# Inclusive Practices in Large Urban Inner-City Schools: School Principal Involvement in Positive Behavior Intervention Programs

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## Abstract

This study explores a district-wide implementation of Positive Behavior Intervention and Support (PBIS) program in one large urban inner-city school district. Using a mixed-method design we observed the district addressing the needs of students with behavioral challenges, and the involvement of principals to reframe the climate of schools beyond a focus on behaviorally challenged students, in order to improve the academic achievement of students in the general classroom. We asked, "What are the challenges of large urban inner-city school districts in the implementation of school-wide systems such as PBIS?" Findings showed that leadership and a high level of buy-in from stakeholders is needed to support of inclusionary practices that are fair and equitable—in order to improve schools and the academic achievement of students.

*Keywords*: positive behavior support; principal leadership; inclusion; inclusive practices

One of the challenges in large urban inner-city school districts is promoting the education of all students, including those with emotional and behavioral disorders. Often times, these students are educated in restricted environments (Landrum, Katsiyannis, & Archwamety, 2004), transitioning in and out of disciplinary alternative education programs (DAEP). Even though this group of students is small in comparison to the general student population, the students require specialized programming to meet their social and emotional needs (Algozzine, Christian, Marr, McClanahan, & White, 2008) while continuing in their academic development. Moreover, without effective intervention programs, the likelihood that these students continue to perform at the lowest academic levels (Frank, Sitlington, & Carson, 1995), and eventually drop out of school is extremely high (Skiba & Peterson, 2000; Sprague & Walker, 2000).

This mixed method study explored a district-wide implementation of Positive Behavior Intervention and Support (PBIS) program in one large urban inner-city school district in South Texas. We focused on the implementation as the district worked to address the needs of students with behavioral challenges and sought to observe the involvement of principals to reframe the climate of schools in order to improve the academic achievement of these students in the general classroom. The study explored the question: "What are the challenges of large urban inner-city school districts in the implementation of school-wide systems such as PBIS?"

## Rationale and Significance

Significant to this study is the widely accepted notion among researchers and practitioners that without a school climate that is conducive to learning, that is fair, equitable, and with a high level of buy-in from stakeholders, a school has little chance of accomplishing its central mission of generating high academic achievement among students. Positive Behavior Interventions and Support (PBIS) is a program that has been developed in response to considering the inclusion of students with behavioral challenges in the general education setting (Algozzine & Algozzine, 2007). They argue that with school districts facing increasing budgetary cuts and accountability requirements, the inclusion of these students into general education classrooms is becoming a common practice (Algozzine & Algozzine, 2007). The goal of the program is to enhance the capacity of schools to educate all children through the implementation of positive, preventative, and effective instructional approaches to school-wide behavior management and discipline ("Texas Behavior Support," 2010). Established behavioral expectations and tiered intervention strategies are the hallmark of PBIS.

## Positive Behavior Interventions and Support

PBIS is a proactive, three-tiered school-wide behavior management philosophy that is designed to address the behavioral needs of students who struggle academically and behaviorally in a traditional classroom system. "The key components to successful PBIS programming at the school-wide level are: a) the development and functioning of a leadership team, b) staff participation and involvement, c) administrative support, d) the development of competent coaching capacity, and e) district level support" (Handler et al., 2007, p. 29). The principal leads the campus in creating a PBIS leadership team that facilitates the programmatic practices and

programs (Handler et al., 2007). Once established, the leadership team is responsible for the facilitation and support of PBIS on the campus. The team, consisting of administrators and teachers, actively maintains PBIS, coordinates training for other staff, evaluates the program for intervention effectiveness, and continuously coaches and models the PBIS practices established for the campus (Handler et al., 2007).

PBIS' three tiers allow for a focused approach on those students who do not benefit from the general behavioral programming of a campus. These tiers of intervention allow for a concentration on behavioral interventions and strategies that encourage and help students to remain in their general education classrooms (Riffel, 2011). It is a "value-based intervention approach that integrates research-based practices in behavioral, social, educational, and biomedical sciences, with systems change strategies to enhance individuals' quality of life and to reduce or prevent their problem behaviors" (Bambara, Nonnemacher, & Kern, 2009, p. 161). Similar to the approaches used for academic support, schools must identify clear and measurable outcomes, collect and use data to guide their decisions, implement effective, relevant, and evidence-based practices, as well as invest in systems that will ensure that those practices are implemented and sustained over time in the area of behavior management (Simonsen, Sugai, & Negron, 2008).

