ACADEMIC ENHANCEMENT SITE

Judith A. DeJong, Ph.D., and Stanley R. Holder, M.S.

Abstract: This off-reservation boarding school serves over 600 students in grades 4-12; approximately 85% of the students reside in campus dormitories. After having documented significant improvement on a number of outcomes during a previous High Risk Youth Prevention demonstration grant, the site submitted a Therapeutic Residential Model proposal, requesting funding to continue successful elements developed under the demonstration grant and to expand mental health services. The site received Therapeutic Residential Model funding for school year 2001-2002. Once funds were received, the site chose to shift Therapeutic Residential Model funds to an intensive academic enhancement effort. While not in compliance with the Therapeutic Residential Model initiative and therefore not funded in subsequent years, this site created the opportunity to enhance the research design by providing a naturally occurring placebo condition at a site with extensive cross-sectional data baselines that addressed issues related to current federal educational policies.
Academic Enhancement Site

Located less than a mile from a community of approximately 7,000 residents and surrounded by wooded areas, this off-reservation boarding school serves approximately 600 students in grades 4-12. Approximately 85% of students were housed in campus dormitories. Prior to Therapeutic Residential Model (TRM) funding, this school had documented significant improvement over the course of a Center for Substance Abuse Prevention (CSAP/SAMHSA/PHS/DHHS)\(^1\) demonstration grant that began in 1995 and ended in 1999. A precursor to the TRM approach, this demonstration grant brought the concept of a comprehensive, data-driven prevention approach to campus. The school's mode of operation shifted during that half-decade from a focus on crisis management to a proactive approach. Spearheaded by a project director oriented toward a therapeutic approach and supported by reform-minded administrators, the site experimented with a variety of interventions.

This site pioneered the use of paraprofessional counseling technicians as parenting surrogates who provided one-on-one attention, care, and advocacy for students. Several specialized residential settings for short-term placement were piloted. These included a transition dormitory for students whose lack of social skills resulted in behavioral problems, an opportunities dormitory for students in need of academic assistance, and a therapeutic dormitory for students with significant mental health needs. During the period that these CSAP prevention programs were in place, there was a 50% drop in tobacco use, a decrease from 87% to 50% among 7th and 8th graders in marijuana use, an increase in academic proficiency in math from 44% in 1997 to 83% in 2000, and an increase in language proficiency from 41% in 1997 to 86% in 2000.

Recognizing that serious problems remained, this site presented a comprehensive TRM proposal that was accepted and funded for the school year (SY) 2001-2002. This proposal sought to continue and enhance elements developed under CSAP funding, while significantly enhancing the mental health resources and other comprehensive services for students. In the gap between the proposal submission and receipt of funding, however, the No Child Left Behind initiative came into being. When TRM funds were received, the school administration chose to shift the majority of that funding to academic enhancement activities. Evaluation efforts documented this effort and the outcomes associated with it, thus providing a naturally occurring alternate treatment group for comparison purposes. After the first year of funding, the Office of Indian Education Programs decided to eliminate the site from the TRM program because its proposed therapeutic approach had not been implemented. However, data from this site were valuable for comparison purposes. Among other advantages, this site had 5 years of data documenting its evolution as a precursor to the TRM. When the data were analyzed for the year of TRM funding, the site showed little change in the outcome indicators. Results from this site underscore the importance of administration commitment, the necessity for oversight, and the need for a multidimensional TRM approach.

Student Characteristics

Life Stressors. Table 1 shows responses of Academic Enhancement site (AE) students on the Prevention Planning Survey section of the American Drug and Alcohol Survey (ADAS), administered anonymously in fall 2001. It is clear that many incoming students had experienced school failure and been exposed to violence as either perpetrators or victims.
BOARDING SCHOOL REFORM:  
EVALUATION OF THE THERAPEUTIC RESIDENTIAL MODEL PROGRAM  

Table 1  
History of Incoming Students in Fall 2001 –  
Anonymous ADAS Self Reports  

