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Bridget Anne Walker



The Initial Psychometric Assessment Of The BEACONS Positive Behavior Support  
Individual and Team Self-Assessment and Program Review

Bridget Anne Walker

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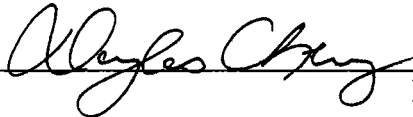
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**ABSTRACT**

The Initial Psychometric Assessment Of The BEACONS Positive Behavior Support  
Individual and Team Self-Assessment and Program Review

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An increasing number of schools in this country are initiating systemic positive behavior support (PBS) efforts to support students with or at-risk of school failure. In doing so, it is helpful for schools to have access to a self-assessment process, which utilizes benchmarks related to evidence-based practices to help them evaluate their progress towards effective implementation. While some tools exist which specifically measure the school-wide, or primary level, of PBS supports, no measure has yet been established that allows schools to rate the level at which their systems at all three levels of the PBS model (primary, secondary, and tertiary) are in place. The BEACONS Project at the University of Washington has developed a *PBS Self-Assessment and Program Review* (Cheney & Walker, 2003), which consists of 10 evidence-based practices or subscales, that include evidence-based indicators related to systems at all three levels of the PBS model. School staff rate their level of implementation using a Likert scale of 1 to 5 on each practice, meet as a team to discuss their findings and determine a team rating on the practice, then use the results to provide feedback for developing and evaluating school improvement efforts. This study describes techniques for establishing the initial reliability and validity of this self-assessment to determine if the measure warrants a larger scale psychometric study. Initial results indicate that the measure has both good reliability and validity in most areas. However, there were some issues associated with establishing criterion validity.

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## **DEDICATION**

In loving memory of my Grandparents, Aunt, and Mother

who I believe would be very proud.

For my Father, who I know is.

and to my incredible husband Scott Condon,

for everything he has done to make this possible.

## Chapter 1

### Introduction and Statement Of The Problem

Schools today are faced with tremendous challenges as they attempt to meet the social and academic needs of an increasingly diverse student body. For example, in Washington State student demographics for the 1996-1997 school year indicated that 31% received free or reduced lunch benefits, 11% qualified for special education, and 5% qualified as transitional bilingual. At that time, students of color represented 23% of the total population. This contrasts with the student demographics for the 2004-2005 school year, which indicated that 36% received free or reduced lunch benefits, 12% qualified for special education, and 7% qualified as transitional bilingual. Students of color represented 29% of the total population, with the largest growth in Hispanic students (Office of the Superintendent of Public Instruction, 2006). In a recent survey of 400 Washington State teachers conducted for the Center for Strengthening the Teaching Profession, approximately half reported that they have begun experiencing these changing demographic trends in their classrooms over the last five years, particularly in the area of English Language Learners (Knapp, Elfers, Plecki, Loeb & Zahir, 2005).

Findings from the national Special Education Elementary Longitudinal Study (SEELS) indicate that 55% of the students who qualify for special education receive their primary language arts instruction in general education classrooms. Within this instructional area alone, special education students receive an average of six accommodations and learning supports such as modified materials and/or tutoring (Wagner & Blackorby, 2004). Even with the support of special educators, meeting the needs of such a wide range of students is a challenge for general education teachers.

In addition to the shifting student demographics, recent federal policy changes to improve school accountability have increased the pressure on schools and teachers to demonstrate a level of academic growth for all students, including those with disabilities that are unprecedented in public education. The expectations set for schools by the No Child Left Behind Act (U.S. Department of Education, 2003) have increased the importance of supporting academic and social success for all learners, regardless of individual need or ability. Schools that are not able to demonstrate “adequate yearly progress,” as defined by the federal government stand to receive significant penalties. Yet, when surveyed only 34% of Washington State teachers reported that they felt “very prepared” to manage the diverse learning needs in their classrooms (Knapp, Elfers, Plecki, Loeb & Zahir, 2005).

Changing demographics and increased accountability are not the only concern for today’s educators. In *Teaching Interrupted: Do Discipline Policies in Today’s Public Schools Foster the Common Good?* (Public Agenda, 2004) 725 secondary school teachers and 600 parents of secondary students from throughout the United States were polled on their perceptions of educational practices. They found that 77% of the teachers thought that their teaching would be more effective if they did not have to spend so much time on disruptive students, and 43% of the parents felt that their child’s ability to learn was negatively impacted by the teachers’ need to attend to the discipline of other students (Public Agenda, 2004). It is within this context that schools in the 21st century must continue to develop their curriculum, instructional strategies, and programs for supporting the social and emotional needs of all the students, including those with or at-risk of developing learning and/or behavioral problems.

To provide some direction to schools on how they might address these needs and issues, the *Individuals with Disabilities Education Act of 1997* (IDEA 97; U.S. Department of Education, 2000) required schools to provide positive behavior supports (PBS) and functional behavioral assessments (FBA) to students with or at-risk of developing emotional or behavioral disabilities (EBD). Although the wording of the final regulations has not yet been completed, these requirements have been continued, with some changes, within the 2004 IDEA reauthorization (IDEA 2004; U.S. Department of Education, 2004). While IDEA 97 mandated the use of FBA only for special education students who face a significant disciplinary action, the use of "positive behavior interventions and supports" is defined as a more proactive approach for any student whose "behavior impedes his or her learning, or the learning of others" (IDEA 97, Sec. 614 (d) (3) (B) (I); U.S. Department of Education, 2000). This allowed schools to begin developing more proactive responses to discipline issues. The 2004 IDEA reauthorization builds on these earlier practices by requiring school teams to conduct an FBA and develop or modify a behavior intervention plan for students whose behavior has been found to be a manifestation of his or her disability (IDEA 2004, Sec. 616 (k) (1) (C) or (G); U.S. Department of Education, 2004) or when a student is placed in an interim alternative educational setting as the result of inflicting "serious bodily injury upon another person while at school, on school premises, or at a school function" (IDEA 2004, Sec. 615 (k) (1) (G); U.S. Department of Education, 2004).

*Positive behavior support as a potential solution.* For more than a decade researchers have been exploring ways that schools can implement FBA/PBS strategies as an early intervention in addressing students' problem behavior and as part of a

comprehensive approach to providing school-wide supports and interventions for all students (Chandler, Dahlquist, Repp, & Feltz, 1999; Learning First Alliance, 2001; McNamara & Hollinger, 2003; Scott & Nelson, 1999; Sugai & Horner, 1999). Based on the work of public health and prevention science, PBS focuses on addressing systemic issues in schools to positively address the areas of discipline, academic performance, and social/emotional development for all students. A major construct of the PBS model is that there are three levels of prevention/intervention that should correspond with a continuum of supports and interventions for the school's students. (Sprague, Sugai, Horner & Walker, 1999; U.S. Department of Education, 2000; Walker, et al., 1996). An example of a universal intervention is the teaching and reinforcing of school-wide expectations. Sprague, Sugai, Horner, and Walker (1999) have theorized that approximately 80% of the students in a school will need no further interventions or supports when systems at this level are positive, consistent, and well established.

The next level of support is referred to as "secondary" or targeted group because specific services and supports are provided for particular students with identified needs. These students are often considered to be at-risk for developing more significant emotional, behavioral, and/or academic problems. It is estimated that approximately 10-15 % of a school's population have needs at this level. Supports typically provided for these students include social skills groups, school counseling, peer tutoring, after school homework clubs, etc. (Sprague, Sugai, Horner & Walker, 1999; Sugai & Horner, 1999).

The third level is referred to as "tertiary" or comprehensive. Students at this level have significant, well-established needs that require specific, individualized supports. While many of these students may qualify for categorical programs such as special

education, many others with significant behavioral concerns who do not qualify for such services are also found at this level. Individualized behavior contracts, systematic functional behavioral assessment and behavior support plans, as well as Individualized Education Plans are typical supports at this level (Sprague, Sugai, Horner & Walker, 1999; Sugai & Horner, 1999).

Findings on the effects of school-wide implementation of PBS on schools and students to date have been promising. Schools that implement systematic school-wide positive behavior support programs are consistently decreasing the number of office discipline referrals for student conduct problems (Horner, Sugai, Todd, & Palmer, 2004; Sugai & Horner, 1999), their rates of student suspension (Scott, 2001), and the number of students referred to more resource intensive programs such as special education (Walker, Cheney, Stage, & Blum, 2005). These changes free up time and resources that can be focused on school and academic improvement efforts (Scott & Barrett, 2004).

Because of these promising results, a number of states throughout the country have initiated projects to help their schools successfully implement school-wide positive behavior support programs. These include Illinois, New Hampshire, Nebraska, and North Carolina. Since 1998, research and demonstration projects at the University of Washington in Seattle have partnered with the Office of Special Education Programs, Washington State education agencies, schools, and families to begin building a statewide network of elementary schools utilizing PBS. The goal of this project was to meet the emotional, behavioral, and academic needs of all students in Washington State schools, but particularly those with or at-risk of developing emotional or behavioral disabilities (EBD). The model, known locally as the BEACONS Project (*Behavioral, Emotional, and*



*Academic Curriculum On the Needs of Students with Emotional or Behavioral Disabilities*), initially focused on achieving positive outcomes for students with or at-risk of EBD at four demonstration schools throughout the state (Cheney, 1998). The results of this project mirrored those throughout the country, with participating schools reducing office discipline referrals, enhancing PBS supports for students and families, and reducing the numbers of students referred to special education (Cheney, Blum, & Walker, 2004; Walker, Cheney, Stage & Blum, 2005).

In 2003 the BEACONS Project was awarded a second federal grant (Cheney, 2003) to expand the implementation of this project to school districts throughout Washington State in an effort to increase the local capacity of districts to establish and sustain PBS programs. The focus of this project is to support schools in developing comprehensive school-wide positive behavior support systems to meet the needs of all students in the school, including those with or at-risk of developing emotional or behavioral problems. The project emphasizes systematic school improvement efforts across all three levels of the PBS model (primary, secondary, and tertiary). In its first year, the BEACONS Outreach Project worked with 13 elementary schools in 7 school districts throughout Washington State. In the second year of the project, participating schools increased to 23 schools in 10 school districts.

Schools in the BEACONS Project receive training and consultation to develop and sustain PBS systems. The project focuses on three training goals, which correspond with the three level model of PBS. These training goals are summarized in Table 1. The first training goal focuses on the foundations of PBS and helps schools develop and enhance their school-wide systems. It begins during the project's first summer training,

where 6-8 representatives of each school's leadership team review approaches to develop and implement a positive school-wide discipline system in their school. These team members then present their strategies and activities to their school faculty, who help to define, teach, and recognize desired behaviors as school begins.

The schools are also introduced to the *School-wide Information System* © (SWIS) (May, Ard, Todd, Horner, Glasgow, Sugai, & Sprague, 2000) to systematically track office discipline referrals. *SWIS* is a secure web based data management system that allows schools to enter and monitor office discipline referrals on a school-wide and individual basis. SWIS can be used to create numerical reports or charts to reflect individual or school-wide discipline reports. This information can be used for internal decision making on school-wide discipline issues; to support development of a student's behavior intervention plan; or for creating school, district, or state discipline reports. School teams are taught how to utilize this data for decision-making both at the school-wide and individual student level.

The second BEACONS training goal focuses on supports for at-risk students. School leadership teams learn how to implement a systematic school-wide screening process to identify students who may need additional interventions and supports. Staff are trained to integrate exemplary practices into classroom and school settings, and systematically monitor social and academic outcomes. The emphasis of this training goal is to expand the school's capacity to provide preventative and early intervention supports for at-risk students before problems become well established (Hawken & Horner, 2003; Walker, Cheney, Stage, & Blum, 2005).

The third training goal focuses on helping school teams learn how to effectively complete a Functional Behavior Assessment (FBA) and use that information to develop a Behavior Intervention Plan (BIP) for students with intensive/chronic behavior problems. These strategies help schools learn to understand the function of a child's behavior and to develop a system of supports and interventions that builds the child's prosocial skills and promotes social and behavioral success (Quinn, Gable, Rutherford, Nelson, & Howell, 1998; O'Neill et al., 1997). In this way, students with intensive/chronic behavior problems have the support they need to function more successfully in their classroom environment. Leadership teams also learn to support teachers, monitor progress, and involve parents more effectively in this process.

Between the scheduled trainings, project staff meet with school leadership teams and faculty to provide coaching and technical assistance as the schools begin to implement new strategies and system's supports. The emphasis is on helping the schools establish systems and learn strategies that will be sustainable long after the project has been completed. Participating school teams are also encouraged to visit one another in order to share strategies, approaches, and ideas for the implementation of PBS supports.

Table 1

BEACONS Outreach Project: Training Goals and Project ActivitiesTraining Goal 1: Foundation and Schoolwide PBS

Identify District Coordinator & Building Coordinator

Begin using Schoolwide Information System (SWIS)

Conduct Schoolwide Evaluation Tool (SET)

Develop building based PBS leadership team

Identify and teach school-wide expectations

Conduct school-wide screening

Enhance school and family communication

Training Goal 2: Supports for At-Risk Student

Identify at-risk students based on screening and/or office discipline referrals

Student support teams receive training on evidence based practices

Teams use evidence based practices with at-risk students

Teams systematically support teachers and monitor students' outcomes

Training Goal 3: Support Students with Intensive Behaviors

Student support teams meet to develop and implement Functional Behavior Assessments (FBA) and Behavior Intervention Plans (BIP)

Teams systematically support and monitor student's social and academic outcomes

Families are involved and supported

Comprehensive Plans are developed for students with intensive needs

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*Characteristics of effective schools and PBS.* The BEACONS approach to the successful implementation of school-wide PBS integrates important characteristics of effective schools within the framework of the three level PBS model. For example, research on school improvement has identified a number of characteristics that are

indicative of effective schools that are also considered critical elements of effective PBS. These include: (a) school improvement efforts that are coordinated and defined by individuals within the school, district, and community; (b) school leadership that provides a clear vision and is representative of the school community; (c) faculty who engage in collaborative planning and problem solving; (d) meaningful data is used to inform decision making; (e) staff implement evidence-based approaches to meet established goals; and (f) staff monitor, evaluate, and adjust efforts based on data (Bruce, 1993; Curtis & Stollar, 2002; Knoff, 2002; Schlechty Center, 2006).

Schools that are able to implement these characteristics become what is often referred to as a 'learning organization' (Garvin, 1993; Senge, 2000). In his book, *Schools That Learn* (2000), Senge proposes three questions to evaluate whether or not a school has "learned to learn."

(a) Does the organization have a clear and honest understanding of its current reality?

(b) Is the understanding of current reality shared throughout the organization, and from there do you create new knowledge?

(c) Is this knowledge translated into effective action toward the desired future?

Schools that are able to consistently ask themselves these questions are referred to as "self-renewing" because such questioning facilitates ongoing growth and development.

"A self-renewing school is inquiry oriented. School staff examine evidence before they adopt initiatives, and they examine evidence when changes are made (Bruce, 1993 p.

22)." Once a school community understands and regularly implements this organizational

learning process, they are better able to implement and sustain long-term improvements and changes.

Another important characteristic of effective learning organizations that is strongly emphasized in PBS is the ability to identify evidence-based practices that can be used as guidelines for program development and ultimately as standards for success. Within the field of organizational development this has been referred to as benchmarking. “Benchmarking compares organizational growth against best practices in the world. It is a means of constantly seeking, then maintaining optimum quality” (Calabrese, 2000, p. 95). This type of data provides a road map of sorts for schools implementing improvement activities, allowing staff to evaluate their current functioning, and providing standards against which to measure future progress. This data is most meaningful when it involves gathering input from all stakeholders in a school, including staff, students, and family members. The results are then used to identify needs and gaps in current functioning as well as to evaluate the impact of changes as they are implemented (Calabrese, 2000; Learning First Alliance, 2001). This approach to long-term school change is also an important aspect of the BEACONS Project’s approach to effectively implementing PBS.

*Self-studies and school improvement.* Several self-studies have been developed in the last decade to help schools measure their efforts to improve school climate by examining their level of functioning against benchmarks derived from school climate research. For example, the Center for Prevention Research and Development has developed the *School Improvement Self Study*. It surveys staff and students to measure school climate, parent involvement, discipline, safety and other elements related to

effective school functioning (Center for Prevention Research and Development, 2004; Learning First Alliance, 2001). The *Effective School Battery* (Gottfredson, 1991) utilizes surveys completed by teachers and students to assess elements related to school climate such as safety, leadership, parent/community involvement, clarity of rules, attachment to school, and job satisfaction. The *Organizational Health Survey* (Hoy & Feldman, 1999) has been used by many secondary schools to assess their school climate and cohesiveness along 10 dimensions. These include: goal focus, communication adequacy, power equalization, resource utilization, cohesiveness, morale, innovativeness, autonomy, adaptation, and problem solving adequacy. The information from these surveys is analyzed and then returned to the school staff so that they can identify goals and objectives to address areas of concern as well as measure progress.

While the information in these surveys is important and helpful in developing a positive and productive school climate, none of the surveys specifically address the key attributes related to the supports suggested by the PBS model. To address this the Center on Positive Behavioral Interventions and Supports (PBIS Center) at the University of Oregon has developed the *Effective Behavior Support Survey* (EBSS; Sugai, Horner, & Todd, 2003) to assist schools in annually evaluating their behavior support systems across four dimensions: school-wide, non-classroom, classroom, and individual student. Each dimension contains features that reflect specific aspects of PBS practices such as “expected student behaviors are taught directly,” “consequences for problem behaviors are taught directly,” or “students experience high rates of academic success (> 75%).” The survey is given to each staff member who reviews the items, then rates whether they feel the feature is either “in place, partially in place or not in place” in their school. Staff

also indicate what they believe the priority for improvement for this feature should be by checking either “high, medium, low” for each feature. The leadership team then reviews the results and sets their action plan based on the items that received the highest number of votes in each area.

One measure that has actually been psychometrically established by the University of Oregon was designed specifically to evaluate the fidelity with which a school is implementing established practices at the primary or school-wide level of a PBS system. The *School-wide Evaluation Tool* (SET) (Horner, Todd, Lewis-Palmer, Irvin, Sugai, & Bolland, 2004; Sugai, Lewis-Palmer, Todd, & Horner, 2001) is a 28-item research tool that is completed at the school by an external evaluator. It involves short interviews of students and staff, a walk through of the building, and a review of written products related to aspects of school-wide PBS. The results rate a school’s primary level PBS systems across 7 subscales, such as “teaching expectations”, “appropriate behavior is recognized”, or “discipline data is used for decision making.” This data is crucial to helping leadership teams determine how well established their school-wide systems have become. However, schools also need to be able to assess their implementation of the essential attributes at all three levels of the PBS model, including secondary and tertiary.

Despite a growing body of literature indicating what *should* be done to implement PBS effectively, no measure has been psychometrically developed that can provide systematic feedback to schools on the effectiveness of their implementation of PBS practices across all three levels of the model (primary, secondary, and tertiary). Research on school effectiveness has indicated that this type of information is necessary for schools to maximize their improvement efforts. To fulfill this need, the BEACONS



Project initiated the development the *BEACONS PBS Self-Assessment and Program Review* process (Cheney & Walker, 2003a; 2003b) that would meet this need for schools engaged in PBS initiatives. A copy of both the *BEACONS PBS Leadership Team Self-Assessment and Program Review* (Cheney & Walker, 2003a) and the *BEACONS PBS Individual Self-Assessment and Program Review* (Cheney & Walker, 2003b) forms can be found in Appendix C. While successfully used in a pilot form, this self-assessment tool has not yet been psychometrically evaluated for reliability and validity. The purpose of this study is complete an initial evaluation of the measure to determine if it is a tool that the project should continue to use and whether is would be worthwhile moving forward with a large scale psychometric evaluation.

## Chapter 2

### Literature Review

To provide schools with a practical measure for assessing their progress in implementing exemplary practices across all three levels of PBS supports, the BEACONS Project developed and piloted a self-assessment survey called the *BEACONS PBS Leadership Team Self-Assessment and Program Review* (Cheney & Walker, 2003a). This self-assessment survey allows schools to assess their programs in comparison to evidence-based practices or benchmarks related to the universal, secondary, and tertiary levels of the PBS model, with an emphasis on prevention and early intervention systems and supports for students with or at-risk of developing emotional or behavioral problems (EBP). Members of the school's leadership team complete the inventory annually to provide a yearly pre-post measure of change in areas that have been identified by each school's leadership team as priorities of improvement as part of their PBS initiatives.

*BEACONS Project Literature Review.* Staff from the BEACONS Project conducted an extensive literature review process that included reviewing the table of contents from journals that report on research related to school improvement, special education, prevention and early intervention, and behavioral issues. Examples of the journals reviewed include: *Behavior Disorders*, *Prevention Science*, *Journal of Positive Behavior Supports*, *Exceptional Children*, *Journal of Emotional and Behavior Disorders*, and *Journal of School Psychology*. Once relevant articles were identified from these journals, staff reviewed their reference lists to locate other articles. Additionally, a search of computer databases such as ERIC or PsychINFO under search terms such as school improvement, positive behavior supports, school discipline, effective interventions, or

school failure resulted in identifying other relevant literature. These articles were reviewed and key practices identified for inclusion in the SA. Along with the literature review, BEACONS staff conducted a content analysis of school climate surveys as well the existing PBS evaluation tools that are summarized in Chapter 1, such as the *Schoolwide Evaluation Tool* (SET; Sugai, Lewis-Palmer, Todd, & Horner, 2001), the *Effective Behavior Support Survey* (EBSS; Sugai, Horner, & Todd, 2003) and the *PBS Implementation and Planning Self-Assessment* (Center on Positive Behavioral Interventions and Supports, 2002).

*The BEACONS Project's 10 Evidence-based Practices.* As a result of the literature review and content analysis of existing measures, BEACONS Project staff identified 10 PBS practices or subscales and their corresponding indicators. The following section provides a summary of the finding from this review.

*1. Administrative policies and procedures support the education of students with or at-risk of developing emotional/behavioral problems (EBP).* As discussed earlier, the foundation of a school's approach to the effective implementation of school-wide positive behavior supports (PBS) lies in its established policies and procedures. One of the most important practices involves the development of a school leadership team, which includes the school administrator and is representative of the stakeholders within the school and community. This team is a keystone to effective school reform, as it oversees the development and implementation of the school-wide PBS initiative. Members of the leadership team play a key role in facilitating and sustaining the change inherent in any school reform initiative (Dwyer, 2002; Learning First Alliance, 2001;

Sugai, Horner, & Gresham, 2002; Knoff, 2002; OSEP Center on Positive Behavior Support, 2004; Todd, Horner, Sugai, & Sprague, 1999).

