ABSTRACT: Educators face ongoing pressure to improve student outcomes, especially with regard to academic achievement and social behavior. One viable strategy for supporting and improving instructional practices is to conduct classroom observations and provide performance feedback. Researchers have shown performance feedback to be effective in the workplace, institutions, and educational settings. The present case study on a high school teacher provides preliminary promising information of the relevance and effectiveness of the combination of a classroom observation and a performance feedback process that focused on the relations among 3 key variables: classroom instructional settings, instructional practice, and classroom student behavior. The authors used a process based on the observational data that identified when students were off task and pinpointed the corresponding setting categories and the teacher's instructional actions. The authors provided performance feedback to the teacher on the basis of these findings. Then, the teacher made changes in the identified setting categories and teacher actions, resulting in substantial gains in class engagement and a reduction in problem behaviors.

KEYWORDS: instructional context, observation .feedback, student engagement, student on-task behavior, teacher-student interactions

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THE NO CHILD LEFT BEHIND ACT (NCLB; 2001) is focused on increasing academic achievement for all students and holding schools accountable to the standards and expectations of the Annual Yearly Progress requirement. Superintendents (Sherman & Grogan, 2003), principals (Marks & Printy, 2003), teachers (Taylor, Pearson, & Rodriguez, 2003), and parents and other community members (Rose & Gallup, 2003) are expected to design, support, and provide teaching environments in which each student is given maximum opportunities to learn to his or her potential.

One expectation of NCLB (2001) was that schools will identify, adopt, adapt, and implement effective practices to maximize academic achievement. To guide schools, NCLB has focused attention on identifying what practices are truly effective. For example, the Learning First Alliance (LFA) (Togneri & Anderson, 2003) was formed as a permanent partnership of leading national organizations with the primary mission of improving student learning. The LFA has identified school districts that substantially raised academic achievement scores. Further analyses of these successful school districts revealed two key variables that were associated with improved school achievement: development of a supportive infrastructure at the district level and priority to the adoption and sustained use of effective instructional practices at the classroom level (Togneri & Anderson).

Although the knowledge base on what constitutes effective instructional practices is relatively clear, the real challenge is providing teachers with the necessary support and professional development to implement these practices accurately, consistently, and contextually and to relinquish ineffective and inefficient practices. One promising strategy for addressing this challenge is providing teachers with performance feedback that would inform their practice and increase the accurate and sustained use of effective instructional strategies.

The organizational and behavior management fields have demonstrated that the use of performance feedback can improve and sustain adult behaviors in the workplace (Alvero, Bucklin, & Austin, 2001; Balcazar, Hopkins, & Suarez, 1985). Researchers define performance feedback in terms of a procedure used to systematically communicate to individuals their current level of behavior (Noell et al., 2005). As early as 1973, the literature has demonstrated that student behavior is affected by the nature of the relation between performance feedback and teacher behavior (Cossairt, Hail, & Hopkins, 1973). More recently, researchers have examined performance feedback as a means to improve individual student academic and social-behavioral performance (Jones, Wickstrom, & Friman, 1997; Martens, Hiralall, & Bradley, 1997; Moore & Shaut, 1978; Mortenson & Witt, 1998; Noell, Duhon, Gatti, & Connell, 2002; Noell, Witt, Gilbertson, Ranier, & Freeland, 1997; Noell et al., 2000, 2005). For example, Mortenson and Witt (1998) found that classroom intervention, on the basis of performance feedback, immediately increased teacher performance. The elementary school students in these teacher--student dyads showed academic gains, though they were somewhat variable. Performance feedback through the use of objective observational methods can serve as a means by which teachers learn how to examine relations associated with instructional materials, tasks, and student behavior.

