The Implications of a System-Wide Positive Behavioral Intervention Initiative: From Design to Successful Implementation

Vance L. Austin, Ph.D.
Micheline S. Malow, Ph.D.
Nikki L. Josephs, Ph.D.
Manhattanville College

Andrew J. Ecker, M.S.
Lower Hudson Regional Special Education Technical Assistance Support Center (RSE-TASC)

Abstract

Residential schools for students with emotional and behavioral disorders have been steadily evolving since the beginning of the 20th Century. Traditional behavioral approaches involving physical restraint and confinement have been replaced with more humanistic interventions involving positive reinforcement. This article traces this transformative journey from the punitive techniques employed in the 1950s and 1960s through to the present and the use of prosocial interventions recommended in current best practices such as PBIS. The authors share the success story of one such residential school as it embraced a sea change in behavior management philosophy, moving from a more traditional behaviorist model to a positive behavior intervention and support system (PBIS) dubbed: “WISE.”

A Brief History of Residential Treatment Systems circa 1925-Present

Residential educational placements for at-risk youth have a long history, initially advocated in the 1920s by Aichhorn, Freud, and other psychoanalysts, as a way of reaching and rehabilitating court-involved youth (Aichhorn, 1925). In the early 20th century, the task of the psychoanalyst and other therapeutic caregivers was to identify the potential for delinquent behavior in children and youth and, through reeducation, to “weaken the latent tendency to delinquency” (p. 41). Early in the twentieth century, “training schools” were placements to which court-involved youth were uniformly assigned. Today, many of these youth would likely be classified as having emotional/behavioral disorders” under IDEA (2004), and some might be most effectively educated in a “residential treatment facility,” which stands as the modern equivalent of the “training schools” of the 1920s and 1930s.

Unfortunately, children housed in early residential treatment facilities received little or no behavioral therapy, as they were seen as a burden to society and/or individuals that would likely become chronic lawbreakers. So these children would be lifelong wards of the state for which therapeutic interventions were thought to be fruitless and futile (Aichhorn, 1925). Very little
literature of the early 1900s supported the use of positive behavioral supports or interventions to treat the needs of youth housed in residential facilities.

By the late 1900s, researchers and practitioners began to provide information to caretakers regarding alternative treatments for youth housed in residential facilities (Ainsworth & Fulcher, 1981; Whittaker, 1981). It was during this time that “milieu or group therapy” for children and youth, was introduced to the literature as an effective approach for the treatment of youth delinquency for those in residential facilities. Ainsworth and Fulcher’s historical overview provided evidence that the notion of “group care” in residential treatment was regarded as an important sub-system, as an “occupational focus” and worthy “field of study” (p. 2-3) for future research.

The Efficacy of Residential Treatment Facilities
Residential treatment facilities of the latter half of the twentieth century have been criticized for being the most costly care alternative for at-risk youth. However, there is evidence that these facilities present a more viable and appropriate alternative for many students as compared with the educational status quo: the inclusive classroom (Sunseri, 2005).

Current educational accountability requirements, according to Owens (as cited in Kott, 2010), will likely compel residential treatment facilities to measure and report program effectiveness (p. 34). At a time when school budgets are being cut and school districts look for the most effective yet least expensive alternative, placement decisions may be made with greater attention to the school budget than to the needs of the child. Therefore, in this climate of fiscal responsibility, it is incumbent on the residential facility to provide compelling evidence about when residential placements are the best choice for students, based on the results of their own data collection systems. Unfortunately, residential treatment programs historically have been immune from data collection and therefore are lacking in evidence-based research. Many residential treatment programs simply suffer from a lack of a consistent definition of the population served as well as well-defined treatment plans with data collection protocols. The reluctance of residential programs to define their population in part stems from the stigma associated with training schools’ procedures, the prevailing predilection for community-based placements, and their association with 19th century reform movements, which unilaterally removed identified delinquent children from their homes in the name of social progress. Notwithstanding misguided social reforms and residential treatment procedures, the literature clearly shows that residential treatment school placements are an important option that can, in the long term, prevent costly repetitive lower-level placements (Sunseri, 2005).