Strong PBIS programs share some common characteristics. Foremost to the program is the establishment of clearly stated expectations for students and staff (Protheroe, 2005; Simonsen et al., 2008). These expectations need to be enforced fairly and consistently. Group planning and decision-making is of primary importance to gain support for the programmatic changes and requirements (Protheroe, 2005). Finally, Simonsen et al. (2008) recommend that schools establish a team that guides the implementation process, identify coaches who will maintain the team, obtain at least 80% buy-in from teachers and staff, ensure the school has a reliable data system, ensure that all members are PBIS trained, select and implement practices specifically for their campus, collect data, and finally, use that data to continue to monitor and improve the program as needed.

The successful implementation of PBIS requires both extensive training and technical assistance at all levels of the system, from top district personnel to the leaders and practitioners on the campus. In order to address this requirement, school districts that have implemented PBIS include all levels of personnel during the training and initiation stages of the programs. Each campus creates a PBIS leadership team that facilitates the programmatic practices and programs at the school level (Handler et al., 2007). Each of these campus leadership teams includes a member from the central office that has also been trained in PBIS. This connection to district level administration is vital to the changes needed at the campus level during the initiation and future maintenance of a PBIS program (Handler et al., 2007; Muscott, Mann, & LeBrun, 2008; Riffel, 2011). Once established, the leadership team on each campus is responsible for the facilitation and support of PBIS on the campus. This team of administrators and teachers actively maintains PBIS, coordinates training for other staff, evaluates the program for intervention effectiveness, and continuously coaches and models the PBIS practices established for the campus (Handler et al., 2007).

Starting a PBIS model on a campus can be a challenge. PBIS models require general education teachers to implement interventions and strategies that were once instituted by special education teachers. In addition to providing the training and professional development required to successfully begin the program, administrators, teachers and staff, and district-level personnel

must be committed to the paradigmatic shift in behavior management methods and systems (Fairbanks, Simonsen, & Sugai, 2008; Muscott et al., 2008). Handler et al. (2007) found that participation and involvement at every level is critical to the success of PBIS. Gottfredson, Gottfredson, and Hybl (1993) and Muscott et al. (2008) determined that administrator and teacher support is vital to not only to the successful implementation of the program requirements, but also of the systemic change PBIS demands. Handler et al. (2007) also pointed out that district commitment to change can be a "critical variable that can either support or delay the ability of a school to implement PBIS" (pp. 36-37). These researchers determined that a district must be ready to commit time and resources, minimize the impact of competing initiatives, and establish direct communication with the campus in order to support successful PBIS initiatives.

The initiation and subsequent sustainability of a PBIS model is not an easy endeavor for the average school district. With the inundation of so many federal and state accountability requirements, it is easy to see why many school districts and schools do not readily adopt PBIS into their practices. However, with looming budget cuts and increasing requirements to address the needs of a variety of students, schools and school districts are not able to simply remove troublesome students from classrooms any longer. A viable solution is required to ensure that all students are receiving the education they need to be productive adults. PBIS offers a research-based model to address these needs.

Strong PBIS programs share some common characteristics that can be readily established and monitored by the principal. The establishment of clearly stated expectations for students and staff is perhaps the most important component to be addressed by the principal (Protheroe, 2005; Simonsen et al., 2008). These expectations need to be enforced fairly and consistently. To gain support for the programmatic changes and requirements group planning and decision-making is of primary importance (Protheroe, 2005). Finally, Simonsen et al. (2008) recommends that schools establish a team that guides the implementation process, identify coaches who will maintain the team, obtain at least 80% buy-in from teachers and staff, ensure the school has a reliable data system, ensure that all members are PBIS trained, select and implement practices specifically for their campus, collect data, and finally, use that data to continue to monitor and improve the program as needed.

Based on this philosophy, administrators and teachers identify students who struggle with universal campus procedures and work collaboratively to design programs and practices to address the individual needs of those students. The three-tiered approach requires a different type of focus on the part of administrators and teachers in that it allows them to look deeply into the actions, behaviors, and needs of students and helps them to develop programs that are effective (Fairbanks et al., 2008; Sugai & Horner, 2002).

## Principal Influence in Positive Behavior Interventions and Support

Starting a PBIS model on a campus can be a challenging endeavor. PBIS models require general education teachers to implement interventions and strategies that were once instituted by special education teachers (Algozzine & Algozzine, 2007). The initiation and subsequent sustainability of a PBIS model would not be easily accomplished without administrative support and involvement. In this study, we consider that an important facilitator and catalyst for the school climate is the principal (Fullan, 2003). Numerous studies demonstrate the importance of strong, focused principal leadership on the implementation of holistic, systemic programs that

demand a shift in paradigm in schools. "Principals play essential roles in creating the organizational and policy conditions that influence how teachers teach and the extent to which they feel supported in adopting new practices," argue Leithwood and Montegomery, (1982;  as cited in Burch, Theoharis, & Rauscher, 2010). Burch, Theoharis, and Rauscher (2010) add that a principal's beliefs and actions are tantamount to the effective implementation of a new program. Blase and Blase (1999), in a study of implementing shared decision making on a school campus, found that the principal significantly influences the development of shared decision making teams by modeling, giving feedback, using inquiry with teachers, soliciting teacher opinions and providing professional growth opportunities.  Similarly, Henri, Hay, and Oberg (2002) found that principals can influence the development of an information-literate school community by giving the program time and attention, facilitating professional development, and supporting the development of resource collection that is current and relevant.