Also, recent researchers have found that in educational settings, interventions without structured follow-up had poor outcomes (Mortenson & Witt, 1998; Noell et al., 1997, 2000; Witt, Noell, LaFleur, & Mortenson, 1997); implementation did not improve after consultation until performance feedback was also provided (Jones et al., 1997); follow-up without the review of data was less effective (Noell et al., 2000); and use of graphic summary designs can enhance performance (Alvero et al., 2001; Balcazar et al., 1985; Noell et al., 2002). These researchers have focused on teacher--student dyads and have not examined student behavior at the whole-classroom level.

Often, typical classroom observations are general, limited in scope, and not instructionally contextualized to student behavior. In particular, the interconnectedness of instructional practices, student learning, and subsequent student behavior is not readily assessed and evaluated in a way that permits specific recommendations for improvement in instruction. In the present study, we aimed to demonstrate this interconnectedness. We conducted classroom observations to (a) assess the relation between the instructional practices the teacher used and the concurrent levels of class engagement and acceptable behavior and (b) use performance feedback on effective classroom practices to improve class engagement and social behavior.

METHOD

Participant and Setting

The participant was a male science teacher in his second year of teaching at a suburban high school of approximately 1,500 students. The teacher initiated a request for assistance to the administration because he was having difficulties securing and maintaining the attention of students in a particular science class and wanted strategies to address the constant side talk among students. The teacher indicated that he had tried all of the strategies he knew to be effective in other classes, but they were ineffective in breaking the side talk or increasing engagement of students in planned activities. The administration approached the first author to provide the requested assistance.

The observations occurred during the 45-min block period for a ninth-grade science class. The class was the first period after

lunch. Approximately 25 students attended this class. A variety of instructional activities occurred during this time (i.e., whole-class lectures, small group activities, independent work, silent reading).

Observation Instrument

We developed an observation tool specifically to collect information that would give teachers a clear picture of the interconnected patterns of instructional practices, student behavior, and teaching contexts, and demonstrate change over time. Thus, we used the following guidelines to develop the classroom observation instrument:

1. Identify and use effective instructional or management strategies that are research based or accepted as best practices, such as explanations, assessment, precorrection, lesson reviews, corrective feedback, and positive reinforcement.

2. Relate student engagement to particular tasks, activities, and instructional practices.

3. Relate teacher practices and student behavior to the context in which the teaching is occurring, such as large and small group instruction, transition, or independent work.

4. Adjust observation procedures (e.g., session length, interval size, event vs. interval) to increase sensitivity of measurement system to student and teacher behaviors and the interactions between them.

5. Document and provide clear feedback to the teacher on the interconnectedness of teacher behavior and corresponding student behavior.

We gathered data in three variables: setting for the classroom period, teacher behavior or action, and class engagement. We used a cover sheet to collect general information (i.e., teacher's name, observer's name, length of observation, subject area, grade) and to provide a quick reference chart identifying the codes used for (a) the context of the teaching, (b) teacher action, and (c) class behavior (see Appendix A). In Appendix B, we provide operational definitions for the coded options in the variables and in class setting, teacher action, and student behavior.

We used a form to record the classroom observations for each of the 10 intervals observed (see Appendix C). In each of the major variables (class setting, teacher action, student behavior), the observer documented the specific code for the factor or practice occurring in the particular interval. In some cases, more than one coded response was observed and recorded.

We tabulated data across all observation intervals. In each of the three classroom visits, we observed four sets of 10 intervals comprising 40 observations per classroom visit. Appendix D shows the results of each of these visits (40 observation intervals per visit). From this information, to examine consistencies, variability, and spread, we made comparisons in and between observation sessions.

We field-tested the instrument by using two observers who conducted observations in three separate classrooms. The two observers met and reviewed the definitions of the items on the observation tool. They discussed examples and nonexamples for each item, completed an observation, and discussed the results. Then, we completed three observations to assess reliability. We obtained a reliability coefficient of 93% across the data for the three observations.