As a part of his work on organizational change in schools, Knoff (2001) defines an effective team as, “a highly communicative group of people with different backgrounds, skills, and abilities with a common purpose who are working together to achieve clearly defined goals (p. 30).” Knoff goes on to say that effective teams include members who are, “interdependent, motivated, unafraid of risks and failure, and thrive on challenge (p.30).” In order for this team to have the time, resources, and energy to implement PBS effectively, it is recommended that the PBS initiative be one of the top three initiatives in a school’s strategic plan (Todd, Horner, Sugai, & Sprague, 1999).

The leadership team is responsible for establishing the initial strategic plan that outlines goals and objectives related to the implementation of PBS in their school. The team then meets at least monthly to monitor and evaluate progress towards the goals and objectives outlined in the strategic plan. This includes reviewing discipline data, teacher and parent feedback, assessing progress on the annual plan, as well as planning implementation and dissemination activities for the school community (Knoff, 2000; OSEP Center on Positive Behavior Support, 2004; Todd, Horner, Sugai, & Sprague, 1999).

One of the first steps that a leadership team takes is to work with the full staff and faculty to articulate a purpose or mission statement related to the implementation of PBS and to the support of students with or at-risk of developing emotional/behavioral problems in their school (EBP; Knoff, 2001; Learning First Alliance, 2001). This

statement defines the rationale, beliefs, and purpose for the PBS efforts and serves to orient and guide staff, students, and parents through activities and plans being implemented throughout the school (Cheney & Barringer, 1999; Sugai, Horner, & Gresham, 2002; OSEP Center on Positive Behavior Support, 2004). An effective mission or vision statement is found both in written school materials as well as actively referenced during planning and decision-making throughout the PBS initiative (Cheney & Barringer, 1999; Sugai, Horner, & Gresham, 2002; OSEP Center on Positive Behavior Support, 2004). As the school develops and implements various aspects of PBS practices, they should begin to articulate them clearly and include them in all school policy manuals such as the parent and staff handbooks, and the school's discipline policies (OSEP Center on Positive Behavior Support, 2004; Sugai, Horner, & Gresham, 2002).

Each year the leadership team is charged with evaluating and updating the school's PBS action plan. The action plan contains a series of goals, activities, and timelines for the effective implementation of PBS in their school. The action plan is shared regularly with staff, students, and families, monitored frequently, and adjusted as necessary to maximize the effectiveness and efficiency of the PBS system (Cheney, Blum, & Walker, 2004; Dwyer, 2002; OSEP Center on Positive Behavior Support, 2004; Sugai, Horner, & Gresham, 2002; Todd, Horner, Sugai, & Sprague, 1999).

*2. School policies and programs emphasize prevention and the early identification of students at risk of developing EBP.* For a PBS system to be most effective, it should include a plan for prevention and early intervention for students with emerging academic and/or behavioral problems (Dwyer, 2002; Kauffman, 1999; Walker

et al., 1996). To have the most impact, schools need to develop systems for identifying students early in their school experience and providing systemic supports before a problem becomes established. One process that has shown promise in identifying students who are at-risk for emotional or behavior problems is the implementation of a systematic school-wide screening process such as the Systematic Screening for Behavior Disorders (SSBD; Forness, Kavale, MacMillan, Asarnow & Duncan, 1996; Merrell, 2003; Walker & Severson, 1992). Similar to the process schools use regularly to identify students with emergent academic or health problems, school-wide screening for students at-risk of developing ongoing emotional or behavior problems can help schools more effectively focus existing resources and supports on at-risk students, before their problems become chronic (McKinney, Montague, & Hocutt, 1998; Sprague & Walker, 2000; Walker, Cheney, Stage, & Blum, 2005).

Once at-risk students are identified, they are matched to a continuum of academic, social, and/or behavioral supports that promote the development of successful academic and prosocial skills, while attempting to reduce the impact of any risk factors that may exist for the child (Adelman & Taylor, 2001; Kauffman, 1999; Walker et al., 1996). These supports can be matched to students, coordinated, and then monitored for effectiveness by a teacher assistance or pre-referral intervention team (Walker, Cheney, Stage & Blum, 2005). These supports might include the direct instruction of prosocial skills, a specialized behavior management plan, small group or individual counseling supports, academic accommodations, and/or tutoring (Conduct Problems Prevention Research Group, 2000; Greenberg, Domitrovich, & Bumbarger, 2001; Hawken & Horner, 2003; Learning First Alliance, 2001; Montague, Bergeron, & Lago-Delello,

1997; Tuesday- Heathfield & Clark, 2004). The involvement of family members in selecting and evaluating supports, as well as providing any needed direct support is a crucial aspect to this process as well (Dwyer, 2002; Friesen & Stephens, 1998; Sprague & Walker, 2000). A study comparing schools with comprehensive prevention and early intervention programs containing these components to schools which had more traditional programs in Baltimore, Maryland found that only 8% of the teachers in schools with comprehensive programs referred students to “special programs” in the schools, compared 19% in the comparison schools. They also found that teachers rated their school climate more positively than the teachers in the comparison schools (Bruns, Walrath, Glass-Siegel, & Weist, 2004).

*3. Staff development activities focus on methods to educate students with EBP.* In order for PBS to be successful in supporting students with or at-risk of developing EBP, teachers and other staff responsible for the supervision and management of children need to have the skills and strategies to be effective with a wide range of students. These include effective instructional strategies for diverse learners, evidence-based prosocial skills instruction, individual and group behavior management techniques, and an understanding of how risk and protective factors can influence a child’s success in school (Conduct Problems Prevention Research Group, 2000; Gable & Van Acker, 2000; Learning First Alliance, 2001). Additionally, educators need ongoing training related to the systems, interventions, and other approaches directly related to PBS, such as collaboration with families, function-based assessment of behavior problems, and data-based decision making (Dunlap, Hieneman, Knoster, Fox, Anderson, & Albin, 2000; Lewis, 2001; OSEP Center on Positive Behavior Support, 2004). In PBS this professional

development includes both formalized instruction provided by trainers, or “experts” in a given topic, as well day to day support provided by “coaches” or “organization facilitators” (Adelman & Taylor, 2001; OSEP Center on Positive Behavior Support, 2004). Often within the context of PBS these coaches or facilitators are members of the leadership team. These “change agents” go beyond the traditional training format to provide ongoing implementation support, helping school staff successfully bring to life the systems, concepts, and strategies required to implement PBS effectively. Finally, as part of the overall evaluation of a school’s PBS efforts, participants must be able to provide feedback on the effectiveness and impact of training activities to ensure that they are providing the desired results for staff (Dunlap, Hieneman, Knoster, Fox, Anderson, & Albin, 2000; OSEP Center on Positive Behavior Support, 2004).

4. *Clear and consistent behavioral expectations are established for students across all school settings.* Central to the PBS approach is the importance of providing students with direct teaching of the behaviors necessary to be successful in school (Horner, Sugai, Todd, & Lewis- Palmer, in press; Lewis & Sugai, 1999; OSEP Center on Positive Behavior Support, 2004). This requires schools implementing PBS to identify up to five positively stated expectations that can be applied to both classroom and non-classroom settings, such as the playground, commons areas, or hallways. Once these are agreed upon they are written in the school handbook and posted throughout the school. These expectations are then clearly defined for each setting and a plan or program is developed for all staff to actively teach the expectations to students. Once students have been taught the expectations, staff consistently monitor student behavior and provide frequent recognition or reinforcement to students behaving appropriately. Additionally,



the staff develop clear and appropriate consequences for problem behaviors that are consistently implemented when needed (Colvin, Kameenui, & Sugai, 1994; Horner, Sugai, Todd, & Lewis-Palmer, 2004; Lewis & Sugai, 1999; Todd, Horner, Sugai, & Sprague, 1999). Together these activities help to develop a safe, orderly, and caring learning community, which is so critical to successful learning for all students (Learning First Alliance, 2001; Safran & Oswald, 2003).

In a recent survey of 400 teachers in Washington State, Knapp, Elfers, & Plecki (2004) found that 33% of the teachers surveyed thought that a positive school climate was an important reason for staying in the teaching profession and 60% thought it to be very important. They also found that among teachers who agreed that their school “has well defined expectations for student learning,” 45% of the teachers felt somewhat prepared to help students achieve standards, and 30% felt very prepared. Clearly, well-established behavioral expectations are an important factor in creating a teaching environment where teachers can teach and students can learn.

As described in Chapter 1, the Center for Positive Behavior Interventions and Supports at the University of Oregon, has developed a tool for measuring the fidelity with which a school is implementing these aspects of PBS, called the School-wide Evaluation Tool (SET). The SET is a 28-item research tool that is completed on-site by an external evaluator. It examines and documents the implementation of the PBS systems discussed above (Sugai, Lewis-Palmer, Todd, & Horner, 2001). Recently the reliability and validity of the SET was examined and found to be acceptable in all areas (Horner, Todd, Lewis-Palmer, Irvin, Sugai, & Boland, 2004). Findings indicate that schools which score > 80% on the teaching behavioral expectations subscale and on the total score are considered to

be implementing the primary level of PBS with fidelity. In a study of 140 elementary schools, Horner, Sugai, Bolland, and Todd (2004) found those that met the SET criteria had 25% fewer office discipline referrals (ODR). This suggests that these components of PBS remain important to positively impacting school culture.

Along with directly teaching and reinforcing the school-wide expectations, it can be very helpful towards creating a positive classroom environment and improving the interpersonal skills of students when teachers provide direct instruction from an evidence- based prosocial skills program. For example, the FAST Track Project, a national longitudinal project that examined the effects of systematic interventions across school, classroom, and family for young children at high risk for the development of long-term antisocial behavior, trained teachers to use the *Promoting Alternative Thinking Strategies Curriculum* (PATHS) as part of their elementary level, school based intervention component. Classroom teachers taught the PATHS social skills curriculum 2–3 times a week. It includes teaching students strategies for increasing self-control, emotional self- awareness, positive peer interactions, and social problem solving. Several studies have demonstrated that PATHS can significantly improve the social/emotional competence of students (Conduct Problems Prevention Research Group, 2002, 2000, 1999; Greenberg, Domitrovich, & Bumbarger, 2001). The FAST Track Project found that by including this prosocial skills development program in the school curriculum and integrating it into a comprehensive system of supports within the school and the home, these high risk students had lower overall levels of aggression and participating teachers had higher ratings on the quality of the classroom atmosphere, than students who were

not involved in the project (Conduct Problems Prevention Research Group, 2002, 2000, 1999; U.S. Department of Health and Human Services, 2001).

Several other respected longitudinal studies included the use of an evidence based social skills development curriculum as a part of their integrated interventions. The Seattle Social Development Project included the *Interpersonal Cognitive Problems Solving* program (Hawkins et. al, 2003) in their first grade classrooms. The Linking Interests of Families and Teachers Together Project (LIFT) included a 20 session program designed to increase student social and problem solving skills, as well as the ability to resist negative peer groups (Greenberg, Domitrovich, & Bumbarger, 2001; Reid, Eddy, Fetrow & Stoolmiller, 1999). The *Incredible Years Series* is a curriculum used in early elementary and preschool classrooms as well as in parent training, to build social competence and prevent, reduce, or treat emerging conduct problems in young children (U.S. Department of Health and Human Services, 2001; Webster-Stratton, Reid, & Hammond, 2004; Webster-Stratton & Taylor, 2001). While many teachers state that they do not have enough time in their instructional day to add “another curriculum or subject” into their instructional day. These studies indicate that time spent in providing prosocial skill instruction to students is regained in the form of a more positive classroom environment and improved student behavior.

*5. School procedures for responding to discipline referrals and emergency situations are implemented consistently and effectively.* Even with a well-developed system of teaching and recognizing school-wide expectations, problem behaviors will still occur. This requires schools to develop a system for responding to and tracking office discipline referrals (ODR) that is integrated with the school-wide expectations.

Staff and students should be clear on the responses and procedures related to problem behaviors in order to promote the consistent use of corrective consequences as needed. Additionally, these procedures should be well defined within the school handbook and communicated proactively to parents (Lewis & Sugai, 1999; Todd, Horner, Sugai, & Sprague, 1999).

Often, discipline referrals can be managed through these systems of established consequences and procedures. However, some discipline issues involve students, and at times adults, escalating behavior to a level that significantly disrupts learning and/or may jeopardize safety. For these situations, it can be helpful for the school to designate a more private and contained area where students can go to resolve issues and/or problem solve with the support of a staff person. It is also critical that schools be prepared to respond effectively to crisis situations so that the problem is resolved rather than escalated (Walker, Colvin, & Ramsey, 1995; Walker, Ramsey, & Gresham, 2003). For this reason, the school must develop a team trained in effective crisis de-escalation and containment, and have a clear procedure for responding to crises so that the disruption to the learning environment is minimized. Students should also be prepared to respond to a potentially unsafe or a volatile situation (move away, call for help, lock down etc.). This helps protect student and staff safety and may keep volatile situations from further escalating (Dwyer, 2002; Walker, Colvin, & Ramsey, 1995; Walker, Ramsey, & Gresham, 2003).

*6. Systematic supports are developed to address the academic and social needs of students with emotional or behavioral problems (EBP).* While PBS can be extremely effective in promoting positive behavior for most students, there remains a group of

students with more ongoing behavior concerns. PBS research over the last several years has found that approximately 10-15% of the students in a school will require some type of more intensive supports beyond the school-wide system, and another 5% will require a comprehensive, individualized behavior support program (Horner, Sugai, Todd, & Lewis- Palmer, 2004; Sugai & Horner, 2002, Walker et al. 1996). This means that teachers need ready access to the support of other professionals with more specialized behavioral and instructional expertise to provide suggestions and strategies for these students. This type of support is critical for both teacher and student success (Knapp, Elfers, & Plecki, 2004)

One important way to provide such supports is for schools to develop a student support team made up of professionals with the necessary expertise, who can meet regularly with staff to assure that adequate behavioral and academic supports are in place for students with or at-risk of EBP (Sugai & Horner, 2002; 1991). Some of the key elements of effective behavior support teams include: clear policies and procedures outlining the roles and function of the team; a process for the early identification of at-risk students; an efficient referral process that is responsive to emergent needs; adequate behavioral and instructional expertise; team based problem solving; and active administrative support. This team works with the teacher and family to develop a behavior support plan and to monitor its efficacy over time (Sugai & Horner, 2002, Todd, Horner, Sugai, & Sprague, 1999).

By matching academic and behavioral supports to students in a proactive manner, when concerns are just beginning to emerge, it may be possible to stabilize the course of a number of students before problems become even more intensive (Walker, Cheney,

Stage, & Blum, 2005). For example, in a recent study on the implementation of PBS in three schools in Washington State, Walker, Cheney, Stage, & Blum (2005) found that within a group of 72 students that had been identified as at-risk through the SSBD, nearly half of the students were stabilized and or maintained by the schools' existing student supports (e.g. counseling, tutoring, peer tutors). Of the remaining students one third were referred to a specialized support team, 11 to a FBA team, and only 7 qualified for special education. These results suggest that a systematic student support process, within the context of a comprehensive PBS program, can provide proactive supports for at-risk students.

*7. Functional Behavior Assessments (FBA) are completed for students with EBP who require more intensive interventions.* As introduced in Chapter 1, FBA is a detailed problem solving approach for students with chronic and/or intensive behavior problems. Using a variety of data collection strategies such as observations and interviews, FBA helps to identify the underlying function for a student's behavior by determining what it is that maintains the pattern of problem behavior across time. An effective FBA includes clear problem identification, systematic problem analysis, the development of a behavior intervention plan (BIP), and is followed by plan implementation and evaluation (Crone & Horner, 2003; Knoster & McCurdy, 2002; OSEP Center for Positive Behavior Intervention, 2000). Frequently, an FBA is completed using what is called the "competing pathway" analysis, which examines the behavior on the basis of the following components: (a) Setting events- those events that are not immediately involved in the problem behavior but tend to effect it; (b) Antecedent events- those that occur immediately before the problem behavior and tend to predict or initiate it; (c) Specific

description of the problem behavior; (d) Maintaining consequences- outcomes that occur immediately after the problem behavior that serve to reinforce them (O'Neill et al. 1997; Sugai, Horner, & Gresham, 2002; Sugai, Lewis-Palmer, & Hagan, 1998).

Once this pathway is clearly identified, a behavior intervention plan can be developed which addresses each section of the pathway. Setting and antecedent events can be modified or changed to reduce the likelihood the behavior will occur. Prosocial skills instruction can be used to teach more appropriate behaviors, which in turn make the problem behavior less efficient. Maintaining consequences can be modified so that the problem behavior is no longer effective or relevant (Crone & Horner, 2003; O'Neill et al., 1997; Sugai, Horner, & Gresham, 2002). By integrating these strategies the team can develop a comprehensive, written behavior intervention plan, which includes strategies for monitoring and evaluating the effectiveness of the plan. One member of the team is then assigned the role of case manager, who takes on the primary responsibility of tracking and monitoring the effects of the plan. The behavior support team assures that the teacher and other staff that will be responsible for the implementation of the plan have adequate training and support to do so effectively (Crone & Horner, 2003; O'Neill et al., 1997; Sugai, Horner, & Gresham, 2002). The active involvement of family members and the staff responsible for implementing the interventions helps to assure that the plan had good "contextual fit," which means it is acceptable and doable from the perspective of those most closely involved with the child (Crone & Horner, 2003; Knoster & McCurdy, 2002; O'Neill et al., 1997; Sugai, Horner, & Gresham, 2002).

8. *Data are routinely collected and systematically analyzed by the leadership team for program evaluation and decision-making purposes.* One important aspect of

effective PBS is the use of data based decision-making in the evaluation of school improvement efforts (OSEP Center on Positive Behavior Supports, 2004; Lewis & Sugai, 1999). Schools are quite familiar with the collection and evaluation of ongoing data related to academic issues, but less practiced in utilizing information related to discipline and behavior. Lewis and Sugai (1999) state that school leadership teams must learn to establish data collection systems that help them determine the following: what has happened in the past, what is currently happening, whether or not something is working, and what should happen next. However, because time is so limited in schools, this process needs to be both efficient as well as effective (OSEP Center on Positive Behavior Supports, 2004; Lewis & Sugai, 1999).

One readily available data source is the number of office discipline referrals (ODR) occurring in a school. This data can be collected most effectively with the aid of an electronic database. One electronic system for monitoring ODR that is now being used by hundreds of schools is the *School-wide Information System* © (SWIS) (May, et al., 2000). As introduced in Chapter 1, *SWIS* is a secure web-based data management system that allows schools to enter and monitor ODR on a school-wide and individual basis. *SWIS* can be used to create numerical reports or charts to reflect individual or school-wide discipline reports. This information can be used for internal decision-making on school-wide discipline issues, to assist in the development of an individual behavior support plan, or to create school, district, or state discipline reports. In a review of several studies utilizing ODR as measures of school and/or student change, Irvin and colleagues found it to be both a valid and sensitive measure of school performance in relationship to PBS (Irvin et al., 2006; Irvin, Tobin, Sprague, Sugai, & Vincent, 2004).



To be most effective, leadership teams should review data regularly (monthly, biweekly), summarize the data for the staff, and use the data for active decision-making (Horner, Sugai, Todd, & Lewis-Palmer, 2004). For example, using SWIS to track the number of ODR in its schools, the state of Maryland has measured the time involved in responding to discipline issues in schools utilizing PBS (Scott & Barrett, 2004). It was determined that school administrators spent an average of 10 minutes processing an ODR, and that a student lost an average of 20 minutes of instructional time as well. Across the two years that PBS was implemented in Maryland schools, administrators saved an average of 11.06 days, and students regained an average of 29.5 days as the result of reduced ODR (Scott & Barrett, 2004). Because PBS is an evolving process, schools that learn to use data to evaluate and monitor their efforts are likely to find the most success.

Data on individual students should be used to review the progress of those with behavior intervention plans, as well as to identify those who may need more intensive supports. Through the analysis of school records, Tobin and Sugai (1999b) found the frequency of ODR to be a significant ( $p < .001$ ) predictor of chronic discipline problems in middle schools, which also predicted the frequency of suspensions in ninth grade ( $p < .001$ ). These findings suggest that providing supports for students with multiple ODR through a behavior support team and an individualized plan may help to prevent on ongoing pattern of discipline problems for many students.

*9. Families are seen as partners in the development of their child's program.*

Involving families or caregivers in the development and implementation of a child's behavior support program is critical for several reasons. First, they have important

insights and information about the child that is necessary for the development of a meaningful plan. Secondly, once strategies have been identified to support a student, they are most effective when implemented by both school staff and family members. Finally, a meaningful behavior support plan addresses needs and issues that may be occurring in the family in response to a child's challenging behaviors. This empowers the family and caregivers so that they are better able to work in partnership with the school in responding more effectively to the child's needs (Cheney & Osher, 1997; Conduct Problems Prevention Research Group, 2000; Fox & Dunlap, 2002; Sugai & Lewis, 1999).

In addition to involving parents in the planning and implementation of a child's individualized support plan, engaging all families in the school culture helps to build a positive, more inclusive, and supportive learning environment (Elizalde-Utnick, 2002; Learning First Alliance, 2001,). Strategies for effectively engaging families and caregivers include regularly providing a series of parenting workshops, developing a library of resources for parents, teachers communicating frequently and directly with parents on positive issues as well as concerns, linking families with community resources, and developing a parent to parent network of support (Cheney & Osher, 1997; Elizalde-Utnick, 2002; Conduct Problems Prevention Research Group, Kohl, Lengua, & McMahon, 2000). Assuring that efforts to involve family members is done in a manner that is responsive to cultural variables, socioeconomic status, and diverse perspectives is also of critical importance (Cheney & Osher, 1997; Kohl, et al., 2000).

A number of studies have examined the impact of actively involving family members and teachers together in training on effective behavior management and student support strategies. This allows both teachers and parents to respond consistently to the

needs of children, as well interact more frequently and positively with one another.

Studies which have used this “multimodal” approach have found improvements in child behavior at home and at school, improved academic performance in the short term, as well as reductions in violent behavior, drug and alcohol use, and other risky behaviors later in life. For example, the Lifting the Interests of Families and Teachers (LIFT) included a classroom based social skills programs, a playground- behavior program, parent training, and strategies for enhanced parent-teacher communication. They found that students had increased prosocial skills and decreased levels of aggression, particularly in the fifth and sixth grade students (Reid, Eddy, Fetrow & Stoolmiller, 1999). The First Steps to Success project worked with schools to identify kindergarten students who were showing signs of antisocial behavior. They then provided training on effective supports and interventions to both teachers and parents. The researchers found that students who were involved in the project decreased in aggressive behavior, improved in prosocial skills, and were more actively engaged in their learning than at-risk students that did not participate in the project. These changes continued across the two years the children were followed after the interventions (Walker, Kavanagh, Stiller, Golly, Severson, & Feil, 1998).

Another long term study that was mentioned earlier, the FAST Track Project (Conduct Problems Prevention Group, 2000) provided a similar set of interventions and supports to schools and families in communities across the country. At the elementary school level, these included the classroom based social skills curriculum (PATHS), training for teachers on effective instructional and behavior management strategies, and providing parenting training for families. They found that after three years of

involvement in the FAST Track program there were positive effects at school, home, and within the peer group. This included improving parenting strategies (Conduct Problems Prevention Research Group, 2002; 2000).