As PBIS is a behavioral philosophy that requires not only programmatic changes, but also paradigmatic changes for successful implementation, the principal must play a key role in its implementation and maintenance (Muscott et al., 2008).  Bambara et al. (2009) found that  84% of the teacher participants in their study of sustaining positive behavior support "stressed the pivotal role that the building  principal play in promoting the overall acceptance" (p. 169) of PBIS programming. In addition to providing the training and professional development required to successfully begin the program, administrators, teachers and staff, and district-level personnel must be committed to the paradigmatic shift in behavior management methods and systems (Fairbanks et al., 2008; Muscott et al., 2008).  Handler et al. (2007) found that participation and involvement at every level is critical to the success of PBIS. Gottfredson et al. (1993) and Muscott et al. (2008) determined that administrator and teacher support is key to not only to the successful implementation of the program requirements, but also of the systemic change PBIS demands:

> Commitment [by the administration] can be demonstrated through a variety of words, actions, and habits, but true commitment seems to be intertwined with depth of understanding of, and real philosophical alignment with, the use of positive and preventive practices that become part of the school culture. (Muscott et al., 2008, p. 204)

PBIS is a global system that encourages fairness, equity, and buy-in while sustaining a culture conducive to learning. This new approach requires the adults on the campus to work together proactively to address the needs of their students. Because PBIS is a change and time-intensive program, it requires the people involved to shift the way they think about the behavioral management of school children. PBIS includes a consistent and focused approach to relearning how to teach behavior and social skills and to redesigning traditional models of school discipline. In this study we observed the initial district planning and steps to introduce the concept and strategies that would change common models of rule enforcement, teacher-centered control, punishment, and exclusion, to a new management system that can generate fair and equitable school climates in an era of stringent accountability.

## Research Design

This study employed a mixed-method design to observe the implementation of PBIS at Central City ISD (CCISD) within a span of six years. Established in 1854, Central City ISD is the 13th largest school district in the state of Texas and the third largest in the county.

### Site Selection

Currently, the state of Texas is uniquely challenged as it faces the fastest population growth of school-aged children in the country and a severely reduced education budget at the same time. The Texas Education Agency (TEA) has suggested the adoption of PBIS. This study observed a Texas school district in the third largest city in the state and the seventh largest city in the United States. The population at CCISD is of a diverse mix of ethnic and racial cultures, with a large Hispanic population. There are several large industries, hospitals, universities and school districts as well as a multitude of smaller businesses and industries that maintain ample employment opportunities. In addition, the city serves as a military hub with several bases, which lends to its diversity and economy.

Central City ISD employs over 7,000 people and serves a population of approximately 54,000 students. The district was rated "academically acceptable" in the state accountability measures for the 2010-2011 school year (Texas Educational Agency, 2011). In the 2010-2011 school year, CCISD missed federal adequate yearly progress (AYP) accountability standards for Reading and Math performance. CCISD currently has 53 elementary schools, 14 middle schools, and 7 comprehensive high schools. It also provides specialized and magnet programming for students in and out of the district. Despite the diversity of the city, CCISD serves primarily Hispanic students (89.5%). The remainder of the population is made up of African American students (7.4 %) and White students (2.7%). In addition, approximately 92% of its population is classified as economically disadvantaged, 18% are Limited English Proficient, 68% of students are considered to be at-risk of failing or dropping out (AEIS, 2011), and 9% of the student population faced disciplinary placement during the 2010-2011 school year. The qualitative portion of the study included five schools and the quantitative portion included 51 schools. The overarching research question used for the qualitative design asked, "What are the challenges of large urban inner-city school districts in the implementation of school-wide systems like PBIS?" Later, for the quantitative portion of this study, this question was expanded to include two sub questions focused on the school principal in the campus leadership. They are: (a) How does the level of principal focus affect the success of the PBIS program? and (b) How does the level of principal focus change as the program ages, and if so what impact if any does this change have on the program's quality? Below, we describe details for each approach and analysis.

### Qualitative Design

A qualitative design, using exploratory case study (Yin, 2009) was employed to observe the preliminary phase of PBIS implementation and diffusion in one large, urban school district. An exploratory case study research is useful when "how" or "why" questions are asked, so that it provides the reader with a description of a contemporary phenomenon within a real-life context (Yin, 2009). We observed the initial PBIS implementation considering some characteristics of

diffusion of innovation (Rogers, 2003) in the exploratory case study. Rogers explained that new ideas are diffused through social systems with people presenting different degrees of adoption. There are: "(a) innovators; (b) early adopters; (c) early majority; (d) late majority; and (e) laggards" (2003, p. 262). All degrees of adoption may be present in the diffusion of new ideas.