Observations

The first author conducted three observations approximately 3 weeks apart over 9 weeks during the first class period after lunch. We selected this period because the teacher reported that most problem behavior occurred during that period. Some evidence suggests that what happens in the first few minutes of a class period indicates how well the lesson will proceed (Frase & Hetzel, 1990). In the present study, we conducted observations during the first l0 min of the first class period after lunch. After completing the observation, we compiled the summary tables.

Performance Feedback

After each observation, the teacher and observer reviewed the observation procedures, analyzed the data from the observation and summary sheet, and developed an action plan. This meeting took about 10--15 min. During the analysis process, they reviewed observation data using the following steps:

1. Identify the instructional practices when the majority of the class is on task (M).

2. Examine student behavior data by intervals when the majority of the class is on task, approximately half on task (H), or less than half on task (H).

3. Identify setting activities for the corresponding student behaviors in each interval.

4. Identify teacher behavior (instructional practice) for the corresponding student behaviors for each interval.

RESULTS

First Observation and Development of the Action Plan

Figure 1 shows a summary of the data for Observations 1, 2 and 3. The analyses indicated that most of the students in the class were on task during 65% of the intervals, approximately half of the students were on task during 25% of the intervals, and less than half of the students were on task during 10% of the intervals. We analyzed the data by identifying intervals when the students were off task and then pinpointing the corresponding setting categories and teacher actions. Our examination of the data for the intervals when half of the students were on task indicated that the corresponding setting categories were transitions and independent work. The corresponding teacher actions in these intervals showed that the teacher was engaged in providing explanations, directions, and questions during 80% of the intervals; checking for student understanding occured only once across all observations; and checking student work by moving around the classroom did not occur at all.

After reviewing the results of the first observation, the teacher and first author developed an action plan that focused on manipulations of the setting or the teacher action variables that were associated with the class levels of student on-task behavior. They specified three action plan strategies:

1. Reduce the percentage of intervals in which a transition occurred during the first 20 min of instruction from 12% to 2% or 3%.

2. Increase the percentage of intervals in which checks for understanding occurred during the explanation time from 1% to approximately 8%.

3. Increase the percentage of intervals in which the teacher moves around the classroom to check work and encourage on-task

behavior from 0% to 4% or 5%.

Second Observation and Modification of the Action Plan

Figure 2 shows a summary of the data for Observations 1, 2, and 3. The second feedback session involved examining the effect of the teacher's efforts to improve transition steps, checks for understanding, and classroom movement on class behavior. On the basis of an analysis of observation data from the first and second observation, they developed the following summary statements:

1. The percentage of intervals in which a transition occurred dropped from 12% to 4% (30% decrease).

2. The percentage of intervals in which a check for understanding following explanations occurred increased from 1% to 12%.

3. The percentage of intervals in which moving around the classroom to check if students were on track and encouraging on-task behavior increased from 0% to 12%. In general, we noted improvements in all areas targeted in the initial action plan. In addition, we observed changes in other teacher action measures without being directly targeted.

4. The percentage of intervals of explanations (teacher talk) and directions decreased by 10% and 15%, respectively.

5. The percentage of intervals of precorrections increased from 0% to 2%. Both precorrections occurred just before a classroom transition.

Between the first and second observations, we demonstrated a change on the class engagement measures. The percentage of intervals in which most of the class was on task increased by 18%, the percentage of intervals in which half of the class was on task decreased by 8%, and the percentage of intervals in which less than half of the class was on task decreased by 10%. In general, class engagement increased and off-task behavior decreased. We observed reductions in the percentage of intervals of on-task behavior (e.g., side talk among students) on two occasions: teacher moving around to help individual students during independent work and teacher asking a series of questions to class.

Because of these results and observations, we modified the action plan as follows:

1. Maintain levels of performance relative to the previous action plan.

2. Introduce an exit task during independent work so that students who finish a task can move to an exit activity rather than sit, chat, or move around the classroom.

