motivated to change their behavior (Roscoe, Fisher, Glover, & Volkert, 2006). Each of these factors was adopted by the consultant in her technical assistance to Ms. Jones.

Being a case demonstration, the study had several limitations. Most obvious is that we did not perform an experimental evaluation. Second, there was only one baseline observation that was compared to multiple observations throughout the consultation process. An additional concern is that the measurement system used in the study did not include assessment of interobserver agreement (IOA), although the consultant had achieved acceptable agreement (i.e., at least 80%) during her initial training on the instrument. Finally, we did not document whether the improved teacher and student classroom behaviors were maintained when consultation was terminated. These are exacting research standards within a “natural” setting such as a public school but should be addressed in more controlled studies concerning the efficacy of behavioral consultation services (Luiselli & Diament, 2002).

In conclusion, this case provides evidence that some teachers exposed to pre-consultation training may benefit from additional, individualized directed assistance when implementing class-wide interventions. The challenge for public schools is to retain consultation services that produce desirable results and are both time-limited and cost-effective. Because our evaluation was performed under “real world” conditions, we propose that the findings have strong external validity, endorsing a similar consultation methodology that addresses classroom instruction and behavior support.

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Author Contact Information:

James K. Luiselli, Ed.D., ABPP, BCBA
The May Institute
41 Pacella Park Drive
Randolph, MA 02368
Telephone: 781-437-1205
Fax: 781-437-1220
E-mail: jluiselli@mayinstitute.org