The researchers gathered data from five elementary schools chosen by the district as pilot campuses for the initial implementation using interviews, observations, and public documents. For CCISD, we mainly focused on innovators, early adopters, and early majority, due to the length of program adoption. Included in the interviews were three school district administrators (special education director, licensed specialist in school psychology, research and state assessment facilitator), and principals. We use pseudonyms for the principals, district administrators, and schools described the findings. The description of context and decisions towards the implementation of program stem from the qualitative data.

## Quantitative Design

At the end of the fourth year, independent samples t-tests and chi-square tests were used to analyze the Benchmark of Quality (BOQ), a comprehensive protocol used by the district to measure the program's quality on each campus (Kincaid, Childs, & George, 2010). The BOQ is an index made up of key elements perceived as vital to the PBIS program's success and contains a rich mixture of qualitative and quantitative data. The district has updated the BOQs in 2010 (Independent School District Report, 2010). BOQ includes 53 items divided into 9 major areas aligned with the PBIS training process. These include:

- PBIS team performance
- Faculty commitment
- Procedures for dealing with discipline
- Establishment of data entry and analysis plan
- Establishment of reward/recognition program
- Lesson plans for teaching expectations/rules
- Implementation plan
- Classroom systems
- Evaluation

BOQs are completed every spring, and a graph is generated for each school, showing the percentage of items in which schools met the PBIS criteria. The t-test included a representative sample ($n$=51) of the Central City ISD's 88 campuses and included a distribution between primary and secondary schools. The chi-square test illuminated a possible decline in principal focus after the second year of implementation.

## Data Analysis

The exploratory nature of the adoption of new initiatives allowed us to report this study in a case study design that describes the qualitative data chronologically, as to report the decisions in a historical format--from the district decisions, and subsequent implementation of PBIS in different campuses.

In the second year, to operationalize the independent variable *principal focus* in the analysis of quantitative data, the researchers turned to the professional who knows the program the best—the Licensed Specialist in School Psychology (LSSP) who has run the program since its inception. The LSSP was asked to guide the investigators in developing a rubric indicating which campuses have 1) Strong Principal Focus and 2) Limited Principal Focus. The use of an existing internal district rubric called a "campus dashboard" (Central City Independent School District, 2010) was suggested as a basis for defining the two categories. After several discussions between the LSSP and the investigators, the categories emerged as follows:

Strong Principal Focus:
- Principal or assistant principal regularly attend PBIS meetings on campus and at the Education Service Center (ESC)
- Campus leader is aware of PBIS plans and works collaboratively with the team on implementation.
- Principal provides adequate time for team to present to staff and supports team during presentations.

Limited Principal Focus:
- Principal does not attend meetings on campus or at the ESC, but an assistant principal may or may not attend (sporadic attendance).
- Principal is not knowledgeable about PBIS team plans or does not work with the team on implementation. Principal may sometimes hinder the process and not allow space and resources needed for implementation.
- Principal does not provide adequate time for team to present OR does not support the PBIS team during presentations.

Objective evidence was used to place the campuses into each of the two groups, excluding any campus that defied the aforementioned definitions due to extenuating circumstances. To lower the chance of a type I error, the standard for strong focus was set quite high and any campus that did not *clearly* meet high standards was placed in the limited category. That is, the data were unlikely to induce a rejection of the null hypothesis based solely on differences in the categories' definitions. This way the researchers would be more confident that a statistically significant result truly showed a difference between strong principal focus and *non-strong* focus, as opposed to strong focus and weak or no focus.

BOQ scores were organized by the principal's focus level (1, 2) so that independent samples t-tests could be used to test the first research question. Ages of the program (2-4, campuses do not receive a BOQ score during their first year of implementation) were recorded to use with focus level in a chi-square test to answer the first part of the second research question. Year of implementation (1-4) and BOQ scores for the latest year were organized in such a way as to be used in an ANOVA to answer the second part of the second research question. Also important to note is that the BOQ is obtained by knowledgeable participants in the PBIS program, with some measure of inter-rater reliability, and exists at great proximity to the mechanisms and impact of the program itself. The study is limited by generalizability to similar contexts. Because the study includes a disproportionate number of elementary schools, we did not include campus level as a variable, although we do believe it may be interesting to explore

differences along this line in future research. The researchers were mindful of limitations due to the close relationship with the district, and strengthened the veracity of data through a partnership between scholars in the district and a local university.