3. Involve the whole class when asking questions instead of sampling one student at a time for each question (e.g., ask students to write their answers, share answers with a classmate, raise their hand if their answer is the same as that of their classmate).

Third Observation and Modification of Action Plan

Figure 3 shows a summary of the data for Observations 1, 2, and 3. The third feedback session involved an examination of the data in relation to the level of implementation of goals set after the second observation and effects on class behavior. The discussion focused on the relation among class behavior, setting variables, and teacher actions. During the observation session, the teacher did not assign independent work. As a result, students were engaged in discussion during the entire period. In 34% of teacher action intervals, the teacher asked at least one question, compared with 8% of intervals in the previous observation. Of these intervals, to involve the whole class, the teacher used prompts such as "Who else was going to say that?" and "Tell me if you agree with...." In addition, analyses of observation data indicated that the teacher involved the whole class more often during question-asking time and increased percent of intervals of positive statements.

Figure 4 shows the measures of student behavior continued to show substantial improvements. For example, most of class on task increased for each successive observation (65%, 83%, 95%, respectively). In addition, levels of student on task continued to improve from Observation 2, especially when the teacher asked questions.

Because of the improvements observed in teacher and student behavior, no further observations were scheduled. However, to maintain these gains, we added to the action plan self-monitoring strategies that included weekly review by the teacher of (a) previous goal statements related to transitions, whole class question asking, and active supervision and (b) academic achievement and progress.

DISCUSSION

The present case study expands the research on the use of a performance-feedback process to the high school level and whole-class setting. We provided the teacher with information that directly related teaching context, instructional practices with class engagement, and social behavior to one of his classes. The observers reviewed with the teacher information from three observations, which resulted in action plans that focused on modifying instructional practices. Results showed substantial improvement in class engagement, reduction in problem social behavior, and changes in teacher instructional practices.

The review of the observational data and feedback focused on the instructional context and concomitant class behavior. The specific changes in teacher behavior were based on standard effective instructional practices such as improvement of transitions, whole-class question-asking strategies, checks for understanding, and movement around the classroom to check for student engagement in class activities. Improvements in these targets were associated with corresponding improvements in class engagement and social behavior. The teacher increased the use of questioning and assessment, which increased the students' opportunities to respond (Brophy, 1986; Walker, Colvin, & Ramsey, 1995). This increase in opportunities to respond may also have affected the rate of student engagement, because students who are responding cannot also be interacting with peers.

We find it interesting that the teacher focused almost entirely on instructional practices as distinct from social behaviors. In fact, the teacher's social behavior responses decreased as class engagement increased during each observation. Although researchers have reported that high rates of social reinforcement are important at lower grade levels (Colvin & Lazar, 1997; Evertson, Emmer, Clements, & Worsham, 1994; Sprick, Garrison, & Howard, 1998; Wong & Wong, 1991), they remained low throughout the observations. The results of our case study may suggest that change in high school teachers' academic instructional practices can increase student engagement even without an increase in teacher social reinforcement. It is clear that this issue needs research beyond case study methodologies before reaching any conclusions or changing current practices.

The results of our case study are encouraging and suggest that an observation system that gives high school teachers information about instructional practices and the effects they have on whole-class behavior is feasible, relevant, and effective. However, researchers should note some limitations in our study. Because our study involved one teacher, researchers should conduct replications across teachers, settings, and time. The administration of the participant's high school identified him for ongoing problems with a particular class (other classes were satisfactory). To improve his teaching, the teacher agreed to participate in our study. Though he commented that this process was very helpful, it is unclear whether we would find the

same effect with teachers who were not interested in receiving assistance to improve their teaching. In addition, we did not take reliability measures during the direct observations. These factors limit the generalizability of our results. Future researchers should examine interobserver accuracy to ensure that teacher and student observation data are accurate and the effect of using the intervention in one class of the teacher and student behaviors in the teacher's other classes.