Indeed, in an effort to remedy the lack of empirical evidence supporting the placement of students in residential treatment schools, researchers have begun to cull together the research that does exist and call for more investigators to examine current practices (Jolivette & Nelson, 2010; Lehr, 2004; Simonsen & Sugai, 2013; Van Acker, 2007). Kott (2010) observes that residential treatment facilities, in addition to empirical research, can and should conduct case studies at the facility level that may contribute substantively to our knowledge of residential treatment efficacy. Finally, Kott (2010) purports that promoting a research perspective at the facility level would create the opportunity to collect data that could be used to consistently assess the effectiveness of the program and make timely evidence-based decisions for continual
improvement (p.21). The use of positive behavior interventions and supports has been shown to be a viable solution to address these issues.

A literature review, conducted by Safran and Oswald, (2003) examined the use of school-based positive behavior supports (PBS), in planning intervention priorities. The efficacy research focused on the three types of PBS; namely, school wide (universal), specific setting, and individual student levels. Overall, the findings validated the efficacy of implementing PBS in all three settings. Safran and Oswald (2003) also noted that some consistently reported characteristics of PBS include: (a) person centered planning, (b) collaborative teaming, (c) the use of functional behavior assessment, (d) hypothesis development, (e) multi-component planning, (f) evaluation of program efficacy, and (g) ultimate systems change.

By way of contrast, a survey of practitioners, conducted by Miramontes, Marchant, Allen Heath, and Fischer (2011) revealed that whereas most respondents agreed that PBIS initiatives fostered positive improvement in school climate, many did not find the application of PBIS methods to be practical. Nevertheless the authors conceded that statistically significant correlations were found between the fidelity of program implementation and increased social validity, suggesting that the more consistently a program was implemented, relative to its theoretical framework, the more viable it was perceived by its stakeholders. This finding underscores the need for research that examines the social validity of PBIS and its consequential impact on program implementation (Miramontes, Marchant, Allen Heath, & Fischer, 2011).

The Emergence of PBIS in Self-Contained Settings
Positive Behavior Interventions and Supports have been described as a "systems approach for establishing the social culture and individualized behavior supports needed for a school to be a safe and effective learning environment for all students" (Sugai & Horner, 2009). This specialized approach to behavior management has been studied in a wide variety of settings with little empirical evidence of its efficacy in self-contained and/or alternative educational settings (Kalke, Glanton, & Cristalli, 2007; Nelson, Sprague, Jolivette, Smith, & Tobin, 2009; Scott, Liaupsin, Nelson, Jolivette, Christie, & Riney 2002; Nelson, Sprague, Jolivette, Smith, & Tobin, 2009; Swain-Bradway, Swozowski, Boden, & Sprague, 2013). Benner, Beaudoin, Chen, Davis, and Ralston (2010) examined the effects of PBIS on the behavior of students identified with emotional/behavioral disorders in self-contained settings. One focus of the investigation was to measure the degree to which teacher fidelity of PBIS implementation influenced pro-social behavioral development over the course of a school year. The results of the study and several others (e.g., Medley et al., 2008; Muscott et al., 2008; Warren et al., 2006) showed significant reductions in both externalizing and internalizing problem behaviors for students. Furthermore, teacher fidelity to PBIS was identified as a critical factor in the development of pro-social behaviors in these students.

Likewise, research conducted by Simonson, Jeffery-Pearsall, Sugai, and McCurdy (2011) suggests that implementing an Alternative Setting School-Wide Positive Behavior Support program (A-SWPBS) is both viable and effective for self-contained settings. Once again the issue of program fidelity emerged and the researchers asserted that practitioners in these settings, all staff and personnel, must receive and participate in systematic training from qualified, vetted district, regional, or state-level trainers. Only in this way can programs ensure the establishment
of meaningful behavioral expectations, make evidence-based decisions about programs, implement viable practices to support students, and invest in systems to support long-term A-SWPB program application with fidelity (Nelson, et al., 2009; Simonsen, Jeffrey-Pearsall, Sugai, & McCurdy, 2011).