*10. Comprehensive plans are developed for students and families in need of intensive support.* Even with the conscientious use of PBS and the development of individual behavior intervention plans, some students need more resources than a school can provide in the general education program. In many cases students with this level of need are then referred to special education with the goal of the development of an individualized education plan. However, the child and/or family may have needs that reach beyond the typical domain of the school. In those cases schools have the ability to link with other agencies and service providers to integrate their support into a comprehensive plan for a student and family with intensive needs. To accomplish this the school and/or the district may have a formalized agreement with a community mental health provider, health clinic, and/or other social service agency to work in collaboration with the school to provide supports for families with significant needs (Woodruff et al., 1999).

Often this process is referred to as “wraparound services,” because it wraps services and supports around the unique needs of children and their families, rather than requiring them to comply with or fit into an existing set of services (Kutash & Duchnowski, 1997). The goal of these services is to successfully support students with significant emotional/behavioral problems in the least restrictive setting possible. Because children spend a great deal of time at school, integrating services and supports there can be both natural and beneficial. Families may find services coordinated through

the school more accessible and less stigmatizing than those provided from more typical health or mental health centers (Woodruff, et al., 1999). In several states and numerous cities around the country, a comprehensive network of supports has been put into place to work with schools to provide comprehensive supports for children and youth with emotional or behavioral disabilities (Eber & Nelson, 1997; Woodruff et. al, 1999). Eber and Keenan (2004) identify ten key elements of a successful wraparound process: They are community based, individualized and strength based, culturally competent, families are full and active partners, team based, flexible in approach and funding, balances both formal and informal family and community resources, unconditional commitment, development and implementation of an individualized plan (utilizing school, community, interagency collaboration), and outcomes determined and measured through a team process. In this approach, supports are implemented that expand on the traditional services available in schools. To maintain communication and consistency, these supports are organized by a case manager or family support liaison that may or may not be employed by the school (Eber & Keenan, 2004).

Another term used to describe a similar approach to service provision is “system of care,” because supports are child/family centered rather than agency centered, and services are coordinated across agencies in a manner that is more family friendly (Cheney & Barringer, 1999). As with wraparound, the goal is to develop child-centered, community based support plans. Cheney and Barringer (1999) identify several guiding principles of this approach to care. These include providing supports in the least restrictive, most normative setting possible, family participation in service delivery,

coordinated services, and supports that are culturally, sensitive and non-discriminatory to the family's context.

The results of this literature review were distilled into the content of the *BEACONS PBS Self-Assessment and Program Review*. The 10 evidence-based practices formed the structure for specific subscales, which include their related practices or indicators. A copy of the individual and team self- assessment forms, including all 10 PBS practices/subscales and their indicators are located in Appendix C. Details on the implementation of this process are outlined in the Methods section in Chapter 3 of this dissertation. During the 2003–2004 school year the *BEACONS PBS Self-Assessment and Program Review* (SA) was piloted with the leadership teams of the 13 elementary schools participating in Cohort 1 of the BEACONS Outreach Project. School leadership teams found this to be a helpful process. The following school year (2004-2005) schools in both cohorts completed the SA process as well. This pilot provided some positive face validity, as well as enough data to move forward with a more formal evaluation of the measure.

*The Practical Utility of Self-Assessments.* Throughout the field of human services the self-assessment process has proven an effective way to support program improvement and decision-making (Campbell, Kyriakides, Muijs, & Robinson, 2004; Fitzgerald, Gruppen, & White, 2000; Powell, 2000). In her analysis of the use of a self-assessment process as part of school improvement in the United Kingdom, Powell (2000) found that the self-assessment process was becoming a critical part of continuing professional and organizational development in schools because it builds a culture of ongoing learning in a way that helps teachers manage and integrate change effectively. She found that teachers

using a process led self-assessment felt that they had become originators of change and professional learning in their organizations rather than “victims” of it.

Campbell, Kyriakides, Muijs, & Robinson (2004) had similar findings, stating that self-evaluation is part of an approach to school improvement “in which ownership of the improvement process can be embodied (p. 461).” In their study of medical students using self-assessment to monitor and track their skills in various aspects of medical training, Fitzgerald, Gruppen, and White (2000), found that students were fairly accurate in measuring their performance against an established, objective standard ( $p < .01$ ). Additionally, they found that accurate self-assessment was a generalizable skill. That once learned, it can be used similarly across a variety of contexts and tasks. These benefits alone may make conducting a self-assessment process worthwhile.

However, for the self-assessment process to be meaningful, it must occur within a framework of training and professional development in order for team members to have accurate ratings as well as have the knowledge they need to successfully plan and implement an effective school improvement process based on their results. In their article on self-awareness, self-knowledge, and their impact on the accuracy of self-ratings, Kruger and Dunning (1999) summarize this issue when they quote Charles Darwin saying in 1871, ignorance more frequently begets confidence than does knowledge. In their study, Kruger and Dunning (1999) found that the better participants understood the concepts and practices they were to use for the self-assessment, the more accurate they tended to be on their ratings. Without training, participants simply did not know that they “do not know.” In the study of self-assessment for medical students described above,

Fitzgerald, Gruppen, and White (2000), had similar findings. The accuracy of the ratings in their study first required training in the practices to be measured.

These studies underscore the importance of the framework of training and ongoing self-assessment developed by the BEACONS Project to provide the professional development school leadership teams need to use the self-assessment process meaningfully and accurately. Using the knowledge and awareness that result from the training and technical assistance provided by the project, leadership teams are then able to more accurately evaluate their school's practices, as well as effectively guide action-planning and improvement activities in their schools. The training goals of the BEACONS Project assure that members of the leadership teams develop a true understanding of the all practices included PBS, which allows the school to benefit more richly from the process and results of self-assessment.

#### *Demonstrating Reliability and Validity in an Assessment Measure*

Establishing the reliability and validity of any assessment tool requires determining both *what* the test measures and *how well* it does so (Allen & Yen, 2002; Fraenkel & Wallen, 1990; Messick, 1989, 1993; Nunally, 1978). Additionally, the items and construct being measured should have meaning and relevance to those being evaluated (Messick, 1989; 1993). The *BEACONS PBS Self-Assessment and Program Review* (SA) process was designed to provide meaning and relevance to a school team working on features of PBS. The purpose of this study is to evaluate whether or not the SA meets psychometric standards for test development.

Construct validity is defined as the degree to which an assessment measures the theoretical concept, or trait that it was designed for. Essentially, it asks does the test



measure what it says it does (Allen & Yen, 2002; Fraenkel & Wallen, 1990; Messick, 1989, 1993; Nunnally, 1978)? Messick (1989) summarizes construct validity as “the latent variable or ‘causal’ factor to account for the relationship among indicators (p.17).” Construct validity is obtained by integrating any evidence or results that effect the meaning or interpretation of the measure, and therefore includes all other forms of validity (Messick, 1989; Nunally, 1978). Establishing construct validity is an ongoing process that involves collecting and analyzing data related to the target measure from a number of methods and assessments, in order to demonstrate whether or not the target measure does what it is purported do (Campbell & Fiske, 1959; Fraenkel & Wallen, 1990; Messick, 1989, 1993; Nunnally, 1978). As data from a study is collected and analyzed it frequently causes researchers to reconsider or restructure the initial construct of the study based on the new evidence (Shadish, Cook, & Campbell, 2002).

One type of validity that helps to establish the overall construct of a measure is referred to as convergent validity. Convergent validity is established when confirmation of a measure’s outcomes are established by independent measurement procedures (Campbell & Fiske, 1959). This may take the form of criterion validity (when the results of one measure agrees with the those of another already established measure), concurrent validity (when comparing the results of the target measure with the results of another measure taken at the same time), or content validity (demonstrating how well the content of the measure represents the concepts or subject being assessed; Fraenkel & Wallen, 1990; Messick, 1989, 1993; Nunnally, 1978).

Along with establishing results that demonstrate agreement or positive correlations with the target measures, it is also important to determine that the target

measure does not align significantly with a measure or variables that it should not.

This is referred to as divergent validity (Campbell & Fiske, 1959). Campbell and Fiske (1959) first proposed an experimental design that integrates both convergent and divergent validity into what they called a “multitrait-multimethod matrix,” that is now widely used. This design calls for the assessment of two or more traits by two or more methods. The intercorrelations are then displayed in a table where both the reliability coefficients and the validity coefficients are displayed in a specific format (Campbell & Fiske, 1959; Devellis, 2003; Messick, 1989). This format allows the reader to see the relationships across the methods and measures quickly and easily.

In addition to construct validity, Shadish, Cook, & Campbell (2002) identify three other types of validity that are critical to effective research design and implementation. These include statistical conclusion validity, internal validity, and external validity. Statistical conclusion validity concerns two related statistical inferences; (a) how well the presumed cause and effect correlate or covary and (b) the strength of that correlation or covariance. They define internal validity as whether the correlation or covariance reflects a causal relationship between treatment and outcome as the research variables are measured. Finally, external validity establishes how well the cause-effect relationship holds across a variety of settings, subjects, treatment and measurement variables.

An assessment tool can be considered reliable when it demonstrates that it measures what it says it does with stability and consistency, within the context it was designed for (Dick & Hagerty, 1971; Fraenkel & Wallen, 1990; Green & Salkind, 2003). This usually takes the form of a correlation of subtest scores with total scores, which are reported as evidence of the internal consistency of the measure (Allen & Yen, 2002;

Green & Salkind, 2003). These results are then used to help to determine which items should be included or excluded from the assessment under development. While the researcher wants to identify the strongest combination of items during development the statistical results alone should not be used to finalize these decisions. The researcher must finalize decisions about which items to include or exclude based also on knowledge of the items and their relationship to the overall construct of the measure under development (Allen & Yen, 2002; Green & Salkind, 2003). This means that a researcher may choose to keep an item that has a lower item analysis score than others because it is considered strongly related to the construct of the assessment.

Taken together, these analyses have the potential to establish what Messick (1993) calls “ a unified theory of validity” for the use of the *BEACONS PBS Self-Assessment and Program Review* (p. 12). He states that beyond specific statistical analyses related to the different types of validity (content, construct, and criterion), researchers must be prepared to answer the following four questions about their assessment or evaluation tool:

- (a) What evidence do you have as the basis for the interpretations for the measure?
- (b) What evidence do you have that the measure has relevance and utility?
- (c) What are the values implied in the interpretation of the measure and
- (d) What are the social or educational consequences that will result from the use of the measure?

By building the content of the *BEACONS PBS Self-Assessment and Program Review (SA)* from the emerging literature, developing items based on effective PBS implementation,

and integrating principles of effective school improvement, this measure has the potential to have both good utility and relevance to practitioners.

The analyses conducted in this study were to determine if the SA is both a reliable and valid tool for assessing the level of implementation of PBS systems, and whether further psychometric evaluation should be conducted. If the psychometric properties of the SA could be established, the educational consequences would be quite positive, by providing a measure that outlines a series of benchmarks to support schools in their efforts to better meet the needs of all students, including those with or at-risk of developing emotional or behavioral problems.

*Purpose of the Study and Research Questions.*

The purpose of this study was to establish the internal consistency reliability, along with the content, construct, and criterion validity of the *BEACONS PBS Self-Assessment and Program Review (SA)*. Specific questions addressed in this study included:

- (a) Based on the ratings of a panel of PBS experts, will the indicators in the SA be considered relevant to successful implementation of PBS at all three levels: primary, secondary, and tertiary?
- (b) Through the analysis of individual PBS self-assessment ratings, what is the internal consistency of the 10 PBS subscales and the related indicators, and does that alpha level meet an acceptable psychometric standard for reliability ( $\alpha > .65$ )?

- (c) Through analysis of individual and team self-assessment total scores, what effect will the professional role of the individual members of school leadership team have on the total scores on the PBS Self-Assessment?
- (d) What is the correlation between subscale and total scores on the 10 PBS subscales and other measures of the effectiveness of PBS implementation such as the School-wide Evaluation Tool (SET), number of office discipline referrals (ODR), and responses to School Support Survey (SSS)?
- (e) Will schools with higher SA total team scores have lower levels of office discipline referrals than schools with lower SA scores?
- (f) What is the percentage of agreement between the PBS Self-Assessment subscales and related subscales on the Schoolwide Evaluation Tool (SET) on whether a school is above or below the 80% criteria level for fully implemented PBS practices?

Answering these questions will provide the information necessary to determine if the PBS Self-Assessment is a reliable and valid measure for assessing a school's implementation of systems at all three levels of the PBS model and whether it merits a larger scale psychometric assessment.

## Chapter 3

### Method

#### *Setting*

The schools participating in this study were all engaged in the BEACONS Outreach Project, and therefore were receiving training and technical assistance on implementing PBS practices in their schools. Two of the schools had been participating in the BEACONS Project for more than three years because they were part of the initial model demonstration project. A total of 13 of the schools were in their second year of PBS implementation, and 10 schools were in their first year of PBS implementation at the time of this study.

All of the schools are at the elementary level only. However, the total grades included in each school varies across districts. Some of the schools serve K-4<sup>th</sup> grades only, while others serve K-5<sup>th</sup> or K-6<sup>th</sup> grades. The schools are located in eight school districts from around the state of Washington, including, eastern, central, and southern Washington, as well as in the Puget Sound area and as a result they represent a range of demographics. Table 2 summarizes the demographics for the each of the school districts involved in the study.

Table 2  
*Demographics of Participating School Districts*

District	Enrollment	Percent Ethnicity	Primary Ethnic Group(s)	% Free/ Reduced Lunch	% Special Education
Cascade	1,416	30	Latino	42.7	10.8
Eastmont	5,539	26	Latino with 15% Migrant	36.5	10.8
Evergreen	22,556	17	Asian American	33.8	10.2
Highline	17,752	51	Asian American and Latino	46.4	10.4
North Kitsap	7,093	16	American Indian and Asian American	20	10
Renton	12,761	47	Black and Asian American	32.2	10.9
West Valley	3,576	11	Latino	39	9.9
North Kitsap (1 school only)	664	20	Latino and Asian	42.7	10.8

### *Participants*

*School Leadership Teams.* The participants of the study were all members of their school's BEACONS PBS Leadership Team, established as part of the PBS implementation process. Each team has 6-8 members that are representative of the school faculty. This typically includes the school administrator, special educator, school counselor or psychologist, general educators from both the primary and intermediate grade levels, as well as paraprofessionals. A total of 23 school leadership teams participated in the study, with 150 individual staff members. The average leadership team in this study included 7 members.

A descriptive analysis of demographic data found that approximately half of the leadership team members were general education teachers. The remainder of the group is made up of a combination of the other professional roles. Table 3 presents a summary of the professional roles for all participants. More than half of the participants report their ethnicity as Caucasian. All other ethnicities combined equaled only about 5% of the participants, while almost a third of the participants chose not to report their ethnicity to the study. Table 4 provides a summary of the ethnicities of leadership team members. The analysis also found that participants have a wide range of experience in education. The mean years of educational experience across all the leadership team members was 14, with a range from one to 40 years (see Table 5).



Table 3  
*Professional Roles of Leadership Team Members*

Role	Number	Percentage
Administrator	24	16
General Education Teacher	77	51
Special Education Teacher	11	7
Psychologist/Counselor	16	11
Paraprofessional	22	15
Total	150	100

Table 4  
*Ethnicity of Leadership Team Members*

Ethnicity	Number	Percentage
Native American	2	1
Hispanic	4	3
Caucasian	96	64
Asian	2	1
Biracial or Multiracial	3	2
Did not report/Missing	43	29
Total	150	100

Table 5  
*Years Experience in Education of Leadership Team Members*

Years Experience	Number	Percentage
0-10 Years	46	31
10-20 Years	36	24
20-30 Years	21	14
30 – 40 Years	9	6
Did not report/Missing	38	25
Total	150	100

*PBS Expert Panel.* The list of potential members of the PBS Expert Panel was generated in two ways. The first group was identified by the list of state and district PBS coordinators found on the National Positive Behavior Interventions and Supports Technical Support Center's website ([www.pbis.org](http://www.pbis.org)). Secondly, the literature review completed to develop items for the SA generated a list of 10-15 researchers who had made substantial contributions to PBS development and research in the last several years. These individuals were also included on the contact list. A total of 40 requests for participation were sent out, 21 individuals agreed to participate, and 18 completed surveys were returned by the deadline. Table 6 summarizes the national representation of the participants and Table 7, their years of experience with PBS. The mean years of experience with PBS was 10, with a range from 2-25 years. A descriptive analysis of

levels education found that half the respondents were at the Ph.D. level, slightly less than half at the Masters level, and one at the Bachelors level.

Table 6  
*National Representation of PBS Experts*

Region	Number	Percentage
Northeast	2	11
Southeast	4	22
Midwest	2	11
Southwest	3	17
Northwest	7	39
Total	18	100

Table 7  
*PBS Experts' Years of Experience*

Years Experience	Number	Percentage
2- 4 Years	5	28
5 -10 Years	7	39
11- 25 Years	6	33
Total	18	100

### *Procedure*

At the time of this study, all of the schools in the BEACONS Project had completed the *PBS Self-Assessment and Program Review* (SA) process twice (during the 2003–2004 and 2004–2005 school years). The SA is completed in two steps. First, each

member of a school's PBS Leadership Team completed the *BEACONS Individual Self-Assessment and Program Review* independently. Secondly, the team members met and compiled their individual scores within the *BEACONS PBS Leadership Team Self-Assessment and Program Review*, to develop a summary of the entire team's perceptions of areas of strength and potential development as compared to these evidence-based practices. The self-assessment includes the 10 evidence-based practices, or subscales, related to implementing PBS systems and supports across all three levels of the model. Included within each PBS subscale is a list of indicators, which further define and operationalize these practices. A copy of the *BEACONS Individual PBS Self-Assessment and Program Review* can be found in Appendix C.

Ratings use a Likert-type scale for each indicator from which a total score is obtained for each subscale. The scale ranges from 1 to 5, with one meaning that the indicator is not in place at the school and 5 meaning that it is fully in place. The ratings of each indicator within an evidence-based practice are then compiled and averaged, providing a total rating for the practice. This data provides the Leadership Team with the ability to review school functioning across each of the 10 PBS practices as a whole, as well as compared to the individual indicators listed with them.

For example, PBS subscale 6 is "systematic supports are developed to address the academic and social needs of students with emotional or behavioral problems (EBP)." The scores given to each of the related indicators determine the total score for this subscale. The school may have all but a few of the indicators well established, resulting in a fairly high score on the practice. But a review of the data would reveal that the leadership team found that indicators 6.1 (general educators receive support in their

classrooms from certified specialists experienced with students having EBP, e.g. school psychologist, behavior specialist, special educator) and 6.2 (a team meets to develop behavior support plans for students with EBP) are not yet well established. Staff can then set goals, objectives, and evaluation plans to support improvement in these areas. The raw scores of the team SA are then converted to percentages of implementation, with 80% considered the criteria for a practice to be well- established in the school. These scores are charted and returned to the school for their planning and reference. This scoring format is similar to the format developed for *Charles F. Kettering Ltd. School Climate Profile* (Fox et al., 1973; Johnson, Johnson, & Gott, 1997) and the *School Level Environment Questionnaire* (Fisher & Fraser, 1991).

#### *Additional Measures*

*School-wide Evaluation Tool* (SET). As described earlier, the *School-wide Evaluation Tool* (SET) (Sugai, Lewis-Palmer, Todd, & Horner, 2001; Horner, Todd, Lewis-Palmer, Irvin, Sugai, & Boland, 2004) is an evaluation tool for the universal or school-wide level that is completed at the school by an external evaluator. The results rate a school's primary or school-wide level PBS systems across 7 subscales. Based on research conducted in schools across the country, a school is considered to be successfully implementing school-wide PBS when the subscale scores of both "expectations taught" and the total score for the measure is  $\geq 80$ ). Recently, in a study to determine its reliability, the SET was found to have an overall alpha of .96 on internal consistency, 97% on test-retest reliability, and 99% on inter-observer agreement. Tests for construct validity found  $r = .75$  ( $p \leq .01$ ) with the *Effective Behavior Support: Self-Assessment Survey* (Horner, Todd, Palmer, Irvin, Sugai, & Boland, 2004). The SET is

administered annually at all schools involved in the BEACONS Project. The SET scores utilized in this study were obtained in fall 2004 in Cohort 2 schools, and in winter 2005 for Cohort 1 schools. As with the SA, raw scores on the SET are converted to a percentage, with 80% for expectations taught subscale and total score considered the minimum criteria for effective implementation of universal supports (Sugai, Lewis-Palmer, Todd, & Horner, 2001; Horner, Todd, Lewis-Palmer, Irvin, Sugai, & Boland, 2004). These scores are also charted and returned to school teams for their reference and planning.

*Office Discipline Referrals.* As discussed earlier, as implementation of PBS in schools has evolved it has been recommended that office discipline referrals (ODR) be used to monitor the efficacy of school-wide programs, school climate, as well as to monitor individual student behavior (Irvin, Tobin, Sprague, Sugai, & Vincent, 2004; Sugai & Horner, 1999; Sugai, Sprague, Horner, & Walker, 2000; Sprague, Sugai, Horner & Walker, 1999). Irvin et al. (2004) conducted an extensive analysis of the validity of using ODR to measure overall school functioning and found that high levels of ODR were associated with higher levels of problem behavior and lower functioning school climates. They found that ODR can be a reliable measure of school-wide functioning, particularly in schools that have begun to implement some type of comprehensive discipline system. In a recent study, Irvin et al. (2006) also found that school teams were able to effectively learn to use systematic analysis of ODR to support program planning and decision making at both the school-wide and individual levels. However, in all cases the authors recommend that ODR be triangulated with other data, such as the other measures suggested in this study.

The ODR data for this study was obtained through the *School-wide Information System* © (SWIS) (May, et al., 2000) at the close of the 2004-2005 school year. *SWIS* is a secure web based data management system that allows schools to enter and monitor ODR on a school-wide and individual basis. Specifically, this study uses the number of ODR per student, per year for analysis. This allows comparisons across schools regardless of size.

*School Supports Survey (SSS)*. Because measures that can be used as external criteria for PBS practices on the self-assessment at all three levels of the model have not yet been established, a method for obtaining data from the schools that could be correlated with team ratings had to be created. For this purpose the School Supports Survey (SSS) was developed to gather more specific data on schools' practices related to the 10 PBS subscales in a manner that allowed consistent analysis. School Coordinators at each school were asked to complete the SSS within 30 days of the completion of the SA. See Appendix A for a copy of this form.