Future researchers should use our--or a similar--instrument. These studies should focus on fidelity of teacher implementation of specific strategies, maintenance of change in teacher behavior over time, and generalization of effects and use by district staff. In the present study, we did not conduct an assessment of the consistency and accuracy of the teacher's use of the intervention practices. Future researchers should include measures of treatment integrity to increase confidence in the relation between teacher practices and student behaviors. In our case study, we conducted three observations (2-3 weeks apart), one per consultation event. Because of the teacher's satisfaction with the change in student behavior, we discontinued the observation and debriefing process after the third observation session.

We conducted no assessment of maintenance effects. Future researchers should include the following systematic examination of maintenance effects: (a) Did the teacher's use of action plan strategies continue? (b) Did improvements in student behavior continue? and (c) What changes did the teacher make in teaching strategies and classroom management practices? We conducted our pilot study during one academic class (i.e., science) of the school day. We did not complete an examination of teacher and student behavior during other similar and different academic periods and contexts. By adding observation sessions in other nonintervention settings and conditions, researchers can determine generalized responding.

Last, an outside consultant supported our teacher assistance effort. Researchers should examine the school- or district-level systems that are required to establish, sustain, and manage an observation-based teacher assistance approach such as the one described in our case study. A study of costs related to personnel, professional development, and time may require revising the instrument to make it easier to administer and less time-intensive.

Because of the national focus on improved student outcomes and increased accountability for adopting and using effective instructional and classroom practices, schools must establish assessment and feedback systems that give educators specific information on what they are doing and what effect their actions have on student performance. This information must be formative (ongoing) and contextualized to reflect the conditions under which instruction is occurring and students are expected to learn and perform. In addition, researchers should emphasize the use and adoption of evidence-based and relevant practices. The practices and results we described in our case study suggest a promising direction for supporting teachers at the high school level in their continual challenge of improving student outcomes and maintaining safe and effective classroom environments.

APPENDIX A

Direct Observation Instructional Management Cover Sheet

Date -- Observation start time -- End time Observer -- Teacher -- Subject and level -- Grade --

General setting and context description:

```
Interval length: 10 s

      Setting              Teacher action        Class engagement

   On coding sheet,       On coding sheet,       On coding sheet,
     mark a slash         mark a slash per        slash percentage
     per interval           interval              and main type

L = Whole class        Academics              M = Most
S = Small group and    E = Explanation           (more than 75%)
    independent work   D = Direction          H = Half
I = Independent work   A = Assessment            (approximately
    whole class        Q = Question              50%)
T = Transition         P = Positive feedback  L = Less (less
O = Social other       C = Correction            than 50%)
                       R = Review

                       Social behavior
                       P = Precorrection
                       R = Positive
                         reinforcement
                       C = Correction
                       S = Supervision
```

APPENDIX B
Categories of Observed Items With Definitions

Symbol	Item	Definition
Setting (most of the interval)		
L	Whole class	All students are involved in the activity.
S	Small group and independent work	Some students are engaged with the teacher while the rest of the class is working independently.
I	Independent work	Whole class is working independently.
T	Transition	Period during an activity change within the classroom, entering or exiting the classroom.
O	Social/other	Instruction or teacher directed activity is not occurring such as students sitting and waiting or a break.
Teacher action (each and any)		
E	Explanation	Teacher describes or explains some content related to the lesson or event.
D	Direction	Teacher presents information on what the students are required to do or makes a specific request related to the lesson or activity.
A	Assessment	Teacher checks work for correct responses by requiring whole class response such as writing a response, having students check their own work or others, or a response involving all students.
P	Positive feedback	The teacher acknowledges student responses as a class or individually, by praise, gestures, and/or delivery of reinforcers.
Q	Question	Teacher asks a discrete question involving single answer where one student responds and teacher continues.
C	Correction	Teacher provides information on how to obtain a correct response after errors

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                                   have been identified with the lesson
                                   task or activity.
R         Review                   Teacher discusses, explains what has
                                   been addressed or accomplished in the
                                   lesson and what may need to be
                                   addressed in the future.

