Examining Key Components of Classroom-Level PBS

4th International Conference on Positive Behavior Support
March 10, 2007
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Statement of the Problem

- Ample evidence to support that school-wide positive behavior support is effective (Horner et al., 2004).
- Several assessment tools available to evaluate the fidelity of SW-implementation (School-wide Evaluation Tool, Effective Behavior Support survey, and the School-wide Benchmarks of Quality).
- In addition, research is currently being conducted utilizing a tool designed to assess individual student systems (Palmer & Todd, in press).
- Until recently, however, little attention has been given to identifying critical or key components of PBS in classrooms.
Why focus on classroom systems?

- Effective classroom practices are considered a prerequisite for maximizing instructional time (Ysseldyke and Christenson, 1996).
- Approximately one-half of all classroom time is taken up with activities other than instruction (Cotton, 1990).
- Specific instances or circumstances that exist in classroom environments can act as setting events (or triggers) for behaviors that occur in non-classroom environments.
- Developing classroom systems can also be appropriate in situations where a class includes more than one student exhibiting the same problem behavior. (Johnson, Stoner, & Green, 1996)
- Can be advantageous for other students with similar but less noticeable problems.
Where does it fit in?

- In keeping with the conceptual framework offered by Horner and Sugai (2004), a systems-approach to PBS should consider multiple levels of implementation (i.e., district, school-wide, classroom, individual).

- Classroom PBS should parallel the building-level system. In other words, practices emphasized in classroom systems should be consistent with those practices in the school-wide system (i.e., nonclassroom settings).

- The focus is still primarily on universal prevention, designed for use with all students in a classroom.
Review of the Literature

- Classroom-level supports:
  - The goal is to extend and support the school-wide system so that students can show success across variations in curriculum, instructional style, classroom routines, and settings (OSEP, Classroom Supports, 2004)
  - Researchers have identified ways that classroom systems should be implemented and developed within the school-wide system:
    - Establishing classroom rules and expectations
    - Directly teaching school-wide and classroom rules and expectations
    - Utilizing a system for rewarding behavioral expectations
    - Utilizing a system for responding to behavioral violations (Horner, Todd, Lewis-Palmer, Irvin, Sugai, & Boland, 2004)
Review of the Literature

Effective Classroom Management

The instructional environment (including instructional planning, management, delivery, and monitoring) can function as a setting event for behavior (appropriate and inappropriate) (Ysseldyke & Christenson, 1996)

Effective manager behaviors used to keep students focused on learning and to reduce the likelihood of student misbehavior are:

- Maintaining a brisk, well-organized, and teacher-directed pace of instruction
- Efficient, orderly, and smooth transitions between instructional and non-instructional activities
- Using effective, immediate, and behavior specific praise
How do we assess classroom components?

- With the recent emphasis on classroom PBS has come the need to investigate the components of such systems.
- In order to conduct research on classroom implementation, it was necessary to have a measurement tool that was capable of evaluating the presence or absence of clearly defined, research-validated classroom supports.
- In developing such an assessment instrument, it was important to ask several questions:
  - What are the most critical features to assess in classrooms?
  - How would we identify the presence or absence of such features in classrooms?
  - What sources of data would most accurately describe the status of PBS in classrooms?
  - What is the relationship between each data source and positive student outcomes?
Analysis of Key Features

- Any tool designed to assess classroom PBS components should include items relevant to the first four of the seven key features of SW-PBS identified by Horner et al. (2004).
  - include items related to whether or not the behavioral expectations had been defined, directly taught, whether or not a system exists for rewarding behavioral expectations, and for responding to behavioral violations.

- Effective classroom management practices
  - having routines to limit unstructured down-time, using advanced organizers and pre-corrections prior to major transitions, using praise effectively, using a high number of positive to negative interactions with students, and using frequent checks for student understanding).
Analyzing of Key Features

- In order to develop a tool for assessing classroom-level PBS:
  - potential items/questions were gleaned from a variety of other instruments (EBS survey, PBS-CAT, SET, The Instructional Environment System-II)
  - categorized by like feature/domain
  - evaluated by proposed data source and format.

- To evaluate the importance of including each item and feature on the tool, research literature for supporting each feature was examined and documented.