*PBS Experts Content Validity Survey*. To determine if the content of the *BEACONS Self-Assessment and Program Review (SA)* process is relevant and representative of the strategies and supports necessary to successfully implement PBS at all three levels (primary, secondary, and tertiary), a modified version of the SA was sent to a panel of experts in PBS for review and input. This panel included researchers and practitioners who have extensive experience in implementing and/or evaluating school-wide PBS systems (see Participants section for further detail on these respondents). Respondents were asked to rate the relevance of each indicator to its corresponding evidence-based practice using a Likert-scale, with 1 = not relevant and related, and 4=

highly relevant and related. The data from this survey will be used to revise the content of the PBS self-assessment (DeVellis, 2003; Messick, 1989). A copy of the survey can be found in Appendix B.

### *Data Analyses*

The first analysis of the study was to complete a descriptive analysis of the results from the *PBS Expert Panel Content Validity Survey* to determine if any of the items should be revised or dropped from the SA. This panel included researchers and practitioners who have extensive experience in implementing and/or evaluating school-wide PBS programs. The target N was a minimum of 20 completed responses, but only 18 were received by the established project deadline. However, this was determined to be a large enough sample to provide a fair level of confidence in the results (Li, personal communication, May 20, 2003; Stage, personal communication, March 18, 2005).

Respondents were asked to rate the relevance of each indicator to its corresponding evidence-based practice using a Likert-scale, with 1 = not relevant and related, and 4 = highly relevant. Descriptive statistics were used to determine the mean and standard deviation for each of the items. The mean score was used unless there was a large standard deviation on a particular item, in which case the median score was utilized (Fraenkel & Wallen, 1990). This data was reviewed and the content of the self-assessment revised based on the feedback. An indicator was eliminated if its mean rating fell below 2 on the Likert scale.

To assess the internal consistency and reliability of the BEACONS *PBS Self-Assessment and Program Review*, an Item-Analysis was conducted using the data from the ratings on each of item within the 10 PBS subscales obtained from each of the 150



individual leadership team members. Prior to the analysis the data was tested for skewness and kurtosis and found to be within normal limits. The reliability analysis included Item/Subscale, Item/Total, and Subscale/Total Correlations. When choosing items, those with high item/test correlations are desired. For research purposes item/scale correlations should exceed  $r = .30$  and internal consistency should exceed  $r = .60$  (Allen & Yen, 2002, DeVillis, 2003; Cichetti, 1994; Fraenkel & Wallen, 1990; Nunnally, 1978). This data was used to evaluate the content of the self-assessment and to determine if items needed to be revised or removed.

*Analysis of Professional Role and Team Total Scores.* The structure of this study involved the nested nature of data characteristic of school settings. In this study the individual responses were nested within school leadership teams, which were then nested within specific schools. To determine the impact of professional role on the outcomes of the PBS Self-Assessment total team scores, a two-level HLM fixed effects analysis was used that modeled individual total self-assessment scores by professional role, nested within school leadership team total self-assessment scores (Bryk & Raudenbush, 1992; Stage, 2001). This was conducted using the HLM software, version 6.0 (Raudenbush, Bryck, & Congdon, 2000). The professional roles identified for this analysis included those found most often in school settings and thus represented on the leadership teams. The following model was used:

Level 1: Professional Roles ( $n = 150$ )

$$Y = \beta_0 + \beta_1 * (\text{administrator}) + \beta_2 * (\text{general education teacher}) + \beta_3 * (\text{special education teacher}) + \beta_4 * (\text{counselor/psychologist}) + \beta_5 * (\text{paraprofessional}) + R$$

Level 2: Total Team Scores (n = 23)

$$\beta_0 = G_{00} + G_{01} * (\text{SA total score } 05) + U_0$$

$$\beta_1 = G_{10}$$

$$\beta_2 = G_{20}$$

$$\beta_3 = G_{30}$$

$$\beta_4 = G_{40}$$

$$\beta_5 = G_{50}$$

*Team Self-Assessment Scores as Unit of Analysis.* It is important to note that for the following analyses, the data utilized were the subscale and total percentage scores on the SA from the leadership teams in each of the 23 schools, rather than the 150 individual responses. This level of analysis is appropriate because at this point the study was examining the functioning of the organization as whole, rather than from individual perspectives. When the construct being measured is based on this type of organizational theory, the mean score of the group is considered to be the valid and relevant source of data (James, 1982; Sirotnik, 1980; Van Horn, 2003).

*Multivariate Analysis of Variance (MANOVA).* Prior to any further statistical analyses it was important to determine if the cohorts should be analyzed as one group or two, based on the length of time in the BEACONS Project. A one-way multivariate analysis of variance (MANOVA) was implemented using the 10 SA subscale total scores from each school within their cohort from year 1 (2004) and year 2 (2005) to establish whether or not any significant difference existed between the cohorts. A MANOVA was chosen because it better controls for Type I error than multiple univariate analyses (Stevens, 1996). If no significant difference was found between the cohorts, all further analyses would treat all the schools as one group.

*Correlational Analyses Between Self-Assessment and Other Measures.*

Correlations were computed between subscales and total score ratings on the *BEACONS PBS Self-Assessment and Program Review* (SA) and other external measures of effective PBS implementation, such as the *Schoolwide Evaluation Tool* (SET), numbers of office discipline referrals (ODR), and responses to the *Student Support Summary* (SSS). The unit of analysis for these correlations was the functioning of the school as a whole, therefore the scores from the 23 school leadership teams were utilized, using the same criteria for each item outlined above (James, 1982; Sirotnik, 1980; Van Horn, 2003). A correlation coefficient was calculated between the related subscales and total scores on the SA, SET, SSS, and ODR (Allen & Yen, 2002; Pallant, 2001). Table 8 details specifically which related subscales, survey responses, and total scores from the measures were correlated. Because the data of all of these measures are nonparametric in nature, the analyses required the use of the Spearman Rank Order Correlation (Spearman rho). In educational research correlations between .40 and .60 can be considered to have some theoretical or practical value. However for these analyses, a correlation of .65 or higher was the target value (Fraenkel & Wallen, 1990). The Bonferroni approach was used to control Type I error across all of the correlations. Therefore,  $p < .005$  was required for significance for these analyses (Stevens 1996; Tabachnik & Fidell, 2001).

Table 8

*BEACONS PBS Self-Assessment (SA) Subscales and Dependent Measures*

SA Subscale	Dependent Measures
1. Administrative policies and procedures support the education of students with or at-risk of developing emotional/behavioral problems (EBP).	School-wide Evaluation Tool (SET) subscale A (Expectations Defined) score.
2. School policies and programs emphasize prevention and the early identification of students at risk of developing EBP.	School Supports Survey (SSS), schools report number of times SSBD screening occurs and types of supports provided to students based on those results.
3. Staff development activities focus on methods to educate students with EBP.	School Supports Survey (SSS); report the number of times staff development focused on a topic related to methods for educating students with or at-risk of developing EBP.
4. Clear and consistent behavioral expectations are established for students across all school settings.	School-wide Evaluation Tool (SET) subscale B (Expectations Taught) scale score. School-wide Information System (SWIS) total ODR reports per 100 students per year for each school.
5. School procedures for responding to discipline referrals and emergency situations are implemented consistently and effectively.	School-wide Evaluation Tool (SET) subscale D (Violations System) scale score. School-wide Information System (SWIS) Total ODR reports per 100 students per year for each school.
6. Systematic supports are developed to address the academic and social needs of students with emotional or behavioral problems (EBP).	School Supports Survey (SSS); schools report the types of support available in the school to support students with EBP during the year prior to completion of the PBS-Self Assessment Survey.

Table 8 (continued)

7. Functional Behavior Assessments (FBA) are completed for students with EBP who require more intensive interventions.	School Supports Survey (SSS); schools report the number of students with EBP referred for FBA support during the year prior to completion of the PBS-Self Assessment Survey.
8. Data are routinely collected and systematically analyzed by the leadership team for program evaluation and decision-making purposes.	School-wide Evaluation Tool (SET) subscale E (Monitoring and Evaluation) scale score; School-wide Information System (SWIS) Total ODR reports per year per 100 students for each school.
9. Families are seen as partners in the development of their child's program.	School Supports Survey (SSS); schools report the number of meetings and activities that include family involvement.
10. Comprehensive plans are developed for students and families in need of intensive support.	School Supports Survey (SSS); schools report the number of meetings and plans developed which reflect the criteria of a comprehensive plan.
11. Total Mean Score	School-wide Evaluation Tool (SET) Total Score; School-wide Information System (SWIS) ODR per 100 students per year.

## Chapter 4

### Results

*Expert Panel Review.* A total of 40 professionals were asked to participate, 18 returned completed surveys. A copy of the survey itself is available in Appendix B. The survey utilized a 4 point Likert scale with 1 = not relevant and 4 = fully relevant. A descriptive analysis was used to compute the mean and standard deviation of each item based on participant responses. The complete results of this analysis are displayed in Table 9. None of the items were rated below the midpoint of the scale (2) designated as the cut off score for item inclusion, and the standard deviation (SD) in all but one item was less than 1. In fact, only two items were rated below a 3 (moderately relevant). Item 2.5, “in school counseling is available received the lowest rating of 2.88 (SD = .75). Item 3.5, “training includes information on common behavioral disorders in schools,” was rated 2.9 (SD = .99). Item 8.4, “discipline data is analyzed for relationship between ethnicity and disciplinary actions” was rated 3.38 but had a SD of 1.03, the largest in the scale. The scores of each of the items are above the criteria for elimination indicating that each should remain in the self-assessment.

Table 9  
*Expert Panel Content Validity Survey Results*

Item	Mean	Standard Deviation
1.1 Written statement that values inclusion of students with emotional/behavioral problems (EBP).	3.27	.82
1.2 Policies included in school handbook.	3.55	.85
1.3 Resources allocated to support programs for EBP.	3.66	.84
1.4 Leadership team established.	3.77	.73
1.5 Team includes administrator and representative staff.	3.83	.70
1.6 Team develops annual goals and objectives.	3.61	.69
1.7 Team annually evaluates progress.	3.66	.68
2.1 Systematic screening process for EBP used annually.	3.44	.70
2.2 Teacher assistance team established and readily available.	3.66	.76
2.3 Teams assure interventions in place for all students identified with EBP	3.77	.73
2.4 Interpersonal problem solving is taught to all students.	3.44	.70
2.5 In school counseling available.	2.88	.75
2.6 Families of students with EBP involved in school programs.	3.44	.70
3.1 Ongoing staff development on supporting students with EBP in place.	3.5	.85
3.2 Training focuses on evidence based practices for supporting students with EBP.	3.5	.92

Table 9 (continued)

Item	Mean	Standard Deviation
3.3 Training includes accommodations and instructional modifications.	3.5	.85
3.4 Training includes information on risk and protective factors.	3.11	.83
3.5 Training includes information on common behavioral disorders in schools.	2.9	.99
3.6 Trainings are evaluated for effectiveness.	3.44	.85
4.1 Staff have adopted a prosocial skills program in classroom and nonclassroom settings.	3.77	.73
4.2 This program is in school handbook.	3.38	.77
4.3 Behavioral expectations are written and posted in classroom and nonclassroom settings.	3.83	.51
4.4 Expectations are taught, monitored, and reinforced systematically.	3.83	.70
4.5 Staff use effective systems for discouraging problem behavior.	3.77	.73
4.6 Leadership team monitors impact of schoolwide program.	3.83	.70
4.7 Expectations and schoolwide program communicated with families.	3.66	.59
5.1 Discipline process outlines definition for office discipline referrals, etc.	3.83	.70
5.2 Discipline process and criteria are included in handbook and communicated to families.	3.50	.78
5.3 Discipline process follows state regulatory requirements.	3.50	.92



Table 9 (continued)

Item	Mean	Standard Deviation
5.4 Trained staff help to resolve student conflicts.	3.50	.92
5.5 A designated area is available for students with conflicts.	3.16	.78
5.6 Staff are trained in conflict intervention.	3.77	.64
6.1 General education teachers are supported by staff with behavioral expertise.	3.83	.51
6.2 Teams develop behavior support plans.	3.83	.70
6.3 Academic supports are available.	3.44	.98
6.4 Specialized services support social and behavioral success.	3.55	.85
6.5 Instruction is modified to support individualized needs.	3.7	.82
6.6 Social support facilitate student's interpersonal relationships.	3.5	.70
7.1 Teams use FBA to develop behavior intervention plans.	3.88	.47
7.2 Plans are built on a behavior pathway model.	3.66	.76
7.3 Behavior plans developed with family and are sensitive to cultural/linguistic differences.	3.5	.78
7.4 Behavior plans have systematic plan for data collection.	3.77	.73
7.5 Behavior plans coordinated by case manager.	3.61	.69
8.1 Staff collect and analyze patterns of office discipline referrals using electronic database.	3.66	.84

Table 9 (continued)

Item	Mean	Standard Deviation
8.2 Reports from discipline data base shared monthly with staff.	3.83	.70
8.3 Staff collect and analyze information on student's behavior in all settings.	3.61	.77
8.4 Discipline data is analyzed for relationship between ethnicity and disciplinary actions.	3.38	1.03
8.5 Discipline data is used along with screening process to identify students with EBP.	3.66	.76
8.6 Discipline data is considered when developing intervention plans.	3.66	.76
9.1 Families are included on team and at meetings.	3.61	.60
9.2 Access to a family support group is available.	3.44	.70
9.3 Families are supported in accessing community supports.	3.61	.77
9.4 Family education programs are available.	3.44	.78
10.1 Students with severe needs have access to medical, mental health, and other community services.	3.72	.66
10.2 Staff understand and are aware of students receiving prescription medications.	3.61	.84
10.3 Student's with IEPs have goals and objectives that address their behavioral needs.	3.83	.51
10.4 Professionals from other agencies attend meetings when needed.	3.55	.78
10.5 The school/district has a formal agreement with community agencies to provide services to students and families with intensive needs.	3.38	.85

Table 9 (continued)

Item	Mean	Standard Deviation
10.6 Interagency teams develop intensive treatment plans to support students with intensive needs.	3.61	.77
10.7 A family support liaison regularly contacts families of students with intensive needs	3.44	.85
10.8 A case manager coordinates communication for interagency team.	3.66	.68

n = 18

Scale: 1= not important 2= partially relevant 3= mostly relevant 4 = fully relevant

*Internal Reliability.* An internal reliability analysis was completed on the entire SA, as well as on each of the 10 subscales based on the item scores from the *BEACONS Project Individual PBS Self-Assessments* completed by school leadership team members in the winter of 2005 (n=150). Table 10 displays the results of these analyses. The alpha level of the entire self-assessment was  $\alpha = .96$ . Analyses of the 10 subscales found that all were above the recommended level of  $\alpha = .70$  indicating that the self-assessment as a whole has a high level of internal reliability and the subscales moderate to high levels of internal reliability (Cicchetti, 1994; Mellor, 2004; Nunally, 1978). Further, review of the item-total correlation results on individual items within all of the subscales found item-item total correlation means ranging from .50-.88, falling within an acceptable range for inclusion. Because the same sample was used to assess both the coefficient alpha and complete the item analysis, there is a likelihood that that the reliability estimate is an overestimate of the population coefficient alpha (Green & Salkind, 2003).

Table 10  
*Internal Reliability of BEACONS PBS Self-Assessment Subscales*

Participants (n = 150)				
Subscale	Mean	Standard Deviation	Alpha $\alpha =$	Number of Items
1. Policy & Procedure	28.27	4.85	.80	7
2. Prevention & Screening	21.27	4.65	.78	6
3. Staff Development	16.41	6.13	.92	6
4. Behavioral Expectations	28.53	4.67	.84	7
5. Response to Discipline Referrals	24.07	4.21	.76	6
6. Academic and Social Supports Provided	21.12	5.58	.76	6
7. FBA as Needed	15.14	6.18	.95	5
8. Data Collected & Analyzed	21.54	5.7	.88	6
9. Families as Partners	13.35	3.89	.81	4
10. Comprehensive Plans for Intensive Needs	27.67	7.64	.90	8
Scale Total			.96	61

*Multivariate Analysis of Variance (MANOVA).* Prior to any analysis related to school leadership team scores, a one-way MANOVA was conducted to determine if a significant difference existed between the SA total scores for schools within the two cohorts in the BEACONS Project (n = 23). The first cohort began training and other interventions one year prior to Cohort 2, making it important to determine if this lag

design had resulted in a significant difference between the two groups that would effect analyses. Tests for normality, homogeneity of variance and covariance matrices, linearity, and multicollinearity were satisfactory. The results found no significant difference between the cohorts, with the Wilks's  $\Lambda = .49$ ,  $F(11, 11) = 1.01$ ,  $p < .49$ , indicating that all the schools could be treated as one group in further analyses.

*HLM Analysis.* Table 11 summarizes the results of the two-level HLM fixed effects analysis that modeled individual total self-assessment scores by professional role nested within school leadership teams' total self-assessment scores. Under the fixed effect model at Level 1, individual assessment scores were not related to professional roles. However, at Level 2 the effect of leadership team total scores were found to be significantly related to individual's scores (coefficient = 209.73;  $p < .001$ ). The reliability estimate indicated that 43% of the variance in individual's self-assessment scores were explained by the nested effect of team leadership scores. Additionally, Table 11 shows the random effect results of Level 2, which found a significant level of individual variation in school leadership team self-assessment scores ( $p < .05$ ). Overall, these results indicate that an individual's professional role does not significantly effect their contribution to the team self-assessment, but that membership in school teams better predicts their self-assessment scores.

Table 11  
*Fixed and Random Effects of Individual Self-Assessment (SA) Ratings by Role and School/Team Total*

Fixed Effect	Coefficient	Standard Error	t- Ratio	Approximate df	p- Value
Level 1: Slope in Scores By Professional Role <sup>a</sup>					
Administrator	11.79	37.29	.316	143	.752
General Education Teacher	8.07	36.39	.222	143	.825
Special Education Teacher	15.27	38.24	.399	143	.690
Counselor/ Psychologist	3.49	37.72	.093	143	.927
Paraprofessional	13.89	35.73	.389	143	.698
Level 2: Total Team Scores <sup>b</sup>					
SA School/Team Total Score	209.73	36.70	5.71	21	.001**
Intercept	1.810	.343	5.270	21	.001**
Random Effects					
Level 2: Individual Total by Role and School Team Totals					
	Standard Deviation	Variance Component	Df	Chi- Square	p-Value
Intercept1, U0	11.91	141.97	21	37.16	.016*
Level 1, R	34.36	1180.86			

Note. <sup>a</sup>n = 150. <sup>b</sup>n = 23.

\* p < .05      \*\*p < .001

Table 12

Descriptives and Correlations of PBS Self-Assessment (SA) and School-wide Evaluation Tool (SET) subscales

(n = 23)	Mean (SD)	Correlations/ Spearman's $\rho = p$	SA 1 Policy & Procedures	SA 4 Behavior Expectations	SA 5 Discipline Response	SA 8 Data Analyzed	SA Total Score
Mean (SD)			81.52 (9.70)	80.86 (8.48)	80.00 (15.07)	73.04 (13.95)	70.84 (10.92)
SET A Expectations Defined	91.13 (14.53)	Correlation	.071				
		$p =$	.748	–	–	–	–
SET B Expectations Taught	91.17 (12.63)	Correlation		.216			
		$p =$		.323	–	–	–
SET D Violations System	83.39 (11.88)	Correlation			.060		
		$p =$			.263	–	–
SET E Data Monitored	92.95 (11.10)	Correlation				.468	
		$p =$				.024*	–
SET Total Score	88.47 (8.30)	Correlation					.167
		$p =$					.446

\*  $p < .05$  Note: corrected significance level requires  $p < .005$

Table 13

*Descriptives and Correlations of PBS Self-Assessment (SA) subscales and School Support Survey (SSS)*

(n = 23)	Mean (SD)	Correlations/ Spearman's $\rho = p$	SA 2 Screening & Intervention	SA 3 Staff Development	SA 4 Expectations Taught	SA 6 Systematic Support
Mean (SD)			72.60 (13.55)	56.00 (16.25)	80.86 (8.48)	72.60 (14.21)
SSS 1 Screening	1.21 (.59)	Correlation	.001			
		$p =$	.995	–	–	–
SSS 2 Staff Development	6.47 (3.07)	Correlation		.238		
		$p =$		.275	–	–
SSS 3 Social Skills Program	.56 (.50)	Correlation			.391	
		$p =$			.065	–
SSS 4 Student Support Team	.78 (.42)	Correlation				.454
		$p =$				.029*
SSS 5 # Students Referred to SST	14.69 (17.59)	Correlation				.432
		$p =$				.040*

\*  $p < .05$  Note: corrected significance level requires  $p < .005$



Table 13 (continued)

(n = 23)		Correlations/ Spearman's $\rho = p$	SA 6 Systematic Support	SA 7 FBA Team Available	SA 9 Parent Support	SA 10 Comprehensive Plans
SSS 6	Mean					
FBA Team Available	(SD)		72.60 (14.21)	59.13 (21.30)	67.82 (17.82)	70.86 (15.04)
SSS 7	.86 (.34)	Correlation	.545	.131	—	—
# Students Referred to FBA	1.38 (3.18)	$p =$ Correlation	.007**	.550 .502	—	—
SSS 8	.39 (.94)	$p =$ Correlation		.020*	.451	—
Parent Training Available					.03*	—
SSS 9	.13 (.34)	$p =$ Correlation			.535	—
Family Support Group/Meeting					.008**	—
SSS 10	14.69 (17.59)	$p =$ Correlation				.186
# Students w/ Comprehensive Plan		$p =$			—	.406
SSS 11	2.47 (1.75)	Correlation				.176
Frequency Comprehensive Team Meets		$p =$				.423

\*  $p < .05$  \*\*  $p < .01$  Note: corrected significance level requires  $p < .005$

Table 14

*Descriptives and Correlations of PBS Self-Assessment (SA) subscales and ODR per 100 Students per Year*

(n = 23)	Significance	SA 4 Expectations Taught	SA 5 Discipline Response	SA 8 Data Monitored	SA Total Score
Mean (SD)		80.86 (8.48)	80.00 (15.07)	73.04 (13.95)	70.84 (10.92)
Total ODR per 100 Students per Year	Correlation	-.429	-.125	-.077	-.176
	Spearman's rho $p =$	.041*	.569	.72	.421

\*  $p < .05$  Note: corrected significance level requires  $p < .005$

*Correlational Analyses.* Correlation coefficients were computed among the team total scores and subscale scores on the *BEACONS PBS Self-Assessment and Program Review* (SA) and *Schoolwide Evaluation Tool* (SET), the number of office discipline referrals (ODR) per 100 students per year, and responses to the *School Supports Survey* (SSS). The Bonferroni approach was used to control Type I error across all of the correlations. Therefore,  $p < .005$  was required for significance for these analyses (Stevens 1996; Tabachnik & Fidell, 2001).

The results of the correlational analysis between subscale and total scores of the SA and from the SET are summarized in Table 12. While one correlation between PBS Self-Assessment subscale 8 (data analyzed) and SET subscale E (data monitored) resulted in a  $p < .05$ , with the correction for Type I error, it can not be considered significant. Analysis of the descriptive data revealed that the means across both the SET and the PBS subscales are fairly flat and have a somewhat restricted range (70%-93%), which may have had some effect on the analysis.