Social behavior (each and any)
P         Precorrection            Teacher provides information to students
                                   about expected behavior prior to the
                                   opportunity for students to engage in
                                   the behaviors such as reminders.
R         Positive                 Teacher provides positive feedback on
          reinforcement            social behavior such as praise,
                                   recognition, delivery of rewards.
C         Correction               Teacher addresses problem behavior such
                                   as prompts, redirection, naming the
                                   problem behavior (reprimand), warning,
                                   and delivery of negative consequence.
S         Supervision              Moving around looking at work, scanning
                                   the room or standing at the front
                                   scanning the room.

Class engagement
M         Most                     More than half of the students are
                                   engaged in the expected behavior.
H         Half                     Approximately half the class is
                                   engaged in the expected behavior.
L         Less                     Less than half the class is engaged
                                   in the expected behavior.
```

APPENDIX C Coding Sheet for Each Interval

```
Interval        Setting (a)

1          L    S    I    T    O
2          L    S    I    T    O
3          L    S    I    T    O
4          L    S    I    T    O
5          L    S    I    T    O
6          L    S    I    T    O
7          L    S    I    T    O
8          L    S    I    T    O
9          L    S    I    T    O
10         L    S    I    T    O

                Teacher action
Interval        for academics (b)

1          E    D    A    P    Q    C    R
2          E    D    A    P    Q    C    R
3          E    D    A    P    Q    C    R
4          E    D    A    P    Q    C    R
5          E    D    A    P    Q    C    R
6          E    D    A    P    Q    C    R
7          E    D    A    P    Q    C    R
8          E    D    A    P    Q    C    R
9          E    D    A    P    Q    C    R
10         E    D    A    P    Q    C    R

           Teacher action for     Class
Interval   social behavior (c)   engagement (d)  Notes/other

1          P    R    C    S       M    H    L
2          P    R    C    S       M    H    L
3          P    R    C    S       M    H    L
4          P    R    C    S       M    H    L
5          P    R    C    S       M    H    L
6          P    R    C    S       M    H    L
7          P    R    C    S       M    H    L
8          P    R    C    S       M    H    L
9          P    R    C    S       M    H    L
10         P    R    C    S       M    H    L
```

(a) In setting, L = whole class; S = small group and independent work; I = independent work; T = transition; O = social/other. (b) In teacher action for academics, E = explanation; D = direction; A = assessment; Q = question; P = positive feedback; C = correction, R = review. (c) In teacher action for social behavior, P = precorrection; R = positive reinforcement; C = correction; S = supervision. (c) In class engagement, M = most; H = half; L = less.

APPENDIX D

Summary of Observations in Period

Total observation intervals -- Total observation minutes --

```
Setting                              #    %

  Whole class
  Small group and independent work
  Independent work
  Transition
  Social/other
Teacher action for academics
  Explanation
  Direction
  Assessment
  Question
  Positive feedback