- The outcome of this process was the development of the Tool for Assessing Classroom Level –Positive Behavior Support (TACL-PBS).
Data should be obtained from multiple informants so as to “triangulate” the indicators of any variable being studied. 

Reynolds and Kamphaus (1992) suggested that ratings be obtained from numerous individuals in numerous settings, and also highlight the value of using observational data to supplement ratings. 

Achenbach, McConaughy, and Howell (1987) studied consistency between ratings by multiple informants and concluded that while disagreements between informants’ reports may exist, they can be as instructive as agreements. 

Different informants validly contribute different information and that it is important to preserve the contributions of different informants. 

**Bottom Line:** 
- it was important to consider multiple methods when designing a tool for assessing the status of classroom PBS implementation.
Overview of the Data Collection Methods
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Tool for Assessing Classroom-Level: Positive Behavior Support (Ern, 2004)

- Developed to assess the key features of PBS at the classroom-level
- It includes items in five domains:
  1. Expectations defined
  2. Behavioral expectations taught
  3. Ongoing system for rewarding behavioral expectations
  4. System for responding to behavioral violations
  5. Teacher skill/classroom management
- The first four domains represent four of the seven key features of SW-PBS identified by Horner et al. (2004).
TACL-PBS:
Methods used to Collect Data

- 3 independent methods are used to triangulate the evidence of PBS components in a classroom.
  - Teacher interview
  - Student interview
  - Key Feature Analysis
    - Involves both direct observation and review of permanent products
- The main focus of the data collector is to capture evidence of the PBS features that are present in the classroom
Methods (cont’d)

- The various methods include parallel items to ensure that informants are rating the same features.
- Alternate questions are available for each student interview item to ensure understanding by students of varying ages and developmental levels.
- In order to triangulate the evidence of PBS features within each classroom, the tool also includes a key feature analysis (KFA) which involves both direct observation of student and staff behavior and a review of permanent products (e.g., review of lesson plans, instructional materials, discipline log, rules/classroom procedures that may be posted, etc.).
Key Feature Analysis

- The focus of the data collector in conducting the KFA is to capture evidence of the PBS features that were present in the classroom.
  - For example, the data collector would review lesson plans or instructional materials to assist in determining whether or not there was a documented system for teaching behavioral expectations and rules to students.
  - To obtain evidence about how frequently teaching of rules and expectations occurred in the classroom (i.e., ongoing/frequent teaching, only in response to behavioral violation, once at the beginning of the year), the data collector would observe in the classroom during instruction.
TACL-PBS Evaluation Sheet

- Response evaluation sheets are formatted to record student and teacher responses verbatim and to assign codes to those responses.
- This allows the data collector to carefully examine the responses and observations at a later time and review the scoring criteria for each item before assigning a score.
- A list of abbreviations are provided on the student and teacher sheets to help record responses:
  - DK = don’t know
  - NR = no response
  - Q = had to query response
  - DNUQ = did not understand question
- On the KFA, data collectors should indicate the type of information that was used to provide evidence of the feature:
  - O = observation; PP = permanent product; NE = no evidence
TACL-PBS Scoring

- Scores for each item range from 0 to 2
  - 0 represents no evidence of that feature being implemented
  - 1 represents some or partial evidence
  - 2 represents clear evidence
- Summary scores are calculated for each domain by each informant.
- Total scores are obtained for each informant by adding together the summary scores for each feature measured.
- The total score represents the percent of features that are reported by that informant.
The TACL-PBS is conducted in the following step-wise fashion:

1. Meet with the PBS Team Leader/School Contact
2. Setting up/conducting the teacher interview
3. Conducting the Key Feature Analysis (KFA)
4. Conducting the Student Interviews
5. Reviewing responses and scoring tool
Which methods are most useful in assessing classroom components?

- **Phase 1**
  - conducted with six classrooms
  - served two primary purposes:
    - to test out the procedures by which the assessment tool would be administered and to revise them based on the findings
    - to take a look at variability between the ratings of informants.