<table>
<thead>
<tr>
<th>Item</th>
<th>7th–8th Grade (N=105)*</th>
<th>9th-10th Grade (N=202)*</th>
<th>11th-12th Grade (N=154)*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History of Antisocial Activity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Have been arrested</td>
<td>25%</td>
<td>50%</td>
<td>41%</td>
</tr>
<tr>
<td>- Have robbed someone</td>
<td>17%</td>
<td>22%</td>
<td>25%</td>
</tr>
<tr>
<td>- Have beaten up somebody</td>
<td>74%</td>
<td>74%</td>
<td>64%</td>
</tr>
<tr>
<td>- Have hurt someone using club/chain/knife/gun</td>
<td>16%</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td><strong>School Failure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Have flunked a grade</td>
<td>47%</td>
<td>60%</td>
<td>51%</td>
</tr>
<tr>
<td>- Have been expelled from school</td>
<td>22%</td>
<td>28%</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Victimization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Have been beaten up by peer</td>
<td>22%</td>
<td>28%</td>
<td>19%</td>
</tr>
<tr>
<td>- Have been beaten up by someone not of same age</td>
<td>39%</td>
<td>40%</td>
<td>38%</td>
</tr>
<tr>
<td>- Been hurt with a club/knife/gun</td>
<td>21%</td>
<td>27%</td>
<td>26%</td>
</tr>
<tr>
<td>- Been robbed</td>
<td>15%</td>
<td>15%</td>
<td>13%</td>
</tr>
</tbody>
</table>

*Not all students responded to all items. Percentages are based on number of students responding yes or no.

Suicidal Tendencies. In 1999, the Johnson Student View was administered anonymously to grades 7-12 using a paper-and-pencil format. As can be seen in Figure 1, at each grade level girls were more likely than boys to report having attempted suicide. Overall, 29% of students reported having attempted suicide.

Figure 1  
Percentage of AE Students Reporting Past Suicide Attempts by Grade and Gender
**Gang Involvement.** Students were asked in fall 2001 surveys about their gang involvement. Figure 2 shows the percentage of students choosing each option to describe their level of involvement.

**Table 2**
Percentage of Students Agreeing with Jessor Items in Fall 2001

<table>
<thead>
<tr>
<th>Jessor Item</th>
<th>7th-8th Grade</th>
<th>9th-10th Grade</th>
<th>11th-12th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardly anything I'm doing in my life means very much to me.</td>
<td>41%</td>
<td>33%</td>
<td>26%</td>
</tr>
<tr>
<td>I sometimes feel unsure about who I really am.</td>
<td>31%</td>
<td>28%</td>
<td>27%</td>
</tr>
<tr>
<td>It's not up to me to help out when people I know are having problems.</td>
<td>40%</td>
<td>23%</td>
<td>27%</td>
</tr>
<tr>
<td>It's hard to know how to act most of the time since you can’t tell what other people expect.</td>
<td>60%</td>
<td>51%</td>
<td>48%</td>
</tr>
</tbody>
</table>

**Alienation.** Using the short form of the Jessor Alienation Scale (Jessor, Donovan, & Costa Frances, 1992), baseline measures of alienation were taken in fall 2001 at the beginning of the year of funding (Table 2).

**Substance Abuse.** Data collected on substance use by the CSAP project showed that a long and gritty war with substance use had taken place on campus in the years preceding TRM funding. Figures 3-5 show drug use in the previous 30 days at AE for spring and fall data points. Marijuana was the drug of choice at this site. Baseline data collected in spring 1996 showed that 87% of the 7th and 8th graders reported using marijuana in the past 30 days. In the year following implementation (SY 1996-1997), fall and spring data showed an increase during the course of the school year in the number of students using marijuana. However, the tide turned in SY 1997-1998 when marijuana use decreased between fall and spring. By spring 1999, at the
end of the CSAP data collection, cross-sectional data showed that the percentage of 7th and 8th graders using marijuana in the past thirty days had fallen to 50%; for 9th and 10th graders it had fallen from 74% to 52%, and for 11th and 12th graders it had fallen from 76% to 59%.

The pattern of alcohol use shown in Figure 4 is similar to that of marijuana use. The number of users increased between fall and spring for SY 1996-1997, indicating that students were being inducted into both marijuana and alcohol use during the year. However, the numbers for all age groups decreased during subsequent school years.
Plagued by an employee union that insisted on the right of staff members to smoke inside school buildings, the CSAP prevention program struggled to reduce cigarette use by students (Figure 5). In SY 1997-1998, a new reform-minded superintendent forced staff to leave the campus boundaries in order to smoke. Figure 5 shows a decrease in tobacco among the students after enforcement of this policy.