Additionally, Kalke et al. (2010) noted it is essential that a top down approach be utilized; with the administration of the residential treatment facility modeling the tenets of the PBIS program tailored to the specific behavioral needs of the institution, and providing substantive and ongoing support to staff and students to ensure fidelity of implementation. Furthermore, conclusions suggest that the positive relationship between the residential treatment facility and the home is critical to ensure the application of consistent behavioral expectations between the two settings (Lewis, 2009). This bi-directional communication between home and school helps to reinforce the positive behavioral development that is vital for student success.

More recently, Johnson et al. (2013) found school-wide PBIS to be effective in the reduction of security referrals and school behavior incidents in a secure juvenile facility after one year of implementation. The researchers also noted that school attendance rose and the number of students who received career and technical certification was higher with SW-PBIS than without.

Finally, to support the efficacy of PBIS initiatives as applied to alternate settings, such as residential treatment facilities, Sugai and Horner (2006) posit the need for further investigation. The more studies conducted that describe successful PBIS interventions with a broad range of children and adolescents, the greater the evidence over time that PBIS may be implemented as a successful approach to use in these special settings.

**PBIS Implementation in a Residential Treatment School**

The Apex School, a residential and day treatment school located in a suburban hamlet in the northeast region of the U.S., was operationalized in the early 1970s. The school followed the popular treatment approach of the decade, which was a form of “milieu therapy” providing the student residents with a complete array of services: psychiatry and clinical therapy, pediatric care, nutritional guidance, speech-language and occupational therapies, child care support and supervision, as well as academic instruction in a traditional school setting.

Historically, the school and on-site residences employed a quasi-Skinnerian approach to behavior management that included a point system with contingent secondary reinforcers such as extended on and off-grounds privileges, later curfews, greater canteen and “deli” access, and more frequent home visits. In contrast to these positive reinforcers, the staff employed an escalating scale of punishments for misconduct and rule violations that ranged from minor infractions, such as being late to class or missing curfew, to physical aggression, willful destruction of property, and fighting. The less serious rule violations incurred nothing more than a loss of points, typically 1-3 out of a possible total of 9 for the school day. These points were tallied daily and the total point value obtained by the student was used to determine cottage levels; associated with the awarding of lesser or greater privileges to the student. In a similar way, major infractions such as physical aggression towards self or others might involve a brief “time out” in a designated safe space or, in the case of a more serious physical altercation, removal to and confinement in the “quiet room.” The transfer process from the site of the altercation to the quiet
room might involve as many as four to six staff members. Two individuals were hired as crisis intervention staff whose sole job it was to escort students in crisis to and from the quiet room and provide on-site supervision of students detained therein.

To be sure, every infraction committed during the school day or afterwards in the residences incurred the requisite loss of points, proportionate to the severity of the (misbehavior) rule violation. A major repercussion, and deterrent, for rule violations was the loss of after-school privileges, which might include, as deemed appropriate and proportionate to the offense, reduction in cottage level resulting in a loss of off-ground privileges and an earlier curfew, or, if more serious or chronic, cottage restriction, which essentially confined the student to the cottage from the end of the school day to an early curfew, with only a break or two to smoke or go to the dining hall for supper. Historically, the points system worked best with residential students as the staff could assign, monitor and administer privileges for the student’s precious after-school time.

During the subsequent three decades, the school honed and promoted a “family oriented” child-centered approach and strategically altered the admission profile to focus on students whose primary diagnosis was within the mood or anxiety categories, thus still falling within the Individuals with Disability in Education Act (IDEA) federal category of emotional disturbance (ED), but screening out the preponderance of aggressive students. However, the sea change in the institution’s behavioral management system really began to take shape when a New York State Education (NYSED) Board of Cooperative Education Schools (BOCES) Positive Behavioral Intervention and Supports (PBIS) “coach” approached the administration of the school with an offer to help institute and provide long-term training and support for a PBIS school-wide system. The coach was careful to explain that the program required a commitment from all the institutions’ stakeholders, not only to assent to its adoption, but also to participate in the longitudinal planning and training essential to the fidelity of implementation. After a series of surveys and focus groups, a PBIS Committee was formed with constituents representing every aspect of the facility, to include, child-care workers, teachers, related service providers, members of the administration, as well as secretarial, kitchen, and ancillary staff members. This newly formed “steering committee,” conducted more surveys, organized several all-day PBIS professional development workshops, in collaboration with the BOCES PBIS coach, and eventually initiated a pilot study to determine the efficacy of a PBIS system in the school and residence facility.