It should be noted that the qualitative tests in this study were developed in the collaboration between the university and CCISD on behalf of the District and in line with its need to audit and monitor program progress and success and not in line with university goals for primary research. We add this caveat to clearly position the analytics in this study with a case study research design and not as stand-alone findings. The results of the study, and the monitoring system that produced them, are currently used by CCISD to guide its focus in on-going implementation of the PBIS program.

### Findings: Initiating the Implementation of PBIS

PBIS was initiated at the district level with CCISD's Director for Special Education in charge of the implementation process. The Licensed Specialist in School Psychology (LSSP) monitored the innovation efforts and steps of adoption. The principals in pilot schools provided their perception of the initiative as opinion leaders (Rogers, 2003). Opinion leaders, according to Rogers (2003) are well-informed early adopters and decision makers that can encourage the adoption of innovations in a given social system. An important value added by this program, according to the Director of Special Education, was a shift from traditional exclusionary practices, to generating schools that would support students in improving behavior and consequently improving academically.

The Director of Special Education had previously served as the district's principal of both the middle and high school disciplinary alternative education programs (DAEPs). She observed that students with disciplinary issues continued to have disciplinary issues regardless of the time spent at the DAEP. In the district, students with behavior issues typically did not perform well on state assessments. Test scores were low among this group of students. Their attendance and graduation rates were among the lowest of all student sub-populations. She reflected,

> …our approach to discipline up until now has been, punitive. It's negative. It's what I call exclusionary practices toward discipline, in other words, you don't belong anymore because of the way you're behaving. Your behavior is *excluding* you from the school, from this activity. So, it's all about exclusion.

Accountability measures at both the state and federal levels were observed, which required school districts to address the needs of this challenging group of students, by implementing programs and systems that address both academic and behavioral concerns and prepare students for graduation. The method chosen to address all of these issues at CCISD was PBIS.

In addition, state and district expectations for current standards of best practice in Texas were not in support of housing students with behavior and emotional needs in separate classrooms with self-contained teachers. In addition, CCISD is a district with severe budgetary limitations, and the cost of maintaining students with behavioral challenges on a separate campus was no longer an option for the district. Students were returned to home campuses and the

general education classroom. Rogers (2003), in fact, indicated that innovation decisions are often based on social and economic benefits.

As a first initiative, the district began implementing PBIS in five elementary schools. The special education director and LSSP chose a behavior management program, CHAMPS by Randy Sprick, that was already developed and being used in other districts in the city (Sprick, Garrison, & Howard, 1998). CHAMPS is a prescribed school wide discipline management program that focuses on building positive behaviors through teaching expectations and social skills. It provides a structured format that makes it user friendly for teachers and school staff. Starting with the development of a solid Tier 1 program like CHAMPS was instrumental to the furtherance of PBIS Tiers 2 and 3 on the pilot and subsequent campuses. The director reflected that the elementary schools were to be the starting point because "if you can change behaviors and expectations at that stage, then maybe we would not have the numbers (students with behavior issues) that get pushed up to high school."

**Early Adopters and PBIS Implementation: Meeting the Needs of Students**

Strategic to the implementation were the steps to organize people and resources for the program. With a strong focus on inclusionary practices, PBIS teams in the five campuses began to receive training through monthly meetings in the district, with dedicated time to create individual campus plans for implementation. Consistent practice was emphasized in the district's implementation process. For example, the director's training plan with the Regional Education Service Center included training for three or more years, at all levels of adoption. In subsequent years following the pilot program, new schools continued to receive initial CHAMPS training while the pilot schools moved on to Tier 2 and Tier 3 intervention training. The program maintained its consistency in regard to commitment to training.

Once the schools committed to the PBIS program, each campus selected a leadership team for the campus. The leadership teams in each school were often made up of a principal, a special education teacher, three general education teachers, and a behavior specialist from the special education department. Behavior specialists were available to help with those students who were in need of Tier 2 or 3 supports, even if the school was initially only working on Tier 1 programming. The Director reflected,

> We had students who were in need of targeted support right away, while the school was still working on establishing universal supports. Providing targeted support was the focus of the behavior specialists. We were not going to ignore the needs of students who needed targeted support just because the campus was not in that stage of PBIS.

Principals were chosen for their interest in creating inclusive environments on campus. One of the principals stated:

> We had to look for those who could have a positive influence, who have that teacher-leader role, who can influence the majority, being open and receptive too – because it was not about what are we going to refer to the office, it's about being different to change the culture on how we approach the students.

The campus staff maintained a proactive and consistent method of implementing CHAMPS and other behavioral interventions by holding each other accountable for program continuity across settings. As stated by the Director when asked about how the campus staff worked on these challenges,

> …every one of us has to have the same picture of what "that" looks like…It's about deciding on things like how we want them to walk down the hall or how they need to behave in the common area. It's not by chance that teacher A does it one way in her class and teacher B does it another way in her class. We all do it the same way, we understand that--and the students understand that. You don't have to wait for the principal to say that something is not acceptable; you hold each other accountable for your own behavior. Everyone knows the expected adult behavior and expected adult response.