**Figure 5**

Percentage of AE Students reporting Daily Use of Cigarettes

<table>
<thead>
<tr>
<th>Year</th>
<th>7-8th</th>
<th>9-10th</th>
<th>11-12th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>30%</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td>Spring</td>
<td>20%</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Fall</td>
<td>15%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Spring</td>
<td>5%</td>
<td>2.5%</td>
<td>1.25%</td>
</tr>
</tbody>
</table>

**BarOn Emotional Quotient Inventory.** The BarOn Emotional Quotient Inventory focuses on a number of areas necessary for successful functioning in the world, including intrapersonal skills (having to do with inner knowledge and inner balance), interpersonal skills, ability to manage stress, and adaptability (reflecting confidence in ability to deal with situations that arise around oneself). Table 3 shows the percentage of incoming students aged 10-19 scoring in the range of low to markedly low on BarOn scales in fall 2001. While generally within the normal curve on the Intrapersonal and Stress Management scales, the percentage of students scoring low on the Interpersonal and Adaptability scales indicated that many students lack interpersonal skills and confidence in their ability to handle challenges.

**Table 3**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Males (n=207)</th>
<th>Females (n=164)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrapersonal</td>
<td>28.2%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>68.1%</td>
<td>47.0%</td>
</tr>
<tr>
<td>Stress Management</td>
<td>14.5%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Adaptability</td>
<td>66.7%</td>
<td>52.4%</td>
</tr>
</tbody>
</table>
BOARDING SCHOOL REFORM:
EVALUATION OF THE THERAPEUTIC RESIDENTIAL MODEL PROGRAM

Site Resources

Facilities and Resource Management

The condition of the facilities ranges from adequate to poor. The majority of buildings on the campus are over sixty years old, well past the date when they should have been replaced. A number of old and beautiful trees shade a campus which is relatively free of trash. There are sidewalks and asphalt roads, but they are in poor condition. Negotiating the campus after a rainstorm is difficult, as mudslides from the “lawn” cover sidewalks with thick, treacherous mud. Potholes on the road circling campus are serious enough to create hazards for walking or driving.

The school buildings are in generally good condition. There are two main buildings, a high school and an elementary building, supplemented by a cluster of modular units. The library has a variety of fiction to encourage reading. Bathrooms have inadequate ventilation and need repairs. Students and staff report that there is frequently only cold water. Doors have been removed from stalls in bathrooms to deter substance use.

The conditions of the dormitories vary. In the two-year interval between TRM proposal submission and receipt of funding, enrollment increased 18%. Student intake assessments done by the counseling technicians allowed the school to obtain Intensive Residential Guidance (IRG) funds for over 99% of students; therefore, school revenue per student and money for services to these students further expanded the available budget. Between SY 1999-2000 and SY 2001-2002 (the year of TRM funding), the number of staff increased from 140 to 219.

The increase in students resulted in overcrowding in the dormitories. Old, cottage-style buildings housed the younger male students and the majority of female students. There were two “newer” dormitories; one housed athletes, and the other housed high school boys. There was a disparity in accommodations. Residents of the new dormitories had three students per room, while the young women and children in the older dormitories were stacked in bunk beds, with up to 18 beds in a large room and 4 to a small room. The bathrooms in the old dormitories had cracked tile, mold, and mildew due to lack of ventilation fans. Shower facilities were so limited that young women’s wake-up calls for shower rotation started at 4 a.m. Lack of ventilation was exacerbated on the ground floor, where windows were locked in an attempt to control behavioral problems. The appearance of the dormitories was shabby, with windows that had pieces of cloth or blankets hung over them. Some attempt had been made on furnishings. Attractive new beds were seen in all the dorms, covered by fuzzy blankets with striking American Indian designs.

At the time of funding, recreational amenities were limited. There was an aging, dusty gym that was being designated an historical monument; a small fitness center; and a number of outside fields and athletic courts. One new steel building housed the football program. Construction had begun on a large, modern gymnasium, the size of which dwarfed the other buildings on campus.

The staff survey in spring 2002 solicited opinions on campus conditions and resources, asking staff members to use a 5-point scale ranging from 0 (not a problem here) to 4 (a major problem). Figure 6 shows the staff members’ ratings of resources.
“Crowded living conditions in the dorm” generated the most concern among the staff, with 75% identifying it as a moderate to serious issue.

Staff morale was relatively high, with only about one-fifth of the staff rating either “Staff dissention” or “Low staff morale” as a major problem. Many staff had a positive “can do” attitude and were willing to push forward if they received leadership. Early in the school year, the Student Services Department director, a mental health professional who had spearheaded the reform effort begun under CSAP funding, left the program. After a period without leadership, the position was filled by the recreation director who had no background in mental health. Unfortunately, the leaderless period coincided with the year of TRM funding, and the staff had little oversight and lacked clear direction.