  Correction
  Review
Teacher action for social behavior
  Precorrection
  Positive reinforcement
  Correction
  Supervision
Class engagement
  Most
  Half
  Less
```

AUTHOR NOTES

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REFERENCES

Alvero, A. M., Bucklin, B. R., & Austin, J. (2001). An objective review of the effectiveness and essential characteristics of performance feedback in organizational settings. Journal of Organizational Behavior Management, 21, 3-29.

Balcazar, F., Hopkins, B. L., & Suarez, Y. (1985). A critical objective review of performance feedback. Journal of Organizational Behavior Management, 7, 65-89.

Brophy, J. (1986). Classroom management techniques. Education and Urban Society, 18, 182-194.

Colvin, G., & Lazar, M. (1997). The effective elementary classroom: Managing for success. Longmont, CO: Sopris West.

Cossairt, A., Hall, R. V., & Hopkins, B. L. (1973). The effects of experimenter's instructions, feedback, on teacher praise and student attending behavior. Journal of Applied Behavior Analysis, 6, 89-100.

Evertson, C. M., Emmer, E. T., Clements, B. S., & Worsham, M. E. (1994). Classroom management for elementary teachers (3rd ed.). Boston: Allyn & Bacon.

Frase, L., & Hetzel, R. (1990). School management by wandering around. Lancaster, PA: Technomic.

Jones, K. M., Wickstrom, K. E, & Friman P. C. (1997). The effects of observational feedback on treatment integrity in school-based behavioral consultation. School Psychology Quarterly, 12, 316-326.

Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. Education Administration Quarterly, 30. 370-397.

Martens, B. K., Hiralall, A. S., & Bradley, T. A. (1997). A note to teacher: Improving student behavior through goal-setting and feedback. School Psychology Quarterly, 12, 33-41.

Moore, J. W., & Schaut, J. A. (1978). Increasing instructional effectiveness through the use of a problem-solving approach to the design of instructional systems. The Journal of Experimental Education, 47, 156-161.

Mortenson, B. P., & Witt, J. C (1998). The use of weekly performance feedback to increase teacher implementation of a prereferral academic intervention. School Psychology Review, 27, 613-627.

No Child Left Behind Act of 2001 (NCLB). (2001). Pub. L. No. 107-110, 115 Stat. 1425 (2001).

Noell, G. H., Duhon, G. J., Gatti, S. L., & Connell, J. E. (2002). Consultation, follow-up, and behavior management intervention implementation in general education. School Psychology Review, 31, 217-234.

Noell, G. H., Witt, J. C., Gilbertson, D. N., Ranier, D. D., & Freeland, J. T. (1997). Increasing teacher intervention implementation in general education settings through consultation and performance feedback. School Psychology Quarterly, 12, 77-88.

Noell, G. H., Witt, J. C., LaFleur, L. H., Mortenson, B. P., Ranier, D. D., & LeVelle, J. (2000). A comparison of two follow-up strategies to increase teacher intervention implementation in general education following consultation. Journal of Applied Behavior Analysis, 33, 271-284.

Noell, G. H., Witt, J. C., Slider, N. J., Connell, J. E., Gatti, S. L., Williams, K. L., et al. (2005). Treatment implementation following behavioral consultation in schools: A comparison of three follow-up strategies. School Psychology Review, 34, 87-106.

Rose, L. C., & Gallup, A. M. (2003). The 35th annual Phi Delta Kappa/Gallup poll of the public's attitudes toward the public schools. Phi Delta Kappan, 85, 41-56.

Sherman, W. H., & Grogan, M. (2003). Superintendents' responses to the achievement gap: An ethical critique. International Journal of Leadership in Education, 6, 223-237.

Sprick, R., Garrison, M., & Howard, L. (1998). CHAMPs: A proactive and positive approach to classroom management. Longmont, CO: Sopris West.

Taylor, B. M., Pearson, P. D., & Rodriguez, M. C. (2003). Reading growth in high-poverty classrooms: The influence of teacher practices that encourage cognitive engagement in literacy learning. Elementary School Journal, 104, 3-28.

Togneri, W., & Anderson, E. A. (2003). Beyond islands of excellence: What districts can do to improve instruction and achievement in all schools--A leadership brief Washington, DC: Learning First Alliance.

Walker, H., Colvin, G., & Ramsey, E. (1995). Antisocial behavior in schools: Strategies and best practices. Pacific Grove, CA: Brooks/Cole.

Witt, J. C., Noell, G. H., LaFleur, L. H., & Mortenson, B. P. (1997). Teacher use of interventions in general education settings: Measurement and analysis of the independent variable. Journal of Applied Behavior Analysis, 30, 693-696.

Wong, H. K., & Wong, R. T. (1991). The first days of school: How to be an effective teacher. Sunnyvale, CA: Wong Publications.

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