Table 13 summarizes the results of the correlational analysis between four subscales from the *BEACONS PBS Self-Assessment and Program Review* (SA) and five of the items from the *School Support Survey* (SSS). Two correlations were found to have a  $p < .05$  (SA subscale 6, systematic supports and SSS item 4, student support team, as well as SSS item 5, number of student referred), but no results met the corrected significance level. Analysis of additional items from the SA and the SSS are displayed on Table 10b. A correlation at  $p < .05$  was found between SA subscale 9 (parent supports) and SSS item 8 (parent training available), but due to the correction for Type I error, they cannot be considered significant. However, a correlation between SA subscale

9 (parent supports) and SSS item 9 (family support groups/meeting) was found to be approaching the corrected significance level at  $p < .008$ , along with SA subscale 6 (systematic supports) and SSS item 6 (FBA team available) at  $p < .007$ .

The final correlational analysis between subscales from the PBS Self-Assessment and the total ODR per 100 students per year is summarized on Table 14. As with the other correlational analyses, no results were found to meet the corrected significance level. One correlation between SA subscale 4 (expectations taught) and ODR had  $p < .05$ . Here also analysis of the descriptive data reveals that the means of SA subscales are fairly flat, with a restricted range (71%-81%). Additionally, the standard deviation of the total ODR is quite large ( $SD = 56$ ), which may have impacted the analysis.

To further explore the relationship between the SA and SET, change scores were computed for both the SET and the SA subscales between Year 1 (2004) and Year 2 (2005), then correlational analyses were conducted along the same parameters as the previous analysis. The results are displayed in Table 15. The Bonferroni correction was again used to control for Type I error, establishing a significance level of .005. The correlation between SA item 1 (policy & procedures) and SET subscale A (expectations defined) approached the corrected significance levels ( $r = .541, p < .009$ ). No other correlations were found to be significant. As would be expected, the means of the change scores for the self-assessment remain fairly flat (16.13-23.68) and the standard deviations were quite large ( $SD = 15.87$ -23.96). The mean change scores across the SET subscales had a somewhat larger range (13.02-30.86), but the standard deviations are quite high here also ( $SD = 9.15$ -38.66). In the case of SET subscales A and D this

Table 15

*Descriptives and Correlations of Change Scores of PBS Self-Assessment (SA) and School-wide Evaluation Tool (SET) Subscales*

(N = 23)	Mean (SD)	SA 1 Policy & Procedures	SA 4 Behavior Expectations	SA 5 Discipline Response	SA 8 Data Analyzed	SA Total Score
Mean (SD)		18.63 (15.90)	19.54 (15.87)	16.13 (16.17)	21.36 (18.33)	23.68 (23.96)
SET A Expectations Defined	30.69 (38.66)	.541 Correlation	–	–	–	–
SET B Expectations Taught	35.26 (32.28)	.009** Spearman's rho $p =$ Correlation	.352 Correlation	–	–	–
SET D Violations System	13.02 (24.92)	.108 Spearman's rho $p =$ Correlation	.107 Correlation	–	–	–
SET E Data Monitored	30.86 (11.10)	.635 Spearman's rho $p =$ Correlation	.037 Correlation	–	–	–
SET Total Score	14.88 (9.15)	.869 Spearman's rho $p =$ Correlation	.194 Correlation	.388 Spearman's rho $p =$		

\*\*  $p < .01$  Note: corrected significance level requires  $p < .005$

actually results in negative scores (indicating a decrease across time) for some schools. This may also have had some effect on the correlational analyses.

*Schoolwide Evaluation Tool (SET) and Self-Assessment (SA) Criteria Ratings*

A descriptive analysis was completed to determine which schools met the 80% criteria for effective implementation across the SA and the SET. This data was used to compare how often the scores across both measures concurred on whether a school was above or below criteria in a given area. Tables 16 and 17 summarize the scores on related subscales from both the SA and the SET for each school in each cohort. A total of six schools in both cohorts are above the 80% criteria on both measures across all of the related subscales. An analysis of the error patterns across each cohort found that in Cohort 1, five schools had only one SET subscale score below criteria and those scores were within 5% of bringing both measures above criteria. By accepting that level of 5% as a reasonable range of error for one subscale, this brings a total of eight schools in Cohort 1 above criteria across all the paired subscales on both measures. Error analysis of the scoring across measures of Cohort 2 schools found that even accepting the same 5% range of error for one subscale, only three schools scored above criteria on both the SA and the SET. However, while three schools scored under criteria on some of the related subscales, the scores matched consistently across the measures.

An analysis of the percentage of time both the SET and SA subscales are in agreement across the related subscales, concurring that a school is either above or below criteria in a specific area, was 71% when including all errors. When accepting 5% as an acceptable range of error when only one subscale is below criteria, this increased to 82%.

Table 16  
*PBS Self-Assessment and SET Subscale Scores by School by Percentage Implemented for Cohort 1 Schools*

School Number	Expectations Defined		Expectations Taught		System for Violations			Data Monitored and Evaluated	
	SA 1	SET A	SA 4	SET B	SA 5	SET D	SA 8	SET E	
1	100	100	100	100	100	88	100	100	
2	100	75	80	80	80	75	80	100	
3	80	100	80	100	80	100	80	100	
4	80	100	90	100	100	75	80	100	
5	80	75	90	80	80	63	80	100	
6	80	100	80	100	70	88	80	100	
7	80	75	80	100	80	88	80	88	
8	80	100	80	70	80	75	80	100	
9	100	75	80	90	60	88	60	63	
10	85	100	90	100	90	92	80	100	
11	90	100	90	100	100	75	90	100	
12	80	100	80	90	100	88	80	76	
13	80	48	80	78	80	60	60	85	

Table 17

*PBS Self-Assessment and SET Subscale Scores by School by Percentage Implemented for Cohort 2 Schools*

School Number	Expectations Defined		Expectations Taught		System for Violations		Data Monitored and Evaluated	
	SA 1	SET A	SA 4	SET B	SA 5	SET D	SA 8	SET E
14	60	98	60	89	40	98	60	100
15	80	100	80	100	80	88	80	100
16	80	100	80	90	80	88	50	75
17	80	100	80	100	80	88	80	88
18	80	100	80	90	80	88	60	88
19	80	75	80	50	100	100	60	100
20	80	100	80	90	60	75	60	75
21	60	75	60	100	80	63	40	100
22	80	100	80	100	100	100	80	100
23	80	100	80	100	60	75	80	100



Using the same criteria, a total of 13 schools matched scores on both measures as being either above or below criteria in all areas and another six schools failed to match in only one area. The remaining four schools failed to match in two or more areas, with three of these schools in Cohort 2.

*Descriptive Analysis Of Self-Assessment and Discipline Referrals.* The mean score for ODR per year, per 100 students in 2004–2005 for the BEACONS schools is 68, which is slightly below the national average of 70 per year for elementary schools during the 2004-2005 school year. (Schoolwide Information System, 2006). However, the large standard deviation ( $SD = 56$ ) indicates that a number of schools have well above this amount. An analysis of the total ODR per year, per 100 students, by school found that 18 schools had less than 100 ODR per 100 students in 2005. While two schools had totals of 108 and 122, and three schools had between 180-200 ODR per year, per 100 students. A more detailed analysis revealed that one third (approximately 8) of the participating schools had 40 or less ODR per 100 students during the 2004-2005 school year, one third had between 41-74 ODR per 100 students, and the remaining third had between 81-200 ODR per 100 students. When comparing the number of ODR by SA total score, four schools had a SA total score greater than 80%, with the mean ODR per 100 students for these schools at 40, well below the national average. Nine schools had SA total scores indicating a moderate level of implementation on PBS practices (69%-79%), with a mean total of ODR at 75 per 100 students, slightly above the national average. The 10 remaining schools had SA total scores indicating an overall low level of implementation of PBS practices (44%-68%), with mean ODR at 95 per 100 students in the 2004-2005 school year. This places them well above the national average in discipline referrals.

*Descriptive Analysis of Self-Assessment and School Support Survey.* A detailed descriptive analysis was conducted on data from the *School Support Survey* (SSS) completed by the schools in conjunction with subscale scores on the *BEACONS PBS Self-Assessment and Program Review* (SA). Analysis of the response to items specifically related to the development and implementation of a school-wide discipline program revealed that while most of the schools were at or above the operational criteria for the SET, as well as rating themselves at a moderate to fully functional level of implementation on the related subscales of the PBS Self- Assessment, 10 schools reported on the survey that they had no prosocial skills development program in place at all. Of that group, nine of those schools had still rated themselves at 80% or above on the related SA subscales. Of the nine schools that reported having a program in place, three reported using it daily, six reported weekly, and four reported monthly use. The two most frequently cited programs were *Second Step* (Committee for Children, 2006) and “a program we developed as a staff.”

Schools reported a range of responses to survey questions about the amount of staff development time devoted to supporting the school-wide discipline program as well as students with EBP. Only two schools rated themselves above criteria on this SA subscale. They reported five and eight dedicated staff development dates in the 2004-2005 school year. Fourteen of the schools rated themselves as moderately implementing the practices in this subscale (60%-79%) yet reported between 5 and 12 dedicated staff development dates. The remaining schools rated themselves at a low level of implementation with most schools reporting five dedicated staff development dates.

In response to survey questions about school practices related to behavioral screening, early intervention, and providing systematic student supports, all the schools reported completing a SSBD screening at least once a year, which is a project requirement, with five schools doing so twice or more per year. All schools reported having counselors in their buildings an average of 30 hours per week. Analysis of the SA subscale scores related to providing systematic supports to students found 15 schools scoring at or above criteria. Nine of those schools had a student support team (SST) that met weekly, two schools met twice a month, one met monthly, and one school reported not meeting at all. The remaining eight schools had SA subscale scores ranging from 40%-79%, with half of those schools reporting a support team that meets twice a month or as needed, and the other four reporting having no SST team at all. Of the schools with the SST process in place, 13 schools indicated that this team provided assistance in behavior management, prosocial skills development, as well as academic support. The other four schools said they primarily emphasized behavior management and prosocial skill development. Overall, the schools reported referring an average of 15 students per year to such support teams.

Survey questions about the existence of teams that specifically provide functional behavioral assessments (FBA) for students with behavior problems had mixed responses. A total of eight schools scored at or above criteria on the related SA subscale, and all reported the existence of a FBA team that met regularly and referring up to 12 students per year. Of the 15 other schools, 12 also reported having an FBA team in place, referring a maximum of 10 students per year, but had rated themselves on the SA FBA subscale

between 20%-60% (not yet established to moderately in place). The three remaining schools reported having no such team in place at all.

Analysis of the SA and survey questions related to family support services provided by the schools found that 11 schools rated themselves above criteria on the SA family involvement subscale. Four of those schools reported meeting weekly, one school met quarterly, three schools reported meeting “as needed,” and three reported having no family support meetings at all. However, of the schools rating themselves above criteria on the family support subscale, only four had parent training available (one school weekly, one school monthly, two schools on a quarterly basis). None of the schools scoring below criteria on this subscale offered parent training at all.

Descriptive analysis of the SA and responses to survey questions related to the existence of a team that focuses on the development of comprehensive support plans for students with intensive needs, found that 13 schools rated themselves as above criteria on the related SA subscale. Yet only two of these schools had a team that met weekly, one that met twice monthly, and another that met monthly to develop such plans. The other eight schools reported meeting “as needed,” and one reported not meeting at all. Of the 10 schools rating themselves below criteria on the SA, six schools reported having such a team but most reported meeting “as needed.” Nine of the schools with a comprehensive support team reported that they had referred up to 10 students for such interventions, six of the schools referred 12 more students, and five schools reported referring none at all last year. Of the schools that provide comprehensive services, 15 of them include members from other community agencies such as mental or public health as a part of that team.

## Chapter 5

### Discussion

The first step in analyzing the *BEACONS PBS Self-Assessment and Program Review* (SA) was to evaluate whether or not the content of the measure adequately represented strategies and supports relevant to the effective implementation of school-wide positive behavior supports (PBS). Establishing content validity is one of the first steps in the development of an effective assessment tool. It demonstrates that the content of the measure is fairly representative of the domain or area it is intended to measure (Devillis, 2003; Messick, 1989; 1993; Nunally, 1978). Nunnally (1978) states that establishing content validity involves two features, (a) the adequacy with which the content has been sampled and (b) the adequacy with which the content has been cast in the form of the items themselves.

The results of the expert survey indicate that all the items included in the SA were considered mostly to fully relevant practices in implementing PBS effectively in schools. This suggests that the content of the SA does “adequately” represent the range of practices critical to the implementation of effective and comprehensive PBS programs, thus satisfying Nunally’s first feature of content validity. These results indicate that schools can use the 10 SA subscales to identify benchmarks for tracking the effectiveness of their PBS initiatives and be assured that in doing so they are developing practices that are considered to be highly relevant to a comprehensive PBS program. Additionally, these results provide support for the content and focus of the three BEACONS training goals, which are also directly linked to the content of the SA (see Table 1).

The internal reliability analyses provide further support for the content of the SA, answering the question: does the internal consistency and reliability of the measure indicate a level of significance that suggests confidence in the internal consistency of the content? The fact that all 10 subscales had overall alpha levels of  $\alpha = .70$  indicates that the content of each subscale has good to strong significance, and with an overall alpha level of  $\alpha = .90$ , the total content of the SA can be considered to have strong significance (Cicchetti, 1994; DeVillis, 2003). High inter-item correlations indicate that all the items are measuring (or manifesting) the same thing, implying strong links between the items themselves and the latent variable (DeVillis, 2003). Therefore, these results satisfy Nunally's second feature of content validity. The content has been "cast" or developed into items that are strongly or highly reliable to one another. Additionally, these results lend strength to what Messick (1989) refers to as the "structural component" of the construct validity of the SA. At a practical level these results, along with those from the expert panel, indicate that school teams can confidently reference the items included in the SA because they provide a reliable and meaningful set of effective practices from across the three levels of the PBS model.

Along with establishing the content validity of the SA, it was equally important to explore the validity of the overall self-assessment process as well. The findings from the HLM analysis are particularly relevant to establishing the validity of the BEACONS SA process. The following is a brief review of the procedure for completing the SA:

- (a) Schools establish a leadership team that includes representation of the full faculty.

(b) All members of the leadership individually complete the *BEACONS*

*Individual PBS Self-Assessment* form.

(c) All members of the team meet to discuss their individual scores and complete the *BEACONS Leadership Team Self-Assessment and Program Review* form, and develop an action plan.

Unlike other PBS assessments such as the *Effective Behavior Support Survey* (Sugai, Horner, & Todd, 2003) discussed earlier, which simply asks staff members to vote on items and priorities are determined by the majority of votes, the BEACONS SA process emphasizes the importance of the team discussion and establishing a group consensus on the ratings and priorities for improvement. This individual followed by team consensus self-assessment process used in the BEACONS SA is similar to one explored by Kelly & Fiske (1951), as described in the seminal article on multitrait-multimethod validation process by Campbell & Fiske (1959) and has been used in several studies on school climate ratings in the last several years (Griffith, 2000; Lindell & Brandt, 2000; Van Horn, 2003).

In their analysis of convergent and discriminant validity Kelly & Fiske (1951) discuss the results of self and team ratings as the variables of interest in the “Assessment Study of Clinical Psychologists,” which involves an individual followed by a team rating process (p. 93). Commenting on the analysis of ratings from both individuals and as a team, Campbell and Fiske found what they called, “a distinct trend for the staff-teammate block to show the greatest agreement. Both represent the external point of view. Both are averaged over three judges, minimizing individual biases and undoubtedly increasing reliabilities (p. 99).” They also state that in such a context, self and teammate ratings

“represent entirely separate methods and can be given the major emphasis in evaluating the data to be presented (p. 95).” James (1982) agrees that a rating built first from the perspective of its individual members, then by a meeting to establish a team rating is an effective measure of organizational functioning, stating, “ perceptual agreement implies a shared assignment of psychological meaning, from which it follows that an aggregate (mean) climate score provides the opportunity to describe the environment in psychological terms (p.221).” Of course, it is critical that team members be consistently reviewing data related to various aspects of the PBS initiative so that their perspectives are also anchored in the daily reality of the school (OSEP Center on Positive Behavior Supports, 2004; Lewis & Sugai, 1999).

The results of the HLM analysis indicate that membership in school team better predicted team self-assessment results than an individual’s professional role. This suggests that the group self-assessment ratings accurately represent a “shared psychological meaning” for the leadership teams in each of the schools. Therefore the team scores can be considered accurate measures of organizational function. If individual perception were the critical element of analysis, then differences based on individual role should have influenced the outcome of the HLM analysis more significantly (Van Horn, 2003). Had the reverse proven true, the implication would be that the shared or unifying perspective is more dependent upon what professional role the individual is involved in, regardless of where that position is located. This would call into question both the validity of the team self-assessment process overall, as well as the reliability of the team scores. However, as they stand, these results provide strong convergent validity to both the team self-assessment process as well as the team scores themselves.



Because the leadership team plays such a crucial role in the implementation of a school's PBS initiative, this opportunity to develop a group consensus on existing practices and goals for improvement is a critical aspect of the BEACONS SA process. There is a powerful effect on the team dynamic when colleagues share an ongoing dialogue and focus their collective energy via the self-assessment process. The team discussion provides the opportunity for members to share their learning and insight with one another, and ultimately with the school community as a whole as a part of the school's PBS initiative (Dwyer, 2002; Sugai, Horner, & Gresham, 2002; Knoff, 2002; OSEP Center on Positive Behavior Support, 2004; Todd, Horner, Sugai, & Sprague, 1999). In her study of the self-assessment process in schools in the United Kingdom, Powell (2000) found that "cross-functional teams" were an important aspect of the self-assessment process (p. 5). These teams were "designed to capture and capitalize talent through enhanced information flows that were less reliant on individuals (p. 5)." Powell's comments on the benefits of the team component within a self-assessment process echoes those of Campbell and Fiske (1959) discussed earlier. A leadership team with a unified understanding of the needs of a school that is data based, and a clearly defined plan for improvement is going to be more influential with the school community, and better able to implement and sustain systemic change than a team that has not been able to establish that shared understanding (Bruce, 1993; Knoff, 2000; Sugai, Horner & Gresham, 2002). This context, together with the results of the HLM analysis lends support to the overall construct of the BEACONS SA process.

The purpose for correlating subscales related to school-wide discipline from the *BEACONS PBS Self-Assessment and Program Review (SA)* with the *Schoolwide*

*Evaluation Tool* (SET) was to attempt to establish some criterion validity between the SA and another established instrument that measures common aspects of school-wide PBS. However, the results of the correlational analyses seem to indicate that no relationship exists between the two measures. This seems unlikely given that both the construct and content of the SET and SA appear to overlap a great deal. Additionally, the descriptive data comparing the subscale scores on both measures across schools (see Tables 13 and 14) seems to suggest a relationship should exist between the measures, but this is not born out by the correlational analyses. To develop a clearer understanding of these results, a further descriptive analysis of the data and the design was conducted in order to determine what could be affecting the analyses and a number of measurement issues became evident. More specifically, issues emerged that effect the statistical conclusion validity of the study. Because the somewhat low N of 23 schools in this study, any type of measurement issue will have a fairly large effect on the analyses and greatly impact power as well (Shadish, Cook, & Campbell, 2002).

The first measurement issue was found in a review of the descriptive data of the SET and SA subscale scores. The means of both measures are fairly flat, as well as having a restricted range. In fact, the scores seem to parallel one another at the high end of the scale, creating a ceiling effect. This lowers the power of the analysis (Shadish, Cook & Campbell, 2002). Additionally, because a correlational analysis can only be completed when there is a change in scores from one data point to another, it is possible that the nature of the data in this particular set of scores may be interfering with the analysis (Tabachnik & Fidell, 2001, Campbell & Fiske, 1959).

Taken on their own, the subscale scores on the SET and SA subscales seem to indicate that most schools in the BEACONS Project are functioning fairly well across the measured practices. This may be the result of the training structure of the BEACONS Project. As discussed in Chapter 1, the BEACONS Project includes as part of its supports to schools a series of three training goals. The first training goal focuses on practices and strategies related to the development and implementation of a positive school-wide discipline program including the development of school-wide expectations, a plan for teaching and reinforcing these expectations for all students, a system of responding to discipline violations, implementing a system for tracking discipline data and using it to inform decision making. These are the practices specifically measured by the SET and SA subscales used in this analysis. The fact that most of the schools in the project are scoring at or above the 80% criteria level seems to suggest that these training objectives are being met. Unfortunately, a side effect of these results is that it may have created the restricted range between scores on the two measures and obscuring potential correlations between the measures.

A second measurement issue is related to the design of part of the study. Because of the funding schedule of the grant supporting the project, the schools in Cohort 1 attended the first training of the project in August of 2003, prior to completing either the first SA or the SET. As a result the scores on both measures for Cohort 1 do not accurately reflect the growth on either measure from year 1 to year 2, and appear flatter than they would in a true pre/post test model. In contrast, the schools in Cohort 2 were assessed on both measures prior to participating in the first training. As a result their scores from year 1 to year 2 are much more variable and tend to reflect more growth.

A secondary correlational analysis was completed using change scores on both the SA and the SET subscales and total scores (Table 15). This analysis found some moderate correlations such as the relationship between policy and procedures on the SA with defined expectations on the SET. This moderate correlation may imply that when schools take the time and energy to develop expectations as a staff, they are likely to become defined and written in the school's policies. One way of determining this is by both reviewing the policies a school has on their social expectations in the school's handbook. Both of the scales include items regarding the handbook, and thus, one can reasonably conclude that these two scales reveal an important feature in schools. That is, policies should clearly reveal practice, and practice should later influence outcomes. However, the measurement issues found in the first correlational analysis are evident here as well. Once again, with the exception described above, the mean change scores have remained fairly flat and the standard deviations quite large, which may be affecting the analysis, making it difficult to draw an accurate conclusion about the results.

Further analysis of the descriptive statistics of the SET subscale change scores revealed a somewhat larger range of scores. However, two of the schools showed negative changes. This may have occurred for three reasons. First, there is the possibility of change in the membership of the leadership team at the school level from year to year, which may result in a change in perspective and therefore in some cases resulting in a decreased score. Secondly, it is possible that as a result of changing or conflicting priorities, a school's practices in certain areas may have actually decreased in effectiveness or level of implementation, resulting in a lower score. Finally, the initial ratings on the SA may have reflected a "naïve" score, meaning that the team thought that

they understood what the listed practices were and how they were implemented the first time the team completed the ratings. However, after involvement in the project the team may have found that the school was not implementing practices in certain areas as effectively as previously thought. This would result in a lower, but more realistic rating on the second assessment (Kruger & Dunning, 1999). Whatever the reason for the negative changes these schools serve as outliers and their scores likely impacted the analysis.

