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Purpose: Review implementation and outcomes of Pax Good Behavior Game in New Mexico

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Expected Outcome: Understand the impact of Pax on student behavior and school culture.

The Pax Good Behavior Game in New Mexico Schools

Background

Pax Good Behavior Game is a strategy employed to stimulate prosocial behavior among students while simultaneously reducing problematic behavior through the encouragement of group and self-regulation. Over the 50-year history of the Good Behavior Game, of which Pax has been an iteration since 1999, numerous studies have shown its positive effects, including consistent reductions in mental, emotional, behavioral, and psychiatric disorders in as little as one semester.

The game helps students work toward shared goals, teaching cooperation, self-regulation, and the delaying of immediate gratification in favor of a bigger goal. The game has been shown to improve multiple measures of academic success, including performance on reading assessments, high school graduation, and college readiness, and has been included in the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Registry of Evidence-Based Programs and Practices.

Mechanics of Pax

How the Pax Good Behavior Game Works

Pax is an intervention used in the classroom with young children to create an environment that is conducive to learning, reduces off-task behavior, increases attentiveness, and decreases aggressive and disruptive behavior. It also aims to improve academic success, as well as mental health and substance use outcomes later in life.

The game includes a set of evidence-based strategies called "kernels" and a classroom game intended to increase self-regulation and cooperation and decrease unwanted behaviors called "spleems." The teacher utilizes the kernels in the classroom, which include transition cues, written notes praising positive behavior, and rewards in the form of brief and fun activities that are normally not allowed in the classroom, such as throwing paper balls.

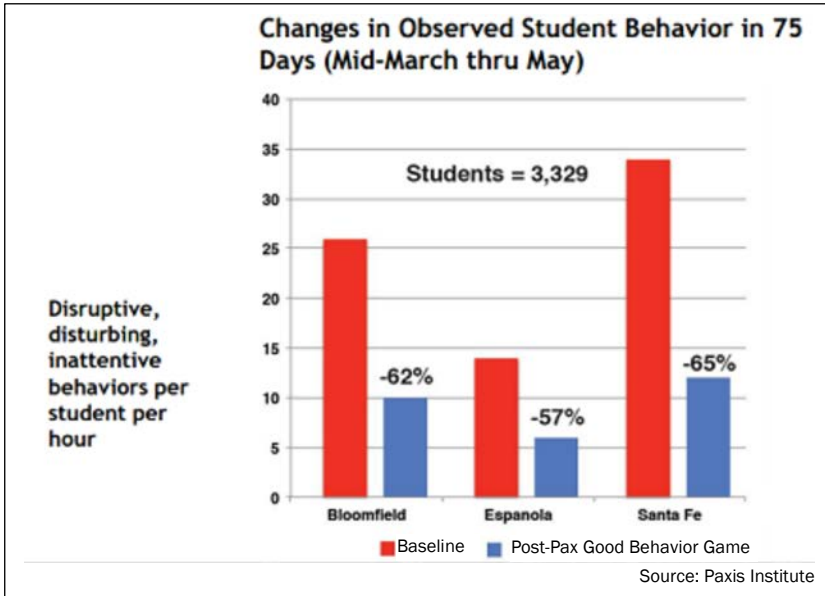
The game is played in two to five teacher-selected teams within a classroom; each day the game is announced and played three times, beginning with

Examples of kernels include using a timer to help students stay focused on a task, beginning with simpler tasks, then moving to more complex ones as students become accustomed to the timer. Another example would be the use of pre-determined tailored consequences for behavioral infractions; students know consequence will be related to the misbehavior, creating a logical association between the action and consequence. Finally, teachers might randomly determine which student might be called upon for a particular question or assignment, avoiding the impression that certain students are called on more or less frequently than their peers.

simpler tasks for brief periods, but increasing in duration and complexity as children improve at the game. During the course of the game, the teacher tracks spleems, and teams that finish with three or fewer spleems earn a reward, typically selected from a list of potential fun activities.

Evaluation and Expected Outcomes of Pax

Pax employs several evaluation tools when reviewing program outcomes. Spleem counts are conducted daily, both pre-and postgame. A “fast track teacher survey” is used to obtain the teacher’s perceptions on each student’s prosocial and academic behavior and skills. A teacher stress survey is conducted to assess any changes in instructor outlook and behavior after implementation of Pax. During the course of implementation, a survey is conducted to assess fidelity and gauge teacher training needs, and qualitative interviews are conducted in the spring to allow teachers to share stories about



Pax implementation.