- **Why?**
  - Does the assessment tool have merit?
  - To correct obvious flaws before conducting a formal, full-scale study.
  - How do we best use the data?
  - What is the potential utility of the information?
  - Would different informants provide similar or different pictures of what was happening in classrooms?
Brief Summary of Results

- Teachers consistently reported a greater number of classroom PBS features than students across all domains of the TACL-PBS
  - Agreed most on whether or not the expectations had been defined
  - Least on items assessing how well they had been taught
- Total scores for each student within the same classroom differed by an average of 5.3 points
  - Kindergarten students showed the greatest point difference; third grade student scores differed the least
Phase II of Study

- Horner et al. (2004) called for additional research to be done that documents the relationship between various features of PBS and valued outcomes.
- The purpose of this study was to evaluate the degree to which items on the TACL-PBS predict positive outcomes at the classroom-level.
Research Question #1:

- What is the relationship between the number of critical components present in the classroom and positive student outcomes?

- **Hypotheses:**
  - Classrooms that have a high number of critical components of PBS in place will experience fewer disciplinary events than classrooms with a low number of PBS components.
  - Classrooms that have a high number of critical components of PBS in place will experience higher rates of on-task behavior than comparable classrooms with a low number of PBS components.
Research Question #2:

- Which individual, or combination, of three data sources on the TACL-PBS best predicts positive student outcomes?

- **Hypothesis:**
  - Scores obtained by either the student interview method or key feature analysis (KFA) will be more predictive of positive student outcomes than scores obtained by the teacher interview method.
Research Question #3:

- Which component on the TACL-PBS is most predictive of positive student outcomes?

- **Hypothesis:**
  - High scores on Domain B (Behavioral Expectations Taught) will be most predictive of positive student outcomes, regardless of data source.
Research Question #4:

- What is the relationship between the fidelity with which school-wide PBS is being implemented, implementation at the classroom-level, and positive student outcomes?

- **Hypotheses:**
  - Schools with higher SW-BOQ scores will have classrooms that score higher on the TACL-PBS than schools with lower BOQ scores.
  - Schools with higher BOQ scores will have classrooms that experience fewer disciplinary events and higher rates of on-task behavior than classrooms in schools with lower scores.
Research Method:

- 10 elementary schools:
  - All implementing school-wide PBS system for at least one full year prior to this study.
  - All schools using SWIS information system
  - All schools received their initial training and ongoing technical assistance from Florida’s PBS Project based at FMHI/USF.
Classroom selection

- 2 classrooms from each of two grade levels (2nd and 4th) will be selected at each of the ten participating schools, for a total of 40 classrooms.
- Only general education classrooms will be included in this study.
- At each school, SWIS will be used to report the total number of ODR’s written by 2nd grade teachers, and again by 4th grade teachers.
- The median will be used to reflect the average number of ODR’s in the sample. Those above median coded High Average; below Low Average
- Only one high and one low referring classroom at each grade level per school will be selected
Student selection

- A simple random sampling method will be used to select a sample of 3 students from each classroom.
- A total of 120 students will participate in this study.
- Only students who spend a majority of their academic day in a general education classroom AND who show the ability to fully understand and respond verbally to the questions asked by the researchers will be included in this study.
- Student with moderate to severe cognitive or physical disabilities (i.e, TMH, PMH, Dual Sensory, SLI) will be excluded from participation from this study.
Summary of Results

- The results of this study found low to moderate degrees of association between the features assessed by the TACL-PBS and positive student outcomes.

- It appears that the teacher’s consistent use of classroom management strategies had the greatest influence on the numbers of office discipline referrals written in classrooms.

- None of the predictor variables included in this study contributed significantly to differences in rates of on-task student behavior.

- Overall, it appeared that the fidelity with which school-wide PBS was being implemented at the building-level did not significantly predict implementation at the classroom-level.
Directions for Future Research

- Study has provided initial insight into the relationship between basic PBS components and behavioral outcomes, yet it has also raised additional questions:
  - What are the desired outcomes of PBS at the classroom-level?
  - Is the goal of PBS in classrooms to maximize student learning?
- Examine the relationships between various PBS components and academic outcomes.
  - Achievement/productivity
- Factor analysis studies to look at items and domains on the TACL-PBS
- Validity studies of ODR’s at the classroom-level