This accountability and consistency in programming allowed CHAMPS to be maintained on campuses despite turnover of leadership teams or the reassignment of the principal. Behavior specialists at the district level supported the campuses in creating classroom support ideas, helping teachers, creating newsletters, tool kits, web pages, and calendars based around PBIS and CHAMPS. The district provided funding, training, and events for positive reinforcement, holding beginning and end-of-the-year showcase events with motivational speakers. In addition, the new teams were given opportunities to present their programs at principals' meetings. The knowledge of opinion leaders helped in the diffusion of PBIS as an innovation.

## Reviewing Traditional Exclusionary Practices

The review of exclusionary practices at CCISD included reviewing the number of referrals in schools. The LSSP shared concerns about pulling students out of the classroom as a common tradition, which is counter-productive for improving students academically:

> We pull students with behavior problems out, and now they are missing their curriculum at their grade level and we are remediating so we are actually decelerating their learning, which means they fall further behind. So inclusion is important because that is where they learn the most.

Similarly, the principals began to examine the referrals to assess whether they were really related to emotional and behavioral concerns, or related to compliance issues (such as uniform use, lack of materials, or tardiness). Within campuses, it was important that principals and team members reviewed how to increase instruction time and decrease referrals, and consequently removal from instruction. The LSSP stated:

> So, we've created a better environment for all students, while at the same time we created a better environment for a student with emotional disabilities. You are always going to have kids that have behavioral issues, kids with disabilities, kids who don't speak English, you're going to have that.  If you plan for it then it's not such an imposition.

One of the principals added that, "In order to really stop a punitive mindset, we needed to go deep, and explore the roots of the school and home life." The change in considering students in need of behavior training included a mindset that was more accepting of differences in behavior and differentiation. Another principal reflected that PBIS not only helped guide behavior among students but the program helped teachers in diffusing good attitudes toward behavior. She stated:

> The changes on campuses are not measurable by data alone. This campus is totally different than before PBIS. Teacher buy-in was the biggest challenge to get PBIS going. Teachers are now all on-board. We have worked at aligning people with good attitudes to make this all happen.

With the help of teachers, the campus teams began creating their own guidelines on different campuses. One of the principals stated that, "when teachers help create the guidelines, they take ownership of it, and I wanted them to be empowered to set up the standards in our school." Selecting schools with cohesive and effective teams were vital to the implementation of the program. As an example, one of the principals modified the team when he started on the campus. He stated:

> When I was transferred to the school, the implementation had already begun prior to my arrival and the team was already set for the year. The team did not seem to be making strides in effecting change, so I included myself in the team, and changed some members of the PBIS team. I didn't ask every teacher that I found effective to join the team, because some of them were dealing with challenging groups so I picked the people who I knew that could balance both commitment and assertiveness. Program fidelity is very important if we want to create change.

The principal in this school summarized most of our observations in relation to the importance of principal fidelity to the program. Hence the importance of concurrently measuring principal effectiveness as the implementation progressed from year to year. Following we report on our analysis of *principal focus* as examining the Benchmark of Quality instrument adopted by the district.

## Principals Affecting the Success of the PBIS Program

We analyzed BOQs using the two sub-questions presented in this study. First, based on a descriptive statistical analysis of BOQ instruments, we examined the question, "Does the level of principal focus affect the success of the PBIS program?" The question appeared to be affirmative with two caveats: a) In the first year that BOQ scores were measured, there is no significant difference; and, b) For the second year, significance was found with confidence between 90% and 95%. Descriptive statistics for the BOQ scores for the three years of implementation are as follows (See Table 1).

Table 1

*BOQ Scores for Three Initial Years of Implementation*

|          | *m*   | *sd*  | *n* |
|----------|-------|-------|-----|
| '08-'09  | 64.35 | 16.12 | 17  |
| '09-'10  | 76.59 | 13.41 | 41  |
| '10-'11  | 79.47 | 13.28 | 51  |

Three independent samples t-tests were performed, one for each year of implementation, using the BOQ scores as the dependent variable and principal focus (1, 2) as the independent variable. The t-tests revealed significant differences between those campuses with strong principal focus and limited principal focus for two of the three years of implementation (See Table 2).