It is also likely that measurement issues affected the results of the correlational analysis between the number of ODR per year, per 100 students and related SA subscales. In this case three schools had almost twice the number of ODR as the majority of other schools, serving as outliers. Two of these schools were from Cohort 2. Such large numbers of ODR in these three schools seems to suggest that while they have begun a more accurate system for counting ODR, the school-wide systems critical to reducing ODR, such as teaching and reinforcing expectations and clear responses to discipline problems are not yet well established. For example, it is likely that in these three schools the faculty have not yet clearly defined which types of behavior problems are addressed within the classroom and those that are managed by the teacher or other supervisor. In this case all discipline problems are treated as ODR and counted as such in the SWIS system. Now that the schools are able to systematically track the number of ODR in their buildings, it is critical that they take the next steps and begin analyzing the discipline data for trends and determine how they can reduce the number of ODR.

When data analysis indicate that certain schools are functioning as outliers it is important that project staff spend time with those schools to further evaluate their

practices. Specifically, staff will need to gather more detailed data on the fidelity with which schools are implementing the practices in question. In this case, reviewing the types of referrals being entered into the SWIS database, observing staff meetings where discipline issues are discussed, and meeting with the leadership teams to determine if and how they are reviewing the discipline data would be critical activities. If it is determined that the outliers are not in fact implementing the PBS activities as outlined, that is with low fidelity, then that provides important information with which to interpret the results.

Time may also be a factor impacting some of the potential relationships between the SA subscales related specifically to discipline (expectations taught, clear response to discipline, and monitoring of data) and the total ODR (see Table 14). Committing and adhering to timelines on school reform may be one of the most difficult goals for a school to attain. Schools must consistently contend with issues such as staff stability, leadership changes, and funding shifts that compete for time, energy, and resources. In their research on school improvement both Knoff (2002) and the OSEP Center on Positive Behavior Support (2002) have proposed that it take 3-5 years for a school's PBS initiative to be fully realized. This length of time is required because system change at this level emerges in stages. For example, Rogers (1995) proposed that there are four stages that a system moves through to take a new program from introduction to diffusion. These are adoption of the new program, actual implementation of the program (with fidelity), dissemination of the program throughout the school or system, and finally sustainability. The pace that schools work through these stages varies, but it is ultimately determined by how long it takes for the faculty to implement PBS practices with fidelity.

This is not an easy or quick process in schools. Dusenbury and Hansen (2004) hypothesize that within any group there is a predictable pattern for the diffusion of an innovation. The first to embrace an initiative and move towards implementation are called “innovators.” In the context of PBS this group is likely to be the leadership team. They are followed first by “early adopters” who are willing to take on a new program fairly quickly. As the program is implemented with success other teachers become involved, creating the “early majority.” As the initiative begins to build momentum and evidence indicates effectiveness most of the remaining staff then buy in, establishing the “late majority.” The last few remaining staff members who continue to resist implementation are referred to as the “laggards.” They often require individualized support to engage in the program or initiative. Dusenbury and Hansen (2004) believe that it is not until the faculty as a whole is implementing an innovation fairly consistently, can it be considered fully in place. The ongoing challenge for leadership teams is strategizing how to move all the members of the school community through these levels in order to realize the school’s reform initiative. Because most of the schools in this project had only been working with a PBS initiative for one to two years at the time of this study, it is quite possible that it is still too early for some of the changes in these areas to be substantial enough to be visible in the statistical analysis.

Developing a systematic response to discipline problems is an area that provides a case in point of the types of challenges schools face within their PBS initiatives, and the time and dedication required to establish effective practices. For example, to accomplish this objective a leadership team would work with the faculty to identify exactly which behaviors warrant an ODR (e.g. severe disruption, aggression, harassment) and those that

should be handled by the classroom teacher or area supervisor (e.g. not following directions, homework, low levels of disruption). This often results in an increase in the types of behavior that are managed in the classroom or on the playground, which is an easier change for some staff to accept than for others. Therefore this process often requires a series of staff meetings, professional development on behavior management strategies, and ongoing analysis of ODR data before this system is consistently implemented and well established in the school culture (Dwyer, 2002; Horner, Sugai, Todd, & Lewis-Palmer, 2004; Sugai, Horner & Gresham, 2002). Within this context it is not surprising that the schools would initially have some mixed data this early in the change process.

Along with the measurement issues, there are other differences between the SET and SA that may have some impact on their relationship to one another. First, the SET is designed to measure outcomes related to the school-wide level the PBS model as part of a school's school improvement initiative. An outside evaluator visits a school for a part of a day, reviews written products, walks through the school, and briefly interviews 10-15 teachers (some of whom are members of the school's leadership team), the administrator, and 10-15 students. The review of the permanent products, such as the parent and staff manuals, provide a measure of how well the PBS practices are being integrated into policy and communicated throughout the school community. The interviews with staff and students provide a measure of the level at which certain PBS practices are being implemented and diffused into the daily experiences within the school community. For example, staff are asked what the school-wide expectations are, if they have been actively taught within the last year, if they have recognized a student for appropriate behavior



using the school's recognition program, and if a leadership team exists that oversees discipline issues in the school. Students are asked if they know the school-wide expectations and if they have recently been recognized for appropriate behavior using the school's system. Clearly, with this design the SET is focused on measuring the level of diffusion and consistent implementation of core PBS practices at the school-wide level.

In contrast, the SA is designed to serve more as a planning and evaluative process specifically for a school's leadership team, and it relies on this team as the source of data. As discussed earlier, the leadership team plays a critical part in the implementation of a PBS initiative. They represent the broader faculty, work together closely, and meet regularly to develop the long-range plan for the implementation of the school's PBS action plan. The leadership team serves as the change agents in the school. A large part of their role is to help educate the full faculty on the principles of effective PBS programs, present data related to the school's current functioning, and guide the school community through the implementation of PBS related goals and objectives. This requires the leadership team to be well ahead of the full faculty in awareness, understanding, and planning. As a result, this "ahead of the curve" perspective may effect a team's SA rating in certain areas, so that the score reflects more on where the leadership team is in their understanding and planning in relation to a specific practice, rather than where the faculty and school community as whole might be functioning. While the goal of any self-assessment process is to minimize these types of discrepancies, it is likely that they will occur from time to time, particularly at the early stages of school reform.

While the correlational analysis did not yield significant relationships between the annual number of ODR per 100 students per year, the SET, and the SA subscales, the

descriptive findings do have some interesting implications. First, as a group, the BEACONS schools have a mean score for ODR of 68, which is slightly below the national average of 70 per year for elementary schools during the 2004-2005 school year. This suggests that strategies and practices learned by project schools and measured by the SA may influence the level of ODR, as well as how schools are now measuring them (Horner, Sugai, Boland, & Todd, 2004).

Most germane to this analysis is whether schools with higher total scores on the SA have fewer ODR. The descriptive analysis comparing the number of ODR by the SA total score, found that four schools had a SA total score indicating that overall their PBS practices were fully in place had a mean rate of ODR at 40, well below the national average. The nine schools with SA total scores indicating a moderate level of implementation on PBS practices had a mean total ODR of 75, slightly above the national average. The 10 remaining schools had SA total scores indicating an overall low level of implementation of PBS practices, with mean ODR at 95 for these schools. This places them well above the national average in discipline referrals. These results suggest that schools with higher SA scores may have a broader range of effective PBS practices well established, which impacts the level of discipline issues in the school.

These findings correspond to those summarized by Irvin, Tobin, Sprague, Sugai, and Vincent (2004), in their analysis of ODR and school-wide behavioral programs. In their review of several studies, they found that higher numbers of ODR were associated with problematic behavior climates in schools. As schools consistently implemented school-wide social and behavioral initiatives, ODR decreased. For example, McCurdy, Mannella, and Eldridge (2003) reported on the results of one urban elementary school

that implemented a school-wide behavior program they called “Keys to Success.”

Across the three years of the study, the number of ODR decreased from .63 ODR per student, per year to .34, including a reduction of the most serious infraction, student assaults (McCurdy, Mannella, & Eldridge, 2003). Overall, the descriptive analysis of ODR and SA scores contribute somewhat to the overall validity to the assessment and effectiveness of the SA, as schools with higher total SA ratings tend to have lower ODR.

In addition to the correlational analyses, a descriptive analysis comparing the number of schools functioning above or below the criteria of 80% on related subscales from both the SA and the SET was completed to determine how the scores across each of the related subscales compared. The results found that the SA and SET subscales consistently rated a school above or below criteria 82% of the time, when including scores on one subscale within 5% of reaching criteria. When a discrepancy did occur between the subscale scores the difference was found with the SET more often than with the SA subscales. Only two schools in the project had consistently discrepant scores between the two measures across all or most of the related subscales. As a whole, the results of the descriptive analysis comparing the scores of the SET and SA subscales found that they were fairly consistent in scoring across positive school-wide discipline related practices in a majority of comparisons.

Cohort 1 had the most schools above criteria across both measures and five schools failed to match only in one area. This suggests that the additional year of training and support from the BEACONS Project to establish and integrate the PBS practices has been beneficial for these schools. Only School 13 failed to match across three of the four areas measured, suggesting that the perceptions of the leadership team varied

substantially from the evaluator completing the SET. In this case it will be critical for the leadership team to talk with the evaluator and review the data from both measures carefully, to determine where the differences in practice and perspective lie.

Where discrepancies between the subscale scores exist within the Cohort 1 schools, it is often the leadership team who has slightly overrated the school's level of functioning on the SA subscales than the outside observer did via the administration of the SET. The area of "systems for violations" or "consistent response to discipline" had the most errors. This is understandable because, as discussed earlier, it is one of the most difficult aspects of school-wide discipline for schools to establish consistently. This may also be an example of case where the leadership team is farther ahead in its sense of the school's level of implementation, than is actually the case in day-to-day reality. Here again it will be critical that the leadership team review the data from both measures and discuss the reason for the disparities. This discussion can provide the leadership team with a "teachable moment," that gives them an opportunity to align their perspective more closely with the overall level of PBS implementation in their school.

Only three of the Cohort 2 schools were found to be above criteria on all the school-wide discipline subscales across both the SA and SET. Another three of the schools did score consistently across both measures, but scored below criteria in some of the areas, and one school failed to match in only one area. The remaining three schools failed to match across measures in two or more areas, suggesting that the perceptions of the leadership team varied substantially from the evaluator completing the SET. In contrast to Cohort 1, the school leadership teams in Cohort 2 tended to rate the school's level of practice lower than the SET evaluator. This was particularly true of School 14,

where the leadership team consistently rated themselves below criteria in all the areas on the SA, while the SET observer rated them well above criteria. The contrast between the leadership team's and the SET evaluator's perceptions may reflect both a lack of experience and confidence for Cohort 2 schools, because they have only had one year of training, support, and practice with these concepts. In cases when a leadership team and an objective evaluator are discrepant, it would be useful for the lead team to review the findings with the evaluator. The leadership team could take these findings into consideration, discuss them, and look for implementation examples throughout the school. It may also suggest that early in the implementation of a PBS initiative some leadership teams lack confidence in their understanding of PBS practices and/or still require guidance in their practical application.

The area of monitoring and evaluating data (SA subscale 8 and SET subscale E) reflected the most errors for Cohort 2 schools. This may have occurred because they have only had one year to begin to establish a consistent system of documenting and analyzing ODR, as well as to learn how to adjust their discipline program based on the results. In general, schools are not experienced with using data to evaluate behavior and discipline issues. PBS calls for leadership teams to review data regularly and to discuss it periodically with their staff. However, leadership teams may still need further training and experience in reviewing and understanding the meaning of PBS related data before they are confident doing that. This underscores the importance of training and support across time as schools develop and learn to implement positive school-wide discipline practices (Dwyer, 2002; Horner, Sugai, Todd, & Lewis-Palmer, 2004; Sugai, Horner & Gresham, 2002). Additional support that would be valuable to schools at this level is for

project staff to visit leadership team and faculty meetings to help the team interpret and present the data effectively.

Across both cohorts, the SET and SA subscales were in agreement across the related subscales, concurring that a school is either above or below criteria in a specific area, 71% of the time if including all errors. When accepting 5% as an acceptable range of error when only one subscale is below criteria, they concurred 82% of the time. On their own, these results suggest at least some concurrent validity between the measures. But because the correlational analysis did not find a significant relationship between the measures these results remain inconclusive. However, the fact that results for Cohort 1 schools were higher and more consistent than Cohort 2 schools suggests that the SA process can differentiate between schools based on training and experience with the school-wide PBS practices being measured by both the SET and the SA. This provides further convergent validity for the SA process.

To further explore the relationship between SA ratings and actual practice in the schools, detailed descriptive data were also analyzed from the *School Support Survey* (SSS) completed by the schools in conjunction with their SA. The results provide interesting insights into the practices of schools early in the implementation of PBS initiative.

Analysis of the responses to items specifically related to the development and implementation of a school-wide discipline program revealed that while most of the schools were at or above the operational criteria for the SET, and rating themselves at a moderate to fully functional level of implementation on the related subscales of the SA, half the schools reported on the survey that they had no prosocial skills development

program in place at all. Further review of the survey responses indicated that the individual(s) responsible for completing the SSS may have misunderstood the language of the question. Within the field of positive behavior supports, a school-wide prosocial skill development program is used to describe the process in which schools identify, teach, and recognize positive school-wide expectations. This may include a more formalized, published social skills program, but also frequently reflects a system developed by school teams and then implemented by the staff and faculty (Colvin, Kameenui, & Sugai, 1993; Dwyer, 2002; Sugai & Horner, 2002). However, it appears that several of the respondents on the SSS interpreted that question to be specifically referring to a published social skills curriculum. Modifying the language used in the SSS items to more clearly reference positive school-wide expectation programs can easily remedy this potential for confusion in the event of future assessments.

The second section of the survey explored the level of staff development dedicated to strategies for supporting students with EBP. The results seemed to indicate that there is no systematic link between the number of dedicated staff development dates and ratings on the related subscale (SA subscale 3). It is likely that five of the dates referenced by most of the schools in the survey reflect a series of materials called *Staff Development Frameworks* that were developed by the project to be presented by members of the school leadership team during staff meetings throughout the year (Blum, 2005). The goal of these presentations was to provide support for leadership teams in communicating PBS concepts and approaches to their school staff regularly and efficiently. It should also be noted that this subscale includes other indicators such as “inservice training focuses on evidence-based practices regarding behavior management

strategies” and “a method is used to evaluate inservice effectiveness” in addition to asking about the number of staff development opportunities. Ratings on these other items would have factored into a team’s overall rating on this subscale.

The next section of survey questions focused on school practices related to screening and early intervention for students with or at-risk of EBP (SA subscale 6). The survey asks about the frequency of school-wide screening, as well as how schools provide systematic supports for students identified in that process. All schools reported completing a school-wide screening at least once a year, which is the minimum BEACONS project requirement, while five schools reported doing so twice or more per year. This is likely because the project recommends more frequent screening for schools with high student mobility. Interestingly, all schools reported having counselors in their buildings at an average of 30 hours per week, but there is little detail about how they are used as part of the schools’ PBS systems. This would be beneficial to explore further, as the effectiveness of counseling as an intervention for disruptive behavior problems has been shown to be limited (Stage & Quiroz, 1997), and the SA item about counseling received the lowest overall relevance score from the expert panel. The SSS could be revised to gather more specific information on how counselors are integrated into the PBS systems in schools for further analysis.

Once students are identified through the SSBD screening process, schools must provide any needed academic or behavior supports to students. Training and support for these types of interventions are included in Training Goal 2 of the BEACONS Project and introduced during year two of the project (see Table 1). One practice that is critical to the effective support of students with EBP is the development of a team that meets



regularly to provide strategies and supports for teachers. These are often referred to as student support teams or SST (Todd, Horner, Sugai, & Sprague, 1999; Walker, Cheney, Stage, & Blum, 2005). For the most part the survey results indicate that schools which rated themselves higher on the student support SA subscale are more likely to have a range of established support teams in place. All of the schools rating themselves above criteria on the SA reported having a SST in place that met at least monthly, with most of the schools meeting at least twice a month, and another three meeting monthly. The survey also found that the types of supports provided by teams that reported meeting regularly are comprehensive, with a majority of schools providing assistance to teachers in behavior management, prosocial skills development, as well as academic support. The other four schools said they primarily emphasized behavior management and prosocial skill development. This combination of supports positions the schools well to proactively meet the needs of most students.

Half of the schools that rated themselves as having a lower level of implementation did not have an SST team that met at all. PBS literature suggests that meeting at least monthly to provide this level of support is related to improved student and discipline outcomes (Todd, Horner, Sugai, & Sprague, 1999; Walker, Cheney, Stage, & Blum, 2005). Further study to identify what factors interfere with a school's willingness or ability to implement a systematic SST process would be beneficial. It is likely that both a lack of behavioral expertise within the building, and competing priorities for time and energy are part of the difficulty.

PBS Self-Assessment subscale 7 focuses on a specific type of intervention designed for students with more significant behavior problems called Functional

Behavior Assessment (FBA). BEACONS schools are introduced to a comprehensive approach to this process at the beginning of the third year of project as part of Training Goal 3 (See Table 1). Most schools have some level of experience with FBA as it applies to special education students with severe behavior problems where it is required under certain conditions. However, the BEACONS Project and PBS places an emphasis on using this approach as a part of early intervention for students with chronic behavior problems (Sugai, Horner, & Gresham, 2002; Walker, Cheney, Stage, & Blum, 2005.). This process also emphasizes a particular approach that involves framing the assessment around what is called a behavior pathway and building intervention around the function or reason for the student's ongoing behavior (Crone & Horner, 2003; Scott & Nelson, 1999).

The analysis of survey questions about teams that specifically provide functional behavioral assessments (FBA) along the structure outlined above for students with behavior problems found that schools with the higher ratings on the FBA SA subscale, have better functioning teams and refer slightly more students than schools with lower SA scores. However, across the schools there were very mixed responses, with some schools rating themselves at lower levels of implementation on the SA even though their survey responses indicated that they met regularly and referred an average of 10 students a year. Further exploration into why these schools rated themselves at lower levels of implementation would be helpful. One possibility is that the respondent who completed the survey inadvertently referenced the number of students referred to the school's multidisciplinary (MDT) team, who is involved in FBA for special education students, while the leadership team that completed the SA rated themselves along the more specific

criteria included in the language of the SA. Here again clearer language in the SSS might provide clearer results in the event of another assessment.

Subscale 9 of the SA focuses on practices related to family support and involvement. While most schools that rated themselves as having these practices moderately to fully in place also had some level of regularly occurring family support meetings, the number of meetings did not directly relate to the ratings determined by the leadership team. This may have occurred for two reasons. First, as with earlier items, there are other indicators included in the family involvement subscale that would effect the teams' overall rating. For example, item 9.1 asks if family members attend team meetings related to their child's program. This may involve informal contacts, which are seldom monitored, as well formally scheduled meetings that often are tracked. Secondly, schools may rate themselves higher believing that they have developed a culture where informal parent involvement is supported, while formalized family education or support groups may not be well established.

The final level of supports and interventions addressed in the SA are found in subscale 10, which outlines practices related to providing comprehensive support plans for students with intensive needs. On this subscale, slightly more than half of the schools rated themselves as having these practices fully in place, and reported meeting frequency that ranged from weekly, monthly, or as needed. Of the remaining schools that rated themselves below criteria on the SA, six reported having such a team, but reported meeting only "as needed." Of the schools that provide comprehensive services, most of them include members from other community agencies such as mental or public health as a part of that team, which is considered one important aspect of this type of support (Eber

& Keenan, 2004; Eber & Nelson, 1997). The fact that most of the schools surveyed had some sort of mechanism to support students and families with intensive needs, and that many had referred 10 or more students to such supports is indicative of the range of student needs that schools encounter regularly. Further study of the types of students referred and the supports that are developed by these types of teams would be very interesting to explore in the future.

It is important to note that comprehensive supports are addressed in the BEACONS Project as part of Training Goal 3 (see Table 1) and are not formally introduced until the third year of the project. These practices reflect a school's process for accessing community agencies and outside interventions as part of a broad level of support for student and/or family with intensive needs. To date, Cohort 1 are the only schools to have received any direct training or support on interventions at this level, and of the 13 schools rating themselves above criteria, nine of them were from Cohort 1.

The findings from the *School Supports Survey* (SSS) provide interesting insights into the types of supports being implemented by schools in the BEACONS Project. They indicate that many schools are implementing a number of the practices measured by the SA, but with a range of frequency and effectiveness. Unfortunately, in several of the subscales a clear link between the type and frequency of the supports reported on the survey and the rating on the related subscale(s) were not particularly clear. This may have occurred for several reasons. First, as discussed previously, the language in the SSS could have contributed to some of the conflicting responses. Secondly, while the directions requested that a member of the school's leadership complete the survey, it is possible that all, or some of the responses, were given by someone not involved with the leadership

team and therefore out of context with the team's ratings. Third, the survey did not request information on all of the practices, or indicators, in each of the subscales. The team's ratings on the practices not included in the SSS may have affected the total subscale ratings in ways that were not captured by the survey. Finally, while the directions requested that the survey be completed within one month of the team self-assessment, it is possible that by separating the activities, the respondent may have referenced different data, also affecting the results.

#### *Towards a More Effective Self-Assessment*

Results of this preliminary study suggest a number of recommendations that can improve the effectiveness of the SA process, as well as address some of the measurement issues that proved problematic to the psychometric analysis. First, addressing the measurement issues that may have served as confounds to the correlational analyses is critical. This involves assuring that both the SET and SA are completed as true pre/post measures, administered prior to schools receiving any training or technical assistance. This may result in a wider range of scores that reflect greater variability across both school and time, perhaps avoiding the ceiling effect and restricted range that may have affected the correlational analyses in this study. Also, following these schools and comparing results across the full length of the project will help to clarify the effects of more time and further training on the change process overall.

Another feature related to measurement that should be more formally measured is the fidelity and dosage of each school's implementation of key PBS practices, such as leadership team meetings, evaluating and sharing data results, student support teams etc. For example, the project staff could develop a short measure that outlines the features of

an effective PBS leadership team meeting (including such features as frequency of meeting, agenda driven, review of current data and feedback, references established action plan, and outlines tasks and responsibilities until next meeting) that includes a rating scale referencing the effectiveness with which each feature was addressed. A member of the leadership would be responsible for completing that measure at each meeting. In addition, a project staff member would periodically attend the leadership team meetings and also complete the fidelity measure and share the results with the team. This process provides an effective scaffold for schools as they internalize the practices because the checklists serve as prompts and guides for the effective implementation of critical practices until they become fluent, along with providing data on the fidelity of implementation for analysis. All fidelity forms would then be collected and used to establish an overall rating for each school. This information will help to put the ratings of each school across all the measures in a practical context, as well as provide important diagnostic information to project staff.

The results also suggest that the SA process could be improved by including an increased emphasis on referencing data as part of the team's SA rating process. For example, the SA directions could be revised to prompt teams to reference their most recent SET results, SWIS reports, and referrals to student supports as part of determining their ratings. By directing teams to use this information as part of their discussion, it is likely to result in more accurate SA ratings while providing another opportunity for teams to practice integrating data into their decision-making.