The TRM program brought in $1.5 million during the year of funding. Because the site combined program funding rather than separately budgeting and tracking TRM funds, the evaluation compared resources and staffing patterns in the year of funding with those in the preceding years to ascertain changes.

**Family and Community Involvement**

Because almost 85% board at the school, many students miss the support of their families and communities. Figure 7 shows the results of a staff survey about issues impacting students. Most of the staff felt that family issues were the principal source of student problems. Unfortunately, given the distance most students are from their families, addressing family issues is difficult. Only in the last month of TRM funding did one of the family counseling sessions described in the proposal take place.
Staff opinions were evenly spread out on the influence of outside politics. Only one-quarter of staff had serious to major concerns regarding “School board policies” (Figure 8).
Program and Service Components

Cultural Programming

This site places a strong emphasis upon culture. The school recognizes and has pride in its history and culture. There is a long-standing American Indian Heritage Club. Hand games, pow wows, traditional dance and drum groups, traditional crafts, and an American Indian Color Guard are some of the cultural activities taking place on the campus. Many of the cultural activities, which had previously been sporadic and sometimes funded out of the pockets of dedicated staff members, were built up by CSAP funding during the previous demonstration project. The TRM funding was to provide additional staff and support additional cultural activities.

Students had a relatively high degree of cultural pride, as measured on a cultural pride scale. Figures 9 and 10 show cultural pride levels at three time points: spring 2001 (the baseline prior to TRM funding), fall 2001 (for incoming students), and spring 2002 (the end of TRM funding).
The highest levels of pride were on Membership (“I like being a member of my tribe,” “I like that my family is part of my tribe,” and “I am proud to be a member of my tribe”). The lowest levels of cultural pride were on Peer Sharing (“I talk to my friends about things having to do with my tribe’s culture [religion, customs, values, food, language, arts, powwow and other celebrations]”) and participation (“I participate in tribal and other Indian celebrations”). Knowledge (“I know about my tribe’s culture and history” and “I like telling and listening to tribal legends and stories about my ancestors”) was between these two clusters.

Socialization/ Life Skills Components.

Elements involved in enhancement of social development and life skills in any school environment are made up of proactive (preventive) elements and reactive (disciplinary) policies.

Proactive Components.

Counseling Technicians. During the previous prevention funding, the site recognized that students were not receiving basic emotional support from dormitory staff, and provided a number of prevention staff who worked closely with students. Realizing that students needed role models such as these who took on the roles of parents, social workers, and advocates, the school created a cadre of paraprofessional Counseling Technicians (CTs) to fill these roles as CSAP funding tapered off. The CTs provided assessment of all incoming students, yielding information that was used to generate a description of individual needs and strategies for meeting these needs. Their role had evolved over the years, and included coordinating services, accessing services, acting as a liaison between parents and teachers, and providing life skills training. At the beginning of the year of TRM funding, CTs were based in a group office, supervised by an experienced lead CT, and had developed a high level of cohesion. Less experienced members of the group extensively consulted with their more experienced colleagues when they encountered problems with students. However, reorganization in January 2001 (the year of TRM funding) had
a major effect on the group, as members lost their office, were reassigned to dormitory duties, and had their caseloads shuffled.

The TRM proposal requested funding to bolster cultural and alternative activities, and to fund an art therapist, a music therapist, 17 additional home living assistants, a cultural tech, and an additional CT. Funds to support the professional development of staff were also requested. Under TRM funding, the number of dormitory and recreational staff increased from 40 to 66, improving the student-staff ratio from 12:1 to 9:1. A substance abuse specialist was added to provide prevention services. However, the music therapist, cultural tech, and counseling tech were not added, and the tenure of the art therapist was brief. As the number of students had increased since the year the proposal was submitted, CTs’ caseloads were increased instead of lightened.

**Reactive Components**

The number of security personnel was increased from two to four under TRM funding.

**Discipline.** In surveys in 2001 and in 2002, staff indicated their concern about a perceived lack of student discipline and inconsistent treatment of students. In October 2001, 37% of staff rated student discipline as a major problem; in April 2002, 40% rated it as major. In 2001, 39% of staff saw a need for consistency. By April 2002, 45% of the staff rated inconsistency as major problem.