Next, with the guidance of the BOCES PBIS coach, the PBIS steering committee identified, through a survey of its caregiver constituents, key pro-social behavioral criteria that could be used to assess the students and provide appropriate incentives, as warranted. The four behaviors identified as most characteristic of pro-social individuals were: (a) accountability, (b) engagement, (c) safety, and (d) respect. At the urging of the BOCES PBIS coach, the staff was invited to create an acronym that would include these four behavioral criteria that would make them easily remembered. After several meetings and much iteration of related terms, the faculty and staff settled on: “W.I.S.E.” (Where you should be; Involved; Safe; Ever Respectful), which captured all four of the agreed upon behavioral criteria. Staff were encouraged to adapt the criteria for their specific environmental contexts; for example, classroom teachers were invited to individualize the WISE criteria to be relevant to their subjects (e.g., one of the science teachers interpreted the W as “in your seat,” the I as “engaged in lab work and in-class assignments,” the
S as “wearing safety glasses and gloves and following lab safety procedures as directed,” and E as “respectful towards peers, teachers, and self by always being courteous and polite”).

The Process of Program Review
The PBIS steering committee, now known as the “WISE Committee,” conducted an initial pilot study involving four randomly selected teachers and 24 students. The duration of this pilot study was one school quarter, or ten weeks. A point system was developed for the school day as an addition to the nine-point residence point program already in place as previously noted. The participants involved in the pilot investigation were provided with point sheets consisting of four points per period encompassing the 12 periods in the school day, which included four homeroom periods, lunch, mentoring, and six subject periods for a possible 48 points per academic day. A point conversion was created for resident students only, to enable the residence staff to continue to use the traditional nine-point system in the residences, for the duration of the pilot investigation. As incentive, any student who was able to accrue the maximum academic points, 48, for four weeks was treated to an extended lunch period in a separate, desirable location. For this lunch reward, the student’s favorite pizza or Chinese food was ordered from a local restaurant. In addition, the names of those students attaining the 48 points for the month was posted conspicuously in each classroom and an announcement was made extolling the accomplishment.

After the successful completion of the pilot program, the school decided to implement the PBIS WISE program throughout the entire school. Apex’s self-contained setting consists of students in grades nine through 12 who are entitled to special education services under the federal classification of ED, although most students also arrive at the school with multiple mental health diagnoses including Attention Deficit Hyperactivity Disorder (ADHD), Bipolar Disorder, Depressive Disorder and Anxiety Disorder to name a few. The school population is comprised of 85% residential students who participate in a 24-hour program that provides therapy, education, and social supports. The remainder of the student population, approximately 15%, consists of day students that attend academic classes and receive therapeutic services at the school. Upon roll out of the PBIS WISE program, data was collected for 72 consecutive school days during the spring of the 2013-2014 academic year. For the roll out of the WISE program there were 160 students enrolled, but due to incomplete data and student attrition, only 99 students, 59 males and 40 females are reported on for the purposes of this review. Of those 99 students, 71 of the students were enrolled in the residential program and 28 of the students were day students. As noted in the PBIS literature, teacher fidelity plays a large and statistically significant role in improving the behavior of students with ED, and as such, all individuals who were part of the day school program and residential facility were trained on the implementation and data recording procedure of the PBIS WISE program.