This also means that support to school teams must specifically focus on effective data based decision-making related to their practices at the secondary and tertiary levels

of the PBS model. As project staff work with schools on supports at these levels, they should include clear examples and strategies for collecting and monitoring data connected to each type and level of support. For example, how can a school meaningfully track the number of students referred to SST or FBA teams? Further, what factors should a team review in determining the effectiveness of these supports? How can schools use this information to focus the allocation of resources?

As discussed previously, clarifying language within the SSS may help to resolve some of the conflicting responses. Additional questions could be added to probe more deeply about the types of supports provided by counselors and the comprehensive support teams, as well as issues that compete or interfere with providing SST supports to students and teachers for further analysis.

To explore the leadership team's overall satisfaction with the SA process and materials, adding a short consumer feedback and satisfaction survey to the individual SA could be very informative. This would provide insight into the experience and perceptions of individual team members as related to SA and its' contribution to the action planning process.

Finally, the expert panel review and the internal reliability analysis indicated that the content of the SA had a high level of internal consistency. While the number of individual participants ( $n = 150$ ) in this study is adequate for an initial analysis, these results could change somewhat with a larger survey. An increased number of participants is likely to broaden the range of the responses, identify redundant items, and provide an even more confident level of internal consistency.

### *Limitations*

The most significant limitation to this study is the lack of a control or comparison group of schools, which is necessary to provide confidence that the changes reflected in the SA ratings are a reflection of the structured interventions of the BEACONS Project and not a matter of chance. Instead the project used a lag design with the two cohorts. Should a larger study be implemented, including a group of schools that are receiving no structured training or supports in the implementation of PBS would serve as an important comparison for the findings.

Additionally, the fact that the study includes only 23 schools is another substantial limitation. The small N affected the power of the statistical analyses, magnified the effects of the measurement issues discussed, as well as limits the generalization of the findings. While the schools in the BEACONS Project served as a population of convenience with which to complete this initial evaluation, a larger group of schools will be needed to truly establish the credibility of the measure.

Finally, the results indicate the most effective use of the SA requires access to training and support on PBS principles and practices to support schools in developing and implementing the practices effectively. This means that that the SA process may not be as useful to schools that are not involved in a PBS support initiative of some kind.

### *Conclusion*

While this study was not completed in the structure of a true multitrait-multimethod analysis, it did include evaluation of the *BEACONS PBS Self-Assessment and Program Review* (SA) from several approaches in an effort to establish the initial reliability and validity. The results of the preliminary psychometric analysis conducted in



this study indicate that the SA has strong content validity, based on the feedback of the expert panel review and analysis of internal reliability. However, the results of the correlational analyses did not indicate a relationship between the SET and SA that allowed establishment of criterion validity between the two measures. This may have been the result of a number of measurement issues and/or it may be that the SET and SA are different enough in their constructs that the SET is not as good a candidate for a criterion measure as initially thought. However, exploration of descriptive data found consistent ratings across SET and SA subscales more than 80% of the time, which suggests that there might be some criterion and/or concurrent validity across the SET and SA if the measurement issues can be addressed. However, it may also be that a true criterion measure with which to compare the SA has not yet been developed. A follow up study controlling for the measurement issues detailed earlier would likely provide more conclusive results about this relationship.

An exploration of the impact of professional role on individual SA rating nested within a school's leadership team ratings, found that school was more significantly related to individual ratings than role. Analysis of SA total scores and ODR per 100 students per year found that schools with higher SA scores generally had lower levels of ODR. Both of these findings provide some additional convergent validity to both the measure and the SA process.

On areas of PBS supports where other measures did not yet exist, the SSS was used to get information on school practices. These results were mixed, with schools reporting similar information but rating themselves at different levels of implementation on the SA. The lack of experience of some leadership teams, and the language in parts of

the SA or SSS itself may have contributed to some of this confusion. Increasing the use of data as part of the team self-assessment process may result in increased accuracy and insight on the part of the leadership teams. However, overall the results of the survey indicate that schools that rated themselves as having the specific PBS practices in place at a moderate to full level implementation, tended to have a better established range of supports for students and teachers. This provides further evidence that SA process helps leadership teams plan and implement PBS initiatives.

The results of several other studies suggest that a self-assessment process as designed by the BEACONS Project offers a number of benefits to schools including improved understanding of effective practices, a higher level of buy in to improvement activities, and more effective team functioning as long as the self-assessment remains linked to a professional development process. These results underscore both the practical utility of the BEACONS SA and its' relevance to reform initiatives in today's schools.

While the correlational analysis leaves several questions about the criterion validity of SET and SA unresolved, the study provides enough evidence about the reliability and practical validity of the measure to suggest that it could be worthwhile to complete a revision of the *BEACONS PBS Self-Assessment and Program Review*, continue its use within the BEACONS Project, and conduct a second study with a larger group of schools in a true pre/post design. The results of this second study will then provide conclusive results about the psychometric properties of the measure as well as the practical validity of the process for schools.

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## Appendix A

### BEACONS School Supports Survey (SSS)

### BEACONS School Supports Survey

Directions: Please answer the following questions as completely and accurately as possible within 30 days of your Leadership Team completing the BEACONS Positive Behavior Support Self-Assessment and Program Review. If you have any questions about how to complete the information please contact the BEACONS office at (206) 221-3441 or [bawalker@u.washingtonl.edu](mailto:bawalker@u.washingtonl.edu).

Please submit a copy of your most recent school handbook (parent and teacher if applicable) along with this form.

School Name:	School Coordinator:
Date this form was completed:	
How many years has your school been in the BEACONS Project?	
<p>Evidence-based Practice 2:</p> <p>A. List the specific dates your school has completed a school-wide screening for students at-risk for emotional or behavioral problems in the past year.</p>   <p>C. Does your school use a specific social skills curriculum or programs across all teachers?          YES   NO   If yes what is it?</p> <p>D. Is your school have staffed by a school based counselor or mental health professional?          YES   NO   If yes, how many hours per week are they assigned to your school?</p>	
<p>Evidence-based Practice 3:</p> <p>List the dates and topics for any staff development directly related to supporting students with or at-risk of developing emotional or behavior problems in the past year (e.g. staff meetings, early release, LID days).</p>   	
<p>Evidence-based Practice 6:</p> <p>A. Does your school have a team that meets to review the supports for students identified in the screening process mentioned above?   YES   NO   If yes how often does it meet?</p> <p>B. If yes, how many students were referred to or supported by this team in the past year?</p>	

C. Circle the types of support provided to students and their teachers via this team:

Behavior management  
supports/training

Academic accommodations

Social

Evidence-based Practice 7:

A. Does your school have a team that specifically provides Functional Behavior Assessments for students with more intensive behavior problems? YES NO

B. If yes, how many students were referred to that team in the past year?

Evidence-based Practice 9:

A. Circle the types of activities in your school which have the involvement of families of children with or at-risk of developing emotional or behavior problems as one of the top three objectives.

Parent Training Classes  
Meetings

Parent Resource Room or Center

Family Support

Parent Support Group

Referrals to Community Services/Agencies

B. For the items circled indicate how often they occur (e.g weekly, monthly, quarterly)?

Evidence-based Practice 10:

A. Does your school work directly with a community mental health or social services agency to develop plans for students and families with the most intensive behavior support needs?

YES NO? If yes, how many students/families have been the focus of such a meeting?

B. If yes, how often do staff from these agencies meet with the school and family?

C. If yes, do these meetings produce a written plan outlining types of supports and who and when they will be provided by? If yes please provide a sample with names blacked out.

D. If yes, circle the features which are part of these services:

Coordinated by a school or agency case manager  
appropriated

Culturally relevant and

Helps family access community services (e.g. medical, dental, psychological)

Tracks medically related issues for the student (e.g. medication, physical accommodations)

## Appendix B

### PBS Expert Panel Review Survey

**BEACONS Positive Behavior Support Leadership Team**  
Self-Assessment and Program Review  
Content Validity Survey

**Respondent Demographics**

1. Please indicate the number of years you have been working in the area of Positive Behavior Supports: \_\_\_\_\_.

2. Please circle your level of education:    Bachelors Degree    Masters Degree  
Ph.D./ Ed.D

3. Please circle the capacity in which you work with positive behavior support (may circle more than one):

State /District Trainer      School /District Coach      University/College  
Instruction

Member of State/District Leadership Team      Researcher      Policy Development

4. Please circle the region of the United States which best describes where you are located:

Northeast      Southeast      Midwest      Upper Midwest      Southwest  
Northwest

**BEACONS Positive Behavior Support Leadership Team****Self-Assessment and Program Review  
Content Validity Survey**

**Directions:** School based positive behavior supports (PBS) are those practices and strategies which come together to create a safer, more effective learning environment for all students across three levels of need universal, targeted, and intensive. Below is a list of evidence-based practices (EVP) research has related to the implementation of Positive Behavior Supports (in bold). Each EVP is followed by a series of indicators related to the implementation of that practice. Using the scale below, rate each indicator at the level you determine it to be relative to the effective implementation of its corresponding EVP.

**Example:** Based on your expertise in PBS, if you found that indicator 1.2 (policies and programs in the school handbook focus on the prevention of behavior problems) was strongly related to EVP #1 (school policies and procedures support the education of students with or at-risk of developing emotional/behavioral problems (EBP)) you would rate it a 4. Conversely if you thought it was only somewhat related you would rate it a 2.

**Level of Relatedness of Evidence-based Practices (EVP) & Indicators Rating Scale:**

4 = this indicator is *strongly* related to the implementation of this evidence-based practice.

3 = this indicator is *fairly* well related to the implementation of this evidence-based practice.

2 = this indicator is only *somewhat* related to the implementation of this evidence-based practice.

1 = this indicator is *not* at all related to the implementation of this evidence-based practice

Rating				
	Not	Somewhat	Fairly	Strongly
<b>1. School policies and procedures support the education of students with or at-risk of developing emotional/behavioral problems (EBP).</b> (Cheney & Barringer, 1995; Dwyer, 2002; Lewis & Sugai, 1999; Sugai, Horner, & Gresham, 2002; Todd, Horner, Sugai, & Sprague, 1999; OSEP Center of Positive Behavior Support, 2004)				
<b>Related Indicators:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1.1 The school or district has a written statement that values the education of all students including those with emotional/behavioral problems.				
1.2 Policies and programs in the school handbook focus on the prevention of behavior problems.	1	2	3	4
1.3 Sufficient resources are allocated to implement these policies and programs.	1	2	3	4
1.4 The school has a leadership team that meets regularly to review school-wide discipline issues.	1	2	3	4
1.3 The team includes a school administrator and representative staff from the school.	1	2	3	4
1.4 The school's leadership team develops annual goals and objectives to improve school-wide positive behavior support.	1	2	3	4
1.5 The school's leadership team annually evaluates progress on goals and objectives.	1	2	3	4
<b>2. School policies and programs emphasize prevention and the early identification of students at risk of developing EBP.</b> (Adelman & Taylor, 2001; Dwyer, 2002; Kauffman, 1999; McKinney, Montague, & Hocutt, 1998; Sprague & Walker, 2000; Tuesday- Heathfield & Clark, 2004; Walker, Cheney, Stage, & Blum, in press)				
<b>Related Indicators:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
2.1 A systematic school-wide screening program is used annually to identify students with or at risk of developing EBP.				
2.2 A teacher assistance or pre-referral intervention team is in place and is available in a timely manner to address problem behavior of students.	1	2	3	4
2.3 Teams develop a method for assuring that interventions are in place for all students identified as EBP.	1	2	3	4



2.4 An interpersonal problem-solving approach is taught and used by entire staff with all students in the building.	1	2	3	4
2.5 An in-school counseling program is available to all students.	1	2	3	4
2.6 Families of students with EBP are engaged in school programs.	1	2	3	4
<b>3. Staff development activities focus on methods to educate students with EBP.</b> (Adelman & Taylor, 2001; Dunlap, Heineman, Knostrer, Fox, Anderson & Albin, 2000; Gable & Van Acker, 2000; OSEP Center on Positive Behavior Interventions, 2004)				
<b>Related Indicators:</b>	1	2	3	4
3.1 Ongoing staff development is provided to address the school's program development for students with EBP.				
3.2 Inservice training focuses on evidence-based practices regarding behavior management strategies for students with EBP.	1	2	3	4
3.3 Inservice training focuses on effective accommodations and instructional modifications for students with EBP.	1	2	3	4
3.4 Inservice training focuses on risk and protective factors for at-risk students.	1	2	3	4
3.5 Inservice training focuses on behavioral disorders of students (e.g., autism, attention deficit disorder, emotional/behavioral disorders, etc.).	1	2	3	4
3.6 A method is used to evaluate inservice effectiveness.	1	2	3	4
<b>4. Clear and consistent behavioral expectations are established for students across all school settings.</b> (Learning First Alliance, 2001; Horner, Sugai, Todd, & Lewis-Palmer, 2004; Lewis & Sugai, 1999; Todd, Horner, Sugai, & Sprague, 1999; Safran & Oswald, 2003; Sugai, Horner, & Gresham, 2002)				
<b>Related Indicators:</b>	1	2	3	4
4.1 Staff have adopted or developed a program to teach prosocial skills in the classroom and non-classroom settings.				
4.2 This program is described in the school handbook.	1	2	3	4
4.3 Behavioral expectations are written and posted in classroom and non-classroom settings.	1	2	3	4
4.4 Behavioral expectations are taught, monitored, and reinforced systematically in classroom and non-classroom settings.	1	2	3	4

4.5 Teachers and staff use effective approaches to discourage problem behavior.	1	2	3	4
4.6 The school leadership team monitors and evaluates the impact of the school-wide program.	1	2	3	4
4.7 The behavioral expectations and school-wide program are regularly communicated to families.	1	2	3	4
<b>5. School procedures for responding to discipline referrals and emergency situations are implemented consistently and effectively.</b> (Dwyer, 2002; Lewis & Sugai, 1999; Todd, Horner, Sugai, & Sprague, 1999; Walker, Colvin, & Ramsey, 1995; Walker, Ramsey, & Gresham, 2003)				
<b>Related Indicators:</b> 5.1 The discipline process includes criteria for: office referrals, addressing the behavior of concern, and returning the student to the classroom.	1	2	3	4
5.2 Discipline and suspension policies are clearly stated in the handbook and effectively communicated to parents, students, and staff.	1	2	3	4
5.3 Trained staff are available to resolve students' social/emotional conflicts.	1	2	3	4
5.4 A designated area is available to resolve students' social/emotional problems (e.g. a problem solving area, think time area, cool-off spot, buddy room. Note: this is <b>not</b> a reference to a time-out room.)	1	2	3	4
5.5 A team of teachers and staff are trained to use a crisis prevention and intervention program for emergency situations.	1	2	3	4
<b>6. Systematic supports are developed to address the academic and social needs of students with emotional or behavioral problems (EBP).</b> (Sugai, Todd, & Lewis-Palmer, in press; Sugai & Horner, 2002; Sugai & Horner, 2004; Todd, Horner, Sugai, & Sprague, 1999; Walker, Cheney, Stage, & Blum, in press)				
<b>Related Indicators:</b> 6.1 General educators receive support in their classrooms from certified specialists experienced with students having EBP (e.g. school psychologist, behavior specialist, special educator).	1	2	3	4
6.2 A team meets to develop behavior support plans for students with EBP.	1	2	3	4

6.3 Academic supports help students with EBP receive passing grades in their classes.	1	2	3	4
6.4 Specialized services help students with EBP succeed socially and behaviorally.	1	2	3	4
6.5 Instructional materials and activities are modified to address individual students' cognitive, behavioral, and emotional needs.	1	2	3	4
6.6 Social supports facilitate positive interpersonal relationships for students with EBP (e.g. circle of friends, buddy system, peer mentors).	1	2	3	4
<b>7. Functional Behavior Assessments (FBA) are completed for students with EBP who require more intensive interventions.</b> (Crone & Horner, 2003; Knoster & McCurdy, 2002; OSEP Center on Positive Behavior Supports, 2004; O'Neill, Horner, Albin, Sprague, Storey, & Newton, 1997; Sugai, Horner, & Gresham, 2002)				
<b>Related Indicators:</b> 7.1 Teams use FBA procedures for developing students' behavior intervention plans (BIP).	1	2	3	4
7.3 Each plan addresses setting events, antecedents, prosocial skills, positive reinforcement, and the function of the behavior.	1	2	3	4
7.4 BIPs are developed collaboratively with family members and are sensitive to cultural and linguistic differences.	1	2	3	4
7.5 BIPs include systematic data collection to assess student progress.	1	2	3	4
7.6 A case manager coordinates and monitors the BIP for each student.	1	2	3	4
<b>8. Data are routinely collected and systematically analyzed by the leadership team for program evaluation and decision-making purposes.</b> (Horner, Sugai, Todd, & Lewis Palmer, in press; Horner, Sugai, & Todd, 2001; Irvin, Tobin, Sprague, Sugai, & Vincent, 2004; Sugai, Sprague, Horner, & Walker, 2000; OSEP Center on Positive Behavior Supports, 2004)				
<b>Related Indicators:</b> 8.1 Staff collect and analyze patterns in office discipline referrals (ODR) using an electronic database.	1	2	3	4
8.2 Reports from the database are reviewed monthly to analyze patterns of ODR.	1	2	3	4

8.3 Staff collect and analyze information on students' social and academic behavior in classrooms and non-classroom settings.	1	2	3	4
8.4 Data are analyzed to evaluate the relationship between ethnicity and disciplinary actions (referrals, suspensions, and expulsions).	1	2	3	4
8.5 Office discipline referrals (ODR) data are analyzed in the screening process to identify students at-risk or with EBP.	1	2	3	4
8.6 ODR data are considered when developing intervention plans for students.	1	2	3	4
<b>9. Families are seen as partners in the development of their child's program.</b> (Cheney & Osher, 1997; Fox & Dunlap, 2002; Elizalde-Utnick, 2002; Learning First Alliance; 2001; Sugai & Lewis; 1999)				
<b>Related Indicators:</b> 9.1 Family members are part of each child's team and they are encouraged to participate in meetings.	1	2	3	4
9.2 Parents of children with significant behavioral concerns have access to a family support group when needed.	1	2	3	4
9.3 Families are supported in accessing additional community resources.	1	2	3	4
9.4 Family education programs and resources are available at the school.	1	2	3	4
<b>10. Comprehensive plans are developed for students and families in need of intensive support.</b> Cheney & Barringer, 1999; Eber & Nelson, 1997; Eber & Keenan, 2004; Kutash & Duchnowski; 1997; Todd, Horner, Sugai, & Colvin 1999; Woodruff, Osher, Hoffman, Gruner, King, Snow, & McIntire, 1999)				
<b>Related Indicators:</b> 10.1 Students with severe behavior problems have timely access to medical, mental health, and other community social services.	1	2	3	4
10.2 A student's use of prescription medication is known by staff and is monitored frequently by school and family members.	1	2	3	4
10.3 Students with IEPs have goals and objectives for their social and emotional needs.	1	2	3	4
10.4 Professionals from other agencies serve on the child's IEP team as needed.	1	2	3	4

10.6 The school/district has a formal agreement with community agencies to provide service to meet the needs of students and their families.	1	2	3	4
10.7 Interagency teams develop, implement, and evaluate treatment plans that are family centered, based on strengths and needs, and sensitive to cultural and linguistic differences.	1	2	3	4
10.8 A family support liaison regularly contacts parents of students in need of intensive support.	1	2	3	4
10.9 A case manager coordinates all communication between the interagency team members.	1	2	3	4

## Appendix C

### Individual and Team Self-Assessment Forms

# Individual School-wide PBS Self-Assessment and Program Review

Version 3.0 draft



## BEACONS Project

*Behavioral Emotional and Academic Curriculum  
for the Ongoing Needs of Students:*

### Outreach Project

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## Individual BEACONS School Self-Assessment & Program Review

School: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Position: \_\_\_\_\_

### Overview:

The BEACONS Project is a multifaceted outreach project to enhance school-wide discipline programs, develop additional supports for students at risk of school failure, and improve access of students with Emotional / Behavioral Disability (EBD) to general education. The Project is a collaborative effort between the U.S. Office of Special Education and Rehabilitative Services, the University of Washington, the Washington State Office of the Superintendent of Public Instruction, the Washington Education Association, and participating school districts. Project staff facilitate and guide school personnel through a process of self-assessment, action planning, and program evaluation.

The first step of school-wide program improvement involves a school self-assessment. This self-assessment tool was developed to assess evidence-based practices regarding school-wide discipline, data collection, family and community involvement, and individualized student supports. Your team will use this self-assessment tool to identify your school's strengths and needs related to these evidence-based practices. This self-assessment contains a list of evidence-based practices for students with challenging behavior. Following each evidence-based practice is a list of items that characterize this practice. Team members will use their rating to assess the functioning level of the school. Throughout this assessment the term "emotional and behavioral problems" (EBP) is used to include all students with challenging behavior, not just those in special education.

### Individual Self-Assessment Directions:

As a member of the school-wide leadership team please complete this survey prior to meeting with your team to complete the Master Self-Assessment. Look over each item and rate it based on the rating scale below. Add the ratings across all items for each numbered section and place the total on the spaces provided. Please be sure to rate all items. Additionally, jot down any comments or questions you may have for the purposes of the team discussion. Bring your completed individual assessment to the scheduled team meeting.



**The Self Assessment Scale:**

**5** = This best practice is fully in place. Each element is functioning well and implemented with high degree of consistency. It needs no work.

**4** = This best practice is mostly in place. All of the elements are present, however, one or two elements are not fully implemented therefore it needs a little work to put into place.

**3** = This best practice is moderately in place. At least half of the elements are present and consistently implemented therefore it needs more work to put into place.

**2** = This best practice is only partially in place. Some of the elements were identified but are inconsistently implemented therefore it needs a lot of work to put into place.