Table 2

*Differences between Campuses with Strong Principal Focus and Limited Principal Focus*

|                                  | '08-'09 | '09-'10 | '10-'11 |
|----------------------------------|---------|---------|---------|
| difference (limited – strong)    | -4.53   | -8.72   | -7.74   |
| t ratio                          | -0.56   | -2.18   | -2.15   |
| p-value (2-tailed)               | 0.580   | 0.036*  | 0.037*  |
| p-value (1-tailed)               | 0.290   | 0.018*  | 0.018*  |
| *df*                             | 15      | 39      | 49      |

*α = .05

While BOQ data for the years '08-'09 and '10-'11 passed tests for normality and equal variances, a Shapiro-Wilk W test of the '09-'10 BOQ data cast some doubt on the normality of that data ($W = 0.944$; $p = 0.043$). However, a visual inspection of the normal quantile plot of the residuals revealed no apparent problem with normality. Nevertheless, a Wilcoxon rank sums test was performed and a statistic of 3.78 was derived with a *p*-value of 0.052, indicating significance at an alpha level of 0.10 and marginal significance at an alpha level of 0.05. Further comparison of the three datasets indicates that the '10-'11 data, where the clearest significant difference was found at alpha level 0.05, appears to be the most reliable, due to its having the largest *n* and the smallest standard deviation.

**Degree of Adoption and Sustainability of PBIS**

A chi-square test of independence was employed to answer the second sub-question, "Does the level of principals' focus on the success of the PBIS program change as the program ages?" The test compared the observed number of campuses with strong focus and limited focus with the expected frequencies in each category and produced a Pearson value of 7.37, $p = 0.061$ indicating marginal significance at an alpha level of 0.05. A Fisher's exact test was also entered into evidence, showing marginal significance at an alpha of 0.05 with a $p$-value of 0.065. The only year showing this marginal difference was year 3 where principal focus seems to have shifted from high to limited by a factor of 2.88.

Because three of the cells contained an expected frequency less than five, the likelihood ratio of 8.99, $p = 0.03$, was used in addition to the Pearson and Fisher tests and found to be significant at an alpha level of 0.05. Due to the fact that there is very little guidance from statisticians on how to interpret the discrepancy among chi-square results (Larntz, 1978), we concluded that we derived something in the neighborhood of 94% to 97% confidence, showing that there is a significant shift in level of focus as campuses leave the second year of implementation and enter the third.

The second sub-question concerned the possible impact of the hypothesized change in principal focus as the program ages. The researchers were interested in observing the sustainability of PBIS at CCISD. Having found significance at a 0.05 alpha level in the first part of the question, the second part was pursued using analysis of variance. An ANOVA was performed to determine whether there were significant variances in the mean BOQ scores by program age. This question was operationalized by designating BOQ scores in the most recent year of measurement ('10-'11) as the dependent variable and the programs' age (years 2-5) as the factor. As mentioned, the BOQ data for '10-'11 passed tests for normality and equal variances, so a parametric test seemed appropriate. A significant difference was found among the years of implementation ($F = 9.31$; $df$: 3, 47; $p = .0001$). Least means contrast post hoc testing revealed significance between year one and each of the other years (2-4), with the greatest difference between years one and four, as well as a significant difference between years two and four (See Table 3).

Table 3

*Variances in Mean BOQ Scores by Program Age*

| Year | -Year | Difference | p-value |
|------|-------|------------|---------|
| 4 | 1 | 29.75 | 0.0001[**] |
| 3 | 1 | 18.62 | 0.0002[**] |
| 2 | 1 | 15.71 | 0.0004[**] |
| 4 | 2 | 14.04 | 0.0206[**] |

[**]$\alpha = .01$

The findings related to the implementation of PBIS demonstrate the importance of different phases of adoption and dissemination. Foremost to the program in this district, was the establishment of clearly-stated expectations for students and staff (Protheroe, 2005; Simonsen et al., 2008). These expectations seemed to be enforced fairly and consistently. Secondly, we observed group planning and early adopters' decision-making in campus teams, as of primary importance to gain support for the programmatic changes and requirements (Protheroe, 2005). Interestingly, the innovation was not only benefitting students with emotional and behavioral disorders.

The innovation and dissemination of PBIS at CCISD followed effective steps of adoption. Indeed, Simonsen et al. (2008) recommended that schools establish a team that guides the implementation process, identify coaches who will maintain the team, and obtain at least 80% buy-in from teachers and staff. We were able to verify if the district developed a reliable data system that would demonstrate whether the investment of principals in schools helped in the diffusion and implementation. Paramount in our observations was that all members were properly trained, that schools had the freedom to select and implement practices that were specific for each campus, that the district collected informative data, and used that data to continue to monitor the program for continued improvement. We expand on these ideas in the discussion section below.

### Discussion

Handler et al. (2007) stressed that the "key components to successful PBIS programming included a) the development and functioning of a leadership team, b) staff participation and involvement, c) administrative support, d) the development of competent coaching capacity, and e) district level support" (p. 29). The district demonstrated success in the preliminary stages of PBIS implementation. The five pilot campuses have consistently reported a reduction in the number of office discipline referrals. The teachers on those campuses report they feel more confident and capable of managing behaviors that once resulted in immediate removal from the classroom.