Once again, at the start of the program’s roll out, the participants were provided with point sheets consisting of four points per period encompassing the 12 periods in the school day; including four homeroom periods, lunch, mentoring, and six academic subject periods for a possible 48 points per day. The point conversion remained intact for resident students, to enable the residence staff to continue to use the traditional point system in the cottages, for the initial school-wide implementation process.
Results from the first 72 days of the program found that student success followed a similar pattern to that of PBIS programs in general education settings; the majority of the students accept the program from the onset, a smaller group needs additional encouragement to participate fully, and the smallest group need intensive support to buy in. In this particular review, 63% (62 students) of the students earned enough points to provide them with access to full privileges (extended curfew, off grounds privileges), 36% (36 students) of the students earned limited privileges (time off of curfew, on grounds privileges) and were given additional supportive encouragement to work toward full, and 1% (1 student) of the students was on limited privileges (9 pm in Cottage Curfew) and individual intensive support was provided (see Table 1 below).

<table>
<thead>
<tr>
<th>Point Range</th>
<th>Privilege Earned</th>
<th>Males</th>
<th>Females</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>43-48</td>
<td>Full Privileges&lt;br&gt;Extended curfew, permission to go off grounds</td>
<td>34</td>
<td>28</td>
<td>62.6%</td>
</tr>
<tr>
<td>33-42</td>
<td>Full privileges, curfew = ½ hour early, on grounds</td>
<td>19</td>
<td>8</td>
<td>27.3%</td>
</tr>
<tr>
<td>23-32</td>
<td>Limited privileges, curfew = 1 hour early, on grounds</td>
<td>5</td>
<td>4</td>
<td>9.1%</td>
</tr>
<tr>
<td>22 – below</td>
<td>Curfew = on time, in cottage access only</td>
<td>1</td>
<td>0</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>59</strong></td>
<td><strong>40</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Therefore the results of this examination proved to be analogous to the hierarchy structure of PBIS as it is implemented in a general education setting; the bulk of students respond appropriately to the universal structure of the program, a smaller subset of students receive less privileges due to their lack of compliance with the general program and a minimal amount of students receive intensive individualized support and structured privileges due to non-compliance with the program.

Consistent with the literature (Sunseri, 2005), this program review provides support for the tenet that PBIS programs instituted in self-contained settings are an effective option as a component of a continuum of care and may prevent costly repetitive lower-level placements for students. Given a structured program with desired incentives and consistent application, the majority of the students were successful as determined by this program review. Similar to the findings of Kalke, Glanton, and Cristalli’s (2010) investigation, as a direct result of the implementation of the PBIS WISE program at the Apex School, students have obtained consistent evidence of their own success. Furthermore, the direct instruction provided to students about the PBIS WISE program enabled students to seek support more often from teachers, related service providers, and child-
care staff prior to a behavioral crisis. Consistent with the observations of Kalke et al. (2007), Muijs et al. (2004), and Sterbinsky et al. (2006), perhaps the greatest contribution of the PBIS program implemented at the Apex School is the affirming, pro-social climate created by the school and residence staff as well as the administration and related service providers, recursively reflected in the positive behavioral responses of the students.

**Implementing Improvement in the Apex PBIS “WISE” Program**

The benefit of program review and reflection is that program enhancement is a natural consequence. Through the course of the analysis of the first 72 days of data, challenges to the fidelity of the program was noted, as well as ways that the program could be improved. Some of the specific challenges noted included (1) the paper and pencil administration of the point system proved unwieldy and contributed to lost data, (2) the recognition that there is a small range of variation between the total points obtained, teachers want to be generous to students in order to positively shape behavior, (3) inter-rater reliability of point assignment by faculty and staff was problematic, some faculty and staff were more lenient than others (4) continual movement of students in and out of the program due to reassignment to home districts, further contributing to lost data, and (5) the lack of meaningful incentives that provided both short-term and long-term goals. The incentives that were in place benefitted the residential students more than the day students; there was a lack of ability to incentivize the day students as most of the incentives related to after school or cottage privileges.

With these challenges in mind, changes to the “WISE” program have been implemented. First, the program is now fully computerized so that faculty and staff can input points for each of the designated periods into a computer tracking system. Full transition to the SSIS Online System was instituted in fall 2014. Furthermore, there was an overhaul of the 48-point system to integrate the cottage residence points into the program. Residence points have become an extension of school points and students now earn a total of 100 points per day. Also, as many researchers had noted, fidelity of application of the program was important (Benner, Beaudoin, Chen, Davis, & Ralston, 2010), so ongoing professional development has been scheduled to monitor, and re-train faculty and staff on the administration of points. As part of the fidelity training, more rigorous criteria were developed for the assignment of points and how students earn points. Lastly, the inconsistent benefits to day and residential students were noted and the development of increased incentives for day students is being addressed.