**1** = This best practice is not yet in place. Few or none of the elements are in place.

1. Administrative policies and procedures support the education of students with or at-risk of developing emotional/behavioral problems (EBP).
  - 1.1. The school or district has a written statement that values the education of all students including those with emotional/behavioral problems. 1 2 3 4 5
  - 1.2. Policies and programs in the school handbook focus on the prevention of behavior problems. 1 2 3 4 5
  - 1.3. Sufficient resources are allocated to implement these policies and programs. 1 2 3 4 5
  - 1.4. The school has a leadership team that meets regularly to review schoolwide discipline issues. 1 2 3 4 5
  - 1.5. The team includes a school administrator and representative staff from the school. 1 2 3 4 5
  - 1.6. The school's leadership team develops annual goals and objectives to improve school-wide positive behavior support. 1 2 3 4 5
  - 1.7. The school's leadership team annually evaluates progress on goals and objectives. 1 2 3 4 5

**Total:** \_\_\_\_\_
2. School policies and programs emphasize prevention and the early identification of students at risk of developing EBP.
  - 2.1. A systematic schoolwide screening program is used annually to identify students with or at risk of developing EBP. 1 2 3 4 5
  - 2.2. A teacher assistance or pre-referral intervention team is in place and is available in a timely manner to address problem behavior of students. 1 2 3 4 5
  - 2.3. Teams develop a method for assuring that interventions are in place for all students identified as EBP. 1 2 3 4 5
  - 2.4. An interpersonal problem-solving approach is taught and used by entire staff with all students in the building. 1 2 3 4 5
  - 2.5. An in-school counseling program is available to all students. 1 2 3 4 5

2.6.	Families of students with EBP are engaged in school programs.	1	2	3	4	5
		<b>Total:</b> _____				
3. Staff development activities focus on methods to educate students with EBP.						
3.1	Ongoing staff development is provided to address the school's program development for students with EBP.	1	2	3	4	5
3.2.	Inservice training focuses on evidence-based practices regarding behavior management strategies for students with EBP.	1	2	3	4	5
3.3.	Inservice training focuses on effective accommodations and instructional modifications for students with EBP.	1	2	3	4	5
3.4.	Inservice training focuses on risk and protective factors for at-risk students.	1	2	3	4	5
3.5.	Inservice training focuses on behavioral disorders of students (e.g., autism, attention deficit disorder, emotional/behavioral disorders, etc.).	1	2	3	4	5
3.6.	A method is used to evaluate inservice effectiveness.	1	2	3	4	5
		<b>Total:</b> _____				
4. Clear and consistent behavioral expectations are established for students across all school settings.						
4.1.	Staff have adopted or developed a program to teach prosocial skills in the classroom and non-classroom settings.	1	2	3	4	5
4.2.	This program is described in the school handbook.	1	2	3	4	5
4.3.	Behavioral expectations are written and posted in classroom and non-classroom settings.	1	2	3	4	5
4.4.	Behavioral expectations are taught, monitored, and reinforced systematically in classroom and non-classroom settings.	1	2	3	4	5
4.5.	Teachers and staff use effective approaches to discourage problem behavior.	1	2	3	4	5
4.6.	The school leadership team monitors and evaluates the impact of the school-wide program.	1	2	3	4	5

4.7.	The behavioral expectations and schoolwide program are regularly communicated to families.	1	2	3	4	5
		<b>Total:</b> _____				
5. School procedures for responding to discipline referrals and emergency situations are implemented consistently and effectively.						
5.1.	The discipline process includes criteria for: office referrals, addressing the behavior of concern, and returning the student to the classroom.	1	2	3	4	5
5.2.	Discipline and suspension policies are clearly stated in the handbook and effectively communicated to parents, students, and staff.	1	2	3	4	5
5.3.	Discipline procedures meet OSPI regulatory requirements (e.g., use functional behavioral assessment and behavior support plans when appropriate).	1	2	3	4	5
5.4.	Trained staff are available to resolve students' social/emotional conflicts.	1	2	3	4	5
5.5.	A designated area is available to resolve students' social/emotional problems (e.g. a problem solving area, think time area, cool-off spot, buddy room. Note: this is <b>not</b> a reference to a time-out room.)	1	2	3	4	5
5.6.	A team of teachers and staff are trained to use a crisis prevention and intervention program for emergency situations.	1	2	3	4	5
		<b>Total:</b> _____				
6. Systematic supports are developed to address the academic and social needs of students with emotional or behavioral problems (EBP).						
6.1.	General educators receive support in their classrooms from certified specialists experienced with students having EBP (e.g. school psychologist, behavior specialist, special educator).	1	2	3	4	5
6.2.	A team meets to develop behavior support plans for students with EBP.	1	2	3	4	5
6.3.	Academic supports help students with EBP receive passing grades in their classes.	1	2	3	4	5
6.4.	Specialized services help students with EBP succeed socially and behaviorally.	1	2	3	4	5

6.5.	Instructional materials and activities are modified to address individual students' cognitive, behavioral, and emotional needs.	1	2	3	4	5
6.6.	Social supports facilitate positive interpersonal relationships for students with EBP (e.g. circle of friends, buddy system, peer mentors).	1	2	3	4	5
						<b>Total:</b> _____
7.	Functional Behavior Assessments (FBA) are completed for students with EBP who require more intensive interventions.					
7.1.	Teams use FBA procedures for developing students' behavior intervention plans (BIP).	1	2	3	4	5
7.2.	Each plan addresses setting events, antecedents, prosocial skills, positive reinforcement, and the function of the behavior.	1	2	3	4	5
7.3.	BIPs are developed collaboratively with family members and are sensitive to cultural and linguistic differences.	1	2	3	4	5
7.4.	BIPs include systematic data collection to assess student progress.	1	2	3	4	5
7.5.	A case manager coordinates and monitors the BIP for each student.	1	2	3	4	5
						<b>Total:</b> _____
8.	Data are routinely collected and systematically analyzed by the leadership team for program evaluation and decision-making purposes.					
8.1.	Staff collect and analyze patterns in office discipline referrals (ODR) using an electronic database.	1	2	3	4	5
8.2.	Reports from the database are reviewed monthly to analyze patterns of ODR.	1	2	3	4	5
8.3.	Staff collect and analyze information on students' social and academic behavior in classrooms and non-classroom settings.	1	2	3	4	5
8.4.	Data are analyzed to evaluate the relationship between ethnicity and disciplinary actions (referrals, suspensions, expulsions).	1	2	3	4	5
8.5.	Office discipline referrals (ODR) data are analyzed in the screening process to identify students at-risk or	1	2	3	4	5

with EBP.

- |      |  |                   |
|------|--|-------------------|
| 8.6. | ODR data are considered when developing intervention plans for students. | 1   2   3   4   5 |
|------|--|-------------------|

**Total:** \_\_\_\_\_

9. Families are seen as partners in the development of their child's program.

- |      |  |                   |
|------|--|-------------------|
| 9.1. | Family members are part of each child's team and they are encouraged to participate in meetings. | 1   2   3   4   5 |
|------|--|-------------------|

- |      |   |                   |
|------|---|-------------------|
| 9.2. | Parents of children with significant behavioral concerns have access to a family support group when needed. | 1   2   3   4   5 |
|------|---|-------------------|

- |      |   |                   |
|------|---|-------------------|
| 9.3. | Families are supported in accessing additional community resources. | 1   2   3   4   5 |
|------|---|-------------------|

- |      |  |                   |
|------|--|-------------------|
| 9.4. | Family education programs and resources are available at the school. | 1   2   3   4   5 |
|------|--|-------------------|

**Total:** \_\_\_\_\_

10. Comprehensive plans are developed for students and families in need of intensive support.

- |       |   |                   |
|-------|---|-------------------|
| 10.1. | Students with severe behavior problems have timely access to medical, mental health, and other community social services. | 1   2   3   4   5 |
|-------|---|-------------------|

- |       |  |                   |
|-------|--|-------------------|
| 10.2. | A student's use of prescription medication is known by staff and is monitored frequently by school and family members. | 1   2   3   4   5 |
|-------|--|-------------------|

- |      |  |                   |
|------|--|-------------------|
| 10.3 | Students with IEPs have goals and objectives for their social and emotional needs. | 1   2   3   4   5 |
|------|--|-------------------|

- |       |  |                   |
|-------|--|-------------------|
| 10.4. | Professionals from other agencies serve on the child's IEP team as needed. | 1   2   3   4   5 |
|-------|--|-------------------|

- |       |  |                   |
|-------|--|-------------------|
| 10.5. | The school/ district has a formal agreement with community agencies to provide service to meet the needs of students and their families. | 1   2   3   4   5 |
|-------|--|-------------------|

- |       |  |                   |
|-------|--|-------------------|
| 10.6. | Interagency teams develop, implement, and evaluate treatment plans that are family centered, based on strengths and needs, and sensitive to cultural and linguistic differences. | 1   2   3   4   5 |
|-------|--|-------------------|

- |       |   |                   |
|-------|---|-------------------|
| 10.7. | A family support liaison regularly contacts parents of students in need of intensive support. | 1   2   3   4   5 |
|-------|---|-------------------|

- 10.8. A case manager coordinates all communication  
between the interagency team members.

1 2 3 4 5

Total: \_\_\_\_\_

**Thank You!**

# PBS Leadership Team Self-Assessment and Program Review

Version 3.0 draft



## BEACONS Outreach Project

*Behavioral Emotional and Academic Curriculum  
for the Ongoing Needs of Students:*

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## **BEACONS Leadership Team Self-Assessment & Program Review**

**School:**

**District:**

**Team Meeting Date:**

**Meeting Facilitator:**

**Leadership Team Members Present:**

### **Overview:**

The BEACONS Project is a multifaceted outreach project to enhance school-wide discipline programs, develop additional supports for students at risk of school failure, and improve access of students with Emotional/Behavioral Disability (EBD) to general education. The Project is a collaborative effort between the U.S. Office of Special Education and Rehabilitative Services, the University of Washington, the Washington State Office of the Superintendent of Public Instruction, the Washington Education Association, and participating school districts. Project staff facilitate and guide school personnel through a process of self-assessment, action planning, and program evaluation.

The first step of school-wide program improvement involves a school self-assessment. This self-assessment tool was developed to assess evidence-based practices regarding school-wide discipline, data collection, family and community involvement, and individualized student supports. Your team will use this self-assessment tool to identify your school's strengths and needs related to these evidence-based practices. This self-assessment contains a list of evidence-based practices for students with challenging behavior. Following each evidence-based practice is a list of items that characterize this practice. Team members will use their rating to assess the functioning level of the school. Throughout this assessment the term "emotional and behavioral problems" (EBP) is used to include all students with challenging behavior, not just those in special education.

### **Self-Assessment Directions:**

#### **Step One: Plan for Schoolwide PBS Leadership Self-Assessment Team Meeting**

Set a date for the School-wide PBS Leadership team to meet and complete the self-assessment. The team will need approximately 60- 90 minutes to complete the process.

#### **Step Two: Preparing for the Self-Assessment Team Meeting**

Prior to the team meeting, each team member should be given an individual self-assessment form to complete and bring with them to the team meeting. Specific directions for completing the individual self-assessment are included in that packet. Additionally, one member of the team, preferably the BEACONS School Coordinator, should be identified to facilitate the team meeting. The facilitator will serve as the team's recorder and will record the final ratings on the Team Self-Assessment form, along with relevant comments and questions for each best practice statement and/or element.

#### **Step Three: The Self-Assessment Team Meeting**

As a school leadership team you will discuss the results of each member's individual self – assessments to develop a consensus about how your school is functioning compared to the best practices listed. For each best practice, the facilitator will ask each team member for his or her total score and record that along the scoring bar located under each item. As a team, discuss to what degree each best practice is being utilized in your school, based on the scores being reported. If there is a significant discrepancy between various team members individual scores, we suggest that the team then discuss the ratings given to each of the elements listed under the best practice to clarify the different perspectives and come to a consensus.

#### **Step Four: Priorities for improvement**

The final step of the self-assessment is for your team to review the results and on page 6 prioritize the best practices from those your team feels is most strongly in place, to those most in need of improvement. This information will help your team track progress in these areas as you continue to develop your PBS programs. Throughout the project we intend to address most of these best practices and elements. In the course of project trainings and activities within the first two years of the project. If as a result of this process your team identifies needs that are not addressed during this time, we will work with you to do so during the last year of the project.

#### **Step Five: Return copies of each assessment to the BEACONS Office**

After the completion of the self-assessment process the facilitator should make a copy of each individual assessment, as well as the team assessment and send these to the BEACONS office. The masters should be kept at the school for reference. Additionally, copies of the priorities for improvement should be given to each team member. We suggest that you share the results of the self-assessment with your faculty as well.

#### **The Self Assessment Scale:**

**5** = This best practice is fully in place. Each element is functioning well and implemented with high degree of consistency. It needs no work.

**4** = This best practice is mostly in place. All of the elements are present, however, one or two elements are not fully implemented therefore it needs a little work to put into place.

**3** = This best practice is moderately in place. At least half of the elements are present and consistently implemented therefore it needs more work to put into place.

**2** = This best practice is only partially in place. Some of the elements were identified but are inconsistently implemented therefore it needs a lot of work to put into place.

**1** = This best practice is not yet in place. Few or none of the elements are present

#### **Sample:**

#### **9. Families are seen as partners in the development of their child's program.**

- 2**    9.1.    Family members are part of each child's team and they are encouraged to participate in meetings.
- 3**    9.2.    Parents of children with significant behavioral concerns have access to a family support group when needed.
- 3**    9.3    Families are supported in accessing additional community resources.
- 4**    9.4    Family education programs and resources are available at the school

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy, or a very low score discuss the individual scores for the elements to come to a consensus.

<b>4 - 6</b> Not in Place	<b>7 - 9</b> Partially	<b>10 - 12</b> Moderately in Place	<b>13 - 15</b> Mostly	<b>16 - 20</b> Fully in Place
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Please mail completed self-assessment forms to the address below and contact us if you have questions or comments.

Bridget Walker, BEACONS Project Coordinator  
University of Washington  
Experimental Education Unit  
Mailbox 357925  
Seattle, WA 98195

Phone: (206) 221-3441  
Fax: (206) 543-8480  
E-mail: [bawalker@u.washington.edu](mailto:bawalker@u.washington.edu)

**1. Administrative policies and procedures support the education of students with or at-risk of developing emotional/behavioral problems (EBP).**

- 1.1 The school or district has a written statement that values the education of all students including those with emotional/behavioral problems.
- 1.2 Policies and programs in the school handbook focus on the prevention of behavior problems.
- 1.3 Sufficient resources are allocated to implement these policies and programs.
- 1.4 The school has a leadership team that meets regularly to review schoolwide discipline issues.
- 1.5 The team includes a school administrator and representative staff from the school.
- 1.6 The school's leadership team develops annual goals and objectives to improve school-wide positive behavior support.
- 1.7 The school's leadership team annually evaluates progress on goals and objectives.

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy, or a very low score, discuss the individual scores for the indicators for consensus.

<b>7 - 10</b> Not in Place	<b>11 - 17</b> Partially	<b>18 - 24</b> Moderately in Place	<b>25 - 31</b> Mostly	<b>32 - 35</b> Fully in Place
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**2. School policies and programs emphasize prevention and the early identification of students at risk of developing EBP.**

- 2.1 A systematic schoolwide screening program is used annually to identify students with or at risk of developing EBP.
- 2.2 A teacher assistance or pre-referral intervention team is in place and is available in a timely manner to address problem behavior of students.
- 2.3 Teams develop a method for assuring that interventions are in place for all students identified as EBP.
- 2.4 An interpersonal problem-solving approach is taught and used by entire staff with all students in the building.
- 2.5 An in-school counseling program is available to all students.
- 2.6 Families of students with EBP are engaged in school programs.

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy, or a very low score discuss the individual scores for the indicators.

<b>6 - 8</b> Not in Place	<b>9 - 14</b> Partially	<b>15 - 20</b> Moderately in Place	<b>21 - 26</b> Mostly	<b>27 - 30</b> Fully in Place
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### **3. Staff development activities focus on methods to educate students with EBP.**

- 3.2 Ongoing staff development is provided to address the school's program development for students with EBP.
- 3.2 Inservice training focuses on evidence-based practices regarding behavior management strategies for students with EBP.
- 3.3 Inservice training focuses on effective accommodations and instructional modifications for students with EBP.
- 3.4 Inservice training focuses on risk and protective factors for at-risk students.
- 3.5 Inservice training focuses on behavioral disorders of students (e.g., autism, attention deficit disorder, emotional/behavioral disorders, etc.).
- 3.6 A method is used to evaluate inservice effectiveness.

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy, or a very low score discuss the individual scores for the indicators.

<b>6 - 8</b> Not in Place	<b>9 - 14</b> Partially	<b>15 - 20</b> Moderately in Place	<b>21 - 26</b> Mostly	<b>27 - 30</b> Fully in Place
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### **4. Clear and consistent behavioral expectations are established for students across all school settings.**

- 4.1 Staff have adopted or developed a program to teach prosocial skills in the classroom and non-classroom settings.
- 4.2 This program is described in the school handbook.
- 4.3 Behavioral expectations are written and posted in classroom and non-classroom settings.
- 4.4 Behavioral expectations are taught, monitored, and reinforced systematically in classroom and non- classroom settings.

- 4.5 Teachers and staff use effective approaches to discourage problem behavior.
- 4.6 The school leadership team monitors and evaluates the impact of the school-wide program.
- 4.7 The behavioral expectations and schoolwide program are regularly communicated to families.

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy, or a very low score discuss the individual scores for the indicators.

<b>7 - 10</b> Not in Place	<b>11 - 17</b> Partially	<b>18 - 24</b> Moderately in Place	<b>25 - 31</b> Mostly	<b>32 - 35</b> Fully in Place
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**5. School procedures for responding to discipline referrals and emergency situations are implemented consistently and effectively.**

- 5.1 The discipline process includes criteria for: office referrals, addressing the behavior of concern, and returning the student to the classroom.
- 5.2 Discipline and suspension policies are clearly stated in the handbook and effectively communicated to parents, students, and staff.
- 5.3 Discipline procedures meet OSPI regulatory requirements (e.g., use functional behavioral assessment and behavior support plans when appropriate).
- 5.4 Trained staff are available to resolve students' social/emotional conflicts.
- 5.5 A designated area is available to resolve students' social/emotional problems (e.g. a problem solving area, think time area, cool-off spot, buddy room. Note: this is **not** a reference to a time-out room.)
- 5.6 A team of teachers and staff are trained to use a crisis prevention and intervention program for emergency situations.

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy, or a very low score discuss the individual scores for the indicators.

<b>6 - 8</b> Not in Place	<b>9 - 14</b> Partially	<b>15 - 20</b> Moderately in Place	<b>21 - 26</b> Mostly	<b>27 - 30</b> Fully in Place
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**6. Systematic supports are developed to address the academic and social needs of students with emotional or behavioral problems (EBP).**

- 6.1 General educators receive support in their classrooms from certified specialists experienced with students having EBP (e.g. school psychologist, special educator).
- 6.2 A team meets to develop behavior support plans for students with EBP.
- 6.3 Academic supports help students with EBP receive passing grades in their classes.
- 6.4 Specialized services help students with EBP succeed socially and behaviorally.
- 6.5 Instructional materials and activities are modified to address individual students' cognitive, behavioral, and emotional needs.
- 6.6 Social supports facilitate positive interpersonal relationships for students with EBP (e.g. circle of friends, buddy system, peer mentors).

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy, or a very low score discuss the individual scores for the indicators.

<b>6 - 8</b> Not in Place	<b>9 - 14</b> Partially	<b>15 - 20</b> Moderately in Place	<b>21 - 26</b> Mostly	<b>27 - 30</b> Fully in Place
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**7. Functional Behavior Assessments (FBA) are completed for students with EBP who require more intensive interventions.**

- 7.1 Teams use FBA procedures for developing students' behavior intervention plans (BIP).
- 7.2 Each plan addresses setting events, antecedents, prosocial skills, positive reinforcement, and the function of the behavior.
- 7.3 BIPs are developed collaboratively with family members and are sensitive to cultural and linguistic differences.
- 7.4 BIPs include systematic data collection to assess student progress.
- 7.5 A case manager coordinates and monitors the BIP for each student.

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy, or a very low score discuss the individual scores for the indicators.

<b>5 - 7</b> Not in Place	<b>8 - 12</b> Partially	<b>13 - 17</b> Moderately in Place	<b>18 - 22</b> Mostly	<b>23 - 25</b> Fully in Place
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**8. Data are routinely collected and systematically analyzed by the leadership team for program evaluation and decision-making purposes.**

- 8.2 Staff collect and analyze patterns in office discipline referrals (ODR) using an electronic database.
- 8.2 Reports from the database are reviewed monthly to analyze patterns of ODR.
- 8.3 Staff collect and analyze information on students' social and academic behavior in classrooms and non-classroom settings.
- 8.4 Data are analyzed to evaluate the relationship between ethnicity and disciplinary actions (referrals, suspensions, and expulsions).
- 8.5 Office discipline referrals (ODR) data are analyzed in the screening process to identify students at-risk or with EBP.
- 8.6 ODR data are considered when developing intervention plans for students.

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy or a very low score discuss the individual scores for the indicators.

<b>6 - 8</b> Not in Place	<b>9 - 14</b> Partially	<b>15 - 20</b> Moderately in Place	<b>21 - 26</b> Mostly	<b>27 - 30</b> Fully in Place
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**9. Families are seen as partners in the development of their child's program.**

- 9.1 Family members are part of each child's team and they are encouraged to participate in meetings.
- 9.2 Parents of children with significant behavioral concerns have access to a family support group when needed.
- 9.3 Families are supported in accessing additional community resources.
- 9.4 Family education programs and resources are available at the school.

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy, or a very low score discuss the individual scores for the indicators.

<b>4 - 6</b> Not in Place	<b>7 - 9</b> Partially	<b>10 - 13</b> Moderately in Place	<b>14 - 17</b> Mostly	<b>18 - 20</b> Fully in Place
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**10. Comprehensive plans are developed for students and families in need of intensive support.**

- 10.1 Students with severe behavior problems have timely access to medical, mental health, and other community social services.
- 10.2 A student's use of prescription medication is known by staff and is monitored frequently by school and family members.
- 10.3 Students with IEPs have goals and objectives for their social and emotional needs.
- 10.4 Professionals from other agencies serve on the child's IEP team as needed.
- 10.5 The school/district has a formal agreement with community agencies to provide service to meet the needs of students and their families.
- 10.6 Interagency teams develop, implement, and evaluate treatment plans that are family centered, based on strengths and needs, and sensitive to cultural and linguistic differences.
- 10.7 A family support liaison regularly contacts parents of students in need of intensive support.
- 10.8 A case manager coordinates all communication between the interagency team members.

Record the scores of each individual team member and circle the box that reflects the scores from most team members. If there is a significant discrepancy, or a very low score discuss the individual scores for the indicators.

<b>8 - 11</b> Not in Place	<b>12 - 19</b> Partially	<b>20 - 27</b> Moderately in Place	<b>28 - 35</b> Mostly	<b>36 - 40</b> Fully in Place
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**Notes & Comments:**

**Determine priorities for improvement:**

As a team, review the results and in the spaces below prioritize the best practices from those your team feels is most strongly in place at your school to those most in need of improvement. This information will help your team track progress in these areas as you continue to develop your PBS programs.

**Self-Assessment Evidence Based Practices****Most Strongly in Place**

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

**Most in need of improvement**

## **VITA**

Bridget Walker was born in Chicago, Illinois and grew up in St. Louis, Missouri. She completed her undergraduate degree at the University of Utah before moving to Seattle, Washington, where she was a special education teacher and behavior specialist for 12 years. She completed her Master's Degree in Special Education at Seattle University in 1993. From 1998 through 2006, Bridget was a research coordinator at the University of Washington and completed her Ph.D. in Special Education there in 2006.