Over its nearly fifty year history, studies by such entities as John Hopkins University, the *Clinical Child and Family Psychology Review*, and the *Journal of Applied Psychology* consistently show beneficial outcomes from the good behavior game, including a 50 percent to 70 percent reduction in inattentive, unengaged learning and disruptive, destructive, or aggressive behavior, which is usually accompanied by a corresponding increase in fully engaged, productive learning without actually increasing instructional time. Attendance usually improves significantly within months of initiating the game, with fewer illnesses and injuries reported among children, including both accidental and intentional. There is a 30 percent to 50 percent reduction in the need for special services for children, meaning less response to intervention or individualized educational plan meetings. Fewer conferences between parents and teachers or administrators are scheduled. There is less staff stress, leading to less turnover. Finally, the more students engage in Pax, the more children’s brains are wired with the core cognitive, emotional, and social skills necessary to improve academic achievement, which in turn leads to higher graduation rates and increased postsecondary matriculation. Successful use of the Pax game can result in up to 25 percent more instructional time, due to reduced classroom interruptions.

According to the Pax website, out of 500 students in classrooms employing the Pax good behavior game, between 5.6 and 6.6 percent fewer boys will use tobacco or other substances, and 3.6 percent fewer boys will abuse alcohol. Further, 4.8 percent fewer girls and 6.6 percent fewer boys will engage in suicidal ideation, and 1 percent fewer boys will commit serious violent crimes. Also, 8.6 percent fewer boys will need special

education services, while 5.6 percent more boys and 8.8 percent more girls will graduate high school, and 6.6 percent more boys and 7 percent more girls will continue to postsecondary education.

Pax in New Mexico

Implementation and Outcomes

In 2016, after having presented to the New Mexico Children’s Cabinet, the Behavioral Health Services Division (BHSD) of the New Mexico Human Services Department (HSD) was permitted to adopt Pax with a six-month rapid demonstration project that took place in Bloomfield School District, Espanola Public Schools, and Santa Fe Public Schools over five months. The project included 253 faculty and 33 school sites with approximately 3,300 students reached. To implement the program, BHSD contracted with both the Paxis Institute and Coop Consulting, Inc., a local firm with background in training and implementing statewide prevention efforts.

According to HSD, its Behavioral Health Services Division was to have funded the implementation of PAX for FY16 and FY17. Yet while the cost for funding Pax in most schools is \$23.27 per each child’s lifetime, projected shortfalls in funding resulted in numerous budget cuts throughout HSD, including cancelling contracts for the second year of implementation. Currently, the program is funded through a SAMHSA grant, though schools and local school districts are encouraged to take over sustainability efforts with their own funds, so that Pax can be taught in additional schools or school districts.

According to the Pax website, game kits, required for all teachers and involved administrators are \$289 and \$239, respectively. Initial training and booster training sessions for up to 40 people both cost \$2,900, plus travel expenses. Three-day, offsite national and regional training costs \$2,500, plus expenses, and annual Pax data monitoring and feedback systems cost \$250 per school. Additional costs for custom supports and trainings vary depending on site needs.