The initial PBIS campuses seemed to be experiencing success and continue to maintain their focus on inclusionary practices based on a PBIS model. Four years into the implementation of the PBIS program in SAISD, leadership commitment levels in the 76 participating schools varied. This may be significant as the district intends to expand the implementation of the program to all campuses while maintaining the level of passion and commitment requisite to the program's success. Whether commitment and fidelity to the program dissipates with wide-spread implementation is an open question that the authors intend to continue exploring.

Results indicated that a principal's level of focus is important to the success of a campus-wide behavioral intervention plan that requires a paradigm shift among stakeholders. This would mean that it is not enough for a principal to delegate the primary role in instituting such a program, or to give it a lower priority than other pressing concerns, such as NCLB-based accountability, even though we understand that multiple pressures reach the principal's desk simultaneously.

Further, our findings indicated that principals may lose focus as the program shifts from the second year into the third. A plausible interpretation of this result would be that principals generally remain steadfast in their level of focus on the PBIS program through its incipient years (1 & 2) and relinquish their control over it when it appears to have been established and

functioning independent of their direct involvement. The ANOVA results support this interpretation, indicating that the program makes a large leap in quality after the first year and then another between the second and fourth years.

The significant difference in quality between year one and subsequent years may be explained by the fact that during the first year of any program, practitioners are settling into a new routine. One way of reading these results might be to hypothesize that principals may be a little premature in letting go after the second year, as the more significant difference in quality appears during year four. From this evidence, it would appear that it may take three full years to generate sustainability in a global campus program like PBIS and that principals may turn their focus away after only two years. On the other hand, the principals may be seen as prescient, as the program does appear to improve in the fourth year despite any decline in focus. An important follow up question for further research will be to explore this challenge that principals face as to when to turn one's focus from a program in order to focus on a new or different one.

A further observation was made concerning the chi-square results and level of focus as the program ages. All four of the inaugural schools (the schools that volunteered to initiate programs as pilots for the district) have strong principal focus in year four despite the observed drop-off of focus during year three. This may indicate that these inaugural schools had unusually strong buy-in and that the principals were dedicated to the PBIS program from the beginning. In turn, this strong buy-in may indicate that the drop-off of focus observed in year three is more extreme than the data would indicate. That is, the drop-off in year three might have been more extreme had all campuses had the same level of buy-in. A randomized complete block design experiment or some other design that accounts for buy-in would have to be employed, and at this time the researchers have no operational definition of "level of buy-in."

## Conclusion

This study is significant in considering the implementation of paradigmatic changes towards inclusiveness in one large urban inner-city school district through the adoption of a PBIS program. In implementing a district-wide program, we examined the impact of principal focus as key in diffusing the adoption of PBIS through the campuses. The district's effort in the adoption of PBIS was to create inclusive spaces when addressing behavioral challenges among students with disabilities and reduce the removal of students to alternative schooling formats.

PBIS's consistent and focused approach to relearning how to teach behavior and social skills is very different from traditional models of school discipline, and we perceive that the school principals are the key leaders who can influence such a shift and persist in creating lasting change. As a campus leader, the principal can generate new models of strategic environment planning, help teachers succeed in positively motivating students to succeed, teach self-determination in students, and provide much needed support, especially in students who lack motivation. As our analysis demonstrated, PBIS required adults on campuses to work together proactively to address the needs of these students. Because PBIS is a change and time-intensive program, the creative involvement of adults was paramount, in order for the program to work on behalf of students. The implementation required a shift in the way educators perceived the behavioral management of school children.

An important consideration for further research is to explore the challenge principals face when presenting a new program to their staff and students. There are numerous programs encouraged by districts simultaneously, and it is difficult to turn one's focus from a program in order to focus on a new or different one. Another important question left unanswered by this project is, "What impact does principal focus have on the intended outcomes of PBIS?" This question would look beyond the quality of the program as measured by BOQ scores and to other indicators of success. In a subsequent study, we intend to analyze the effectiveness of the PBIS program in terms of disciplinary referrals before and after implementation by types of referral and other factors when such data become available. As we perceive the potential of PBIS as influencing the attitudes of teachers, subsequent analyses will also take into account the possible impact the PBIS program has had on academic achievement of not only students with special needs, but the needs of all students.

CCISD continues its efforts to implement PBIS throughout the school district. In the year following the pilot program, thirteen additional schools volunteered for PBIS training. Due to the success reported by the principals in district-wide presentations, the Superintendent determined that PBIS would be a district-wide initiative. PBIS would be implemented in all elementary and middle schools. What happens when PBIS becomes a mandated district initiative? That remains to be seen.

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