Future improvements being considered are the incorporation of students and student’ input. Specifically discussed was the implementation of a “Student Ambassador” program to facilitate student understanding and incorporation into the program; this would benefit high levels of student movement and transition. Also, there is interest in a Menu of Incentives. Using preference surveys with students would provide students with the ability to choose their own incentives from a list of possibilities; students with internalizing and externalizing types of behaviors may prefer different incentives thereby increasing reinforcement level.

Accountability reforms that permeate all educational settings and practices have the same potential to improve services in self-contained settings as in general education settings. PBIS is a system wide program designed to address teaching and supporting positive behaviors with a scaffolded level of support to students. The PBIS system provides a toolbox of positive,
proactive, and preventative strategies to utilize with students. With data-analysis and program effectiveness documentation, student achievement outcomes are documented and the validity and appropriateness of serving at-risk students in residential treatment schools can be substantiated. However, it does require a philosophical shift from a punishment mentality that historically has permeated residential treatment schools to a direct instruction and reinforcement model.

References


Positive Behavior Support on Student Discipline and Academic Achievement. *Journal of Positive Behavior Interventions, 10*(3), 190-205.


**About the Authors**

**Dr. Vance Austin** is Associate Professor and Chair of the Department of Special Education at Manhattanville College and also teaches part-time in a special high school for students with emotional and behavioral disorders. He has formerly worked full time as a special education...
teacher in both public and private schools where he accumulated over twenty-five years of teaching experience and has also taught at several colleges and universities. Dr. Austin’s interests in special education extend beyond the U.S. to include Canada and Vietnam. His current research focus is in the area of finding effective interventions for students with emotional and behavioral disorders as well as improving the quality of teaching in special education. He has authored many articles and book chapters, and presented at numerous national and international conferences on the topics of effective teaching and behavior management, and is completing a second book for teachers on the subject of working effectively with students with emotional and behavioral disorders.

Dr. Micheline S. Malow is Associate Professor and Chair of the Department of Special Education at Manhattanville College and also is a supervising psychologist for an APA doctoral internship training site in the area of psycho-educational assessment and evaluations. She has formerly worked full-time as a school psychologist in developmental preschools in addition to teaching at the college level at several colleges in the New York area. Dr. Malow’s interests in special education lie in the area of program evaluation and student assessment, in addition to identifying effective interventions for students with disabilities. She has authored articles and book chapters, presented at numerous regional, national and international conferences, as well as co-authored a book on the topic of adolescent risk taking behavior.

Nikki L. Josephs is an Assistant Professor in the Special Education Department at Manhattanville College in Purchase, New York. Dr. Josephs is certified in Social Studies Education and Special Education in the State of New York and has ten years of teaching experience at the elementary and secondary levels. Her current research focuses on addressing the academic and behavioral needs of students identified with emotional/behavioral disorders.

Andrew J. Ecker is a Special Education School Improvement Specialist (SEIS) with the Lower Hudson Regional Special Education Technical Assistance Support Center (RSE-TASC) at Putnam/Northern Westchester BOCES in Yorktown Heights, NY. Andrew is an Adjunct Graduate Professor in the Special Education Department at Manhattanville College (Purchase, NY) where he is completing his Professional Diploma (PD) and Doctorate (Ed.D), both in Educational Leadership. Andrew’s research focuses on improving students’ behavioral and social-emotional outcomes through implementation of the Interconnected Systems Framework. Andrew is a member of the RSE-TASC Work Group on Specially Designed Instruction, creating and updating quality indicators and resources for Special Education instructional practices. He was previously a Director, Teacher, and PBIS Coach at a therapeutic, residential high school, a Non-District Specialist with the RSE-TASC and a professional basketball player.