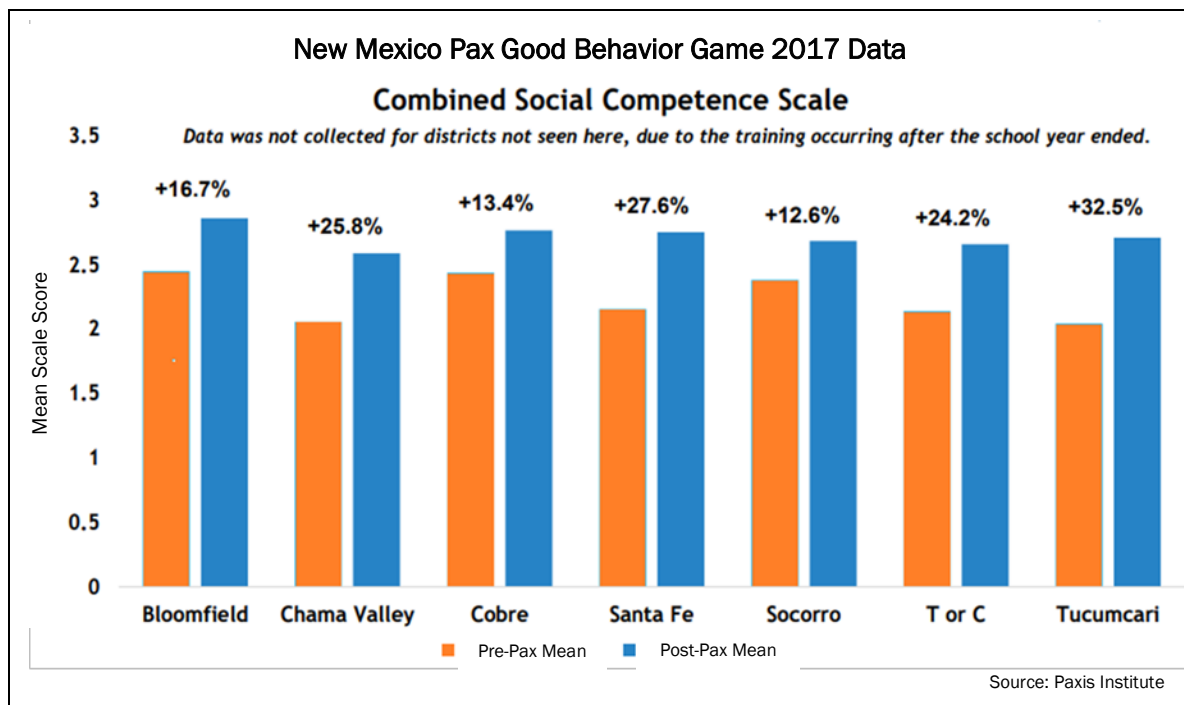
In only 75 days, observed student behavior in Bloomfield yielded 62 percent fewer disruptive behaviors per student per hour than before the rapid demonstration. Espanola saw a reduction in poor behavior of 57 percent, and Santa Fe saw a reduction of 65 percent. According to the Paxis Institute, out of the cohort of 3,300 students in the rapid demonstration sites:

- 8.6 percent fewer students are predicted to need special services;
- 1 percent fewer students are predicted to commit a serious violent crime;
- 9.6 percent fewer are predicted to become addicted to serious drugs;
- 6.6 percent fewer are predicted to become smokers;
- 3.5 percent fewer are predicted to develop alcohol addictions;
- 4.8 percent fewer young women are predicted to contemplate suicide;
- 6.6 percent fewer young men are predicted to attempt suicide;
- 5.6 percent more boys are predicted to graduate from high school;
- 8.9 percent more girls are predicted to graduate high school, with less incidence of teen pregnancy; and
- 13.6 percent more students are predicted to attend university.

The Paxis Institute indicates these results reflect a predicted savings to students, families, schools, communities and the state and federal governments of approximately \$43 million.

The 11 school districts and the tribal school participating in the 2017 rapid demonstration were: Bernalillo Public Schools, Bloomfield School District, Chama Valley Independent School District, Cobre Consolidated Schools, Deming School District, Espanola Public Schools, Farmington Municipal School District, Santa Fe Public Schools, Socorro Consolidated Schools, Truth or Consequences Public School District, Tucumcari Public Schools, and the Choos'gai Community School, located on the Navajo Nation.

In 2017, the rapid demonstration was extended to eight additional local school districts and one tribal school. The game was implemented over five months, involving 397 faculty and 4,314 students in 38 school sites across the state. Detailed data on outcomes are not available for the 2017 demonstration sites, nor are academic data from 2016 demonstration sites, but the fast track teacher surveys include an academic sub-track, which all indicate improvement. Unfortunately, Coop Consulting, Inc. currently lacks access to more detailed academic information for which they need school district approval. However, changes in mean social competence scores are available for six school districts, all of which saw an increase in mean scores after implementation of Pax.



Pax and Native American Students

Social competence scores measure a young person’s perceived ability to be assertive and create and maintain positive peer relationships. It is based on a four-point scale, measuring agreement with several statements related to social interaction and self-regulation.

A portion of the SMHSA grant is devoted to administration of Pax in Native American communities and schools. Choos'gai Community School on the Navajo Nation is currently implementing Pax. Nine teachers, six special education support staff, and two administrators were trained in November 2017, ultimately reaching 157 students.

Coop Consulting, Inc. indicates they hope to expand into schools on the Taos, Laguna, and Acoma pueblos, where they are hoping for whole school development and implementation, which tends to yield better, synergistic results. They note the work in native communities is focused at least partly on opioid abuse prevention, and requires a more deliberate pace, with more buy-in from teachers and administrators. The Paxis Institute named a number of young people from the Yakama Nation Pax “DreamMakers,” having grown up with Pax implemented in their

schools and communities. They travel to indigenous communities throughout the country and Canada to share their experiences and assist in bringing Pax to other communities. These young people introduced Pax to native council members and tribal elders at the recent New Mexico Tribal Summit.