The school had a well-established system of discipline. Staff had a behavioral incident form that listed two categories of offenses. Category A offenses, the more serious ones, included weapons, fighting, possession of substances or paraphernalia, gang involvement, endangerment of self or others, contract violation, felony, AWOL, and sexual misconduct. The school had a no-tolerance policy for these Category A offenses. Students cited for Category A offenses went before a guidance committee. If found guilty, they were given the choice of being suspended, withdrawing, or going to the transition dorm. This dorm provided a strictly regimented environment that in past school years included removal from the classroom and working with a special group of Student Services Department teachers. During TRM funding, however, the transition students were mainstreamed back into the classroom.

A tracking system for behavioral incidents had been put in place under CSAP funding. The elementary school counselor entered behavioral incidents that came before the committee, and disciplinary actions based on the committee’s decisions, into the school computer system. The loss of the director of student services, a strict disciplinarian, appeared to affect this system. The evaluator received a number of reports indicating that staff were being discouraged from making reports on students, and that some reports that staff tried to file were being shelved in an effort to circumvent the system. Almost one-half of the students appeared to believe that there was discrimination in enforcement of rules. When asked whether it was either “very true” or “mostly true” that school rules were fairly enforced, only 52% of 7th and 8th graders, 58% of 9th and 10th graders, and 55% of 11th and 12th graders agreed. As many informants suggested that athletes were one of the groups being favored, data from the spring 2002 ADAS survey were examined, dividing respondents into those who indicated that they were engaged in school athletics and those who did not. As Table 4 shows, on items having to do with discipline, self-identified athletes were consistently less likely to believe they would get in “a lot” of trouble for violating rules.
Table 4
Enforcement of Standards (ADAS Items)

<table>
<thead>
<tr>
<th></th>
<th>Non-Athletes</th>
<th>Athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of students believing</td>
<td>45%</td>
<td>28%</td>
</tr>
<tr>
<td>students get in “a lot” of trouble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for cutting school.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of students believing</td>
<td>51%</td>
<td>34%</td>
</tr>
<tr>
<td>students get in “a lot” of trouble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for bullying another student.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of students believing</td>
<td>52%</td>
<td>47%</td>
</tr>
<tr>
<td>students get in “a lot” of trouble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for hitting another student.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of students believing</td>
<td>77%</td>
<td>60%</td>
</tr>
<tr>
<td>students get in “a lot” of trouble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for smoking.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of students believing</td>
<td>73%</td>
<td>61%</td>
</tr>
<tr>
<td>students get in “a lot” of trouble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for drinking alcohol.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of students believing</td>
<td>73%</td>
<td>63%</td>
</tr>
<tr>
<td>students get in “a lot” of trouble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for using other drugs.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Staff surveys rated “Drug and alcohol problems of students” on the scale of 0 (*not a problem here*) to 4 (*a major problem*) in spring 2001 and spring 2002. In spring 2001, 29.5% rated this item as a major problem; in spring 2002, 35.1% rated it as a major problem.

Student agreement with the Jessor item “It’s hard to know how to act most of the time since you can’t tell what other people expect” is shown in Figure 11. While the small number of students in the youngest age group (20 in spring 2001; 27 in spring 2002) precludes statistical conclusions, there appears to be a decrease in agreement with this item, indicating that they may have found the environment more predictable than had their predecessors.
Mental Health Services

Figure 12 shows that staff recognized the mental health needs of the students. All staff respondents indicated that students had some degree of emotional problems. All staff agreed that students’ low expectations of themselves, and their alcohol or drug use, were significant problems.

![Figure 12](image)

In the TRM proposal, mental health was described as an area with a high level of need, requiring a significant number of trained personnel. The proposal described a system of triage that would use counseling technicians (CTs) at the base level of triage to assess all students for mental health needs. Higher levels of triage would use additional professional staff to deal with students identified by the base assessment as needing more help. In addition to these professionals, AE proposed to further develop the therapeutic dorm pilot project to provide an appropriate setting for students with serious mental health needs requiring the highest, or level three triage.

As described by the proposal generated in SY 1999-2000, AE’s original resources in the mental health area included an elementary school counselor, a high school counselor, a half-time licensed professional counselor, and a director of student services with a Masters degree in counseling. Some very minimal additional assistance was provided by contracts with outside sources. The proposal specified two additional CTs would be hired to lighten caseloads on base triage, an expansion from 2.5 FTE to 10 FTE in professional level positions (i.e. masters level and licensed counselors) to serve students whose mental health needs were beyond the expertise of the CTs, and an expansion of the capacity of in-house and consultant services for the most serious needs.

However, as the proposal was implemented, it was found that TRM funds had not been used to increase mental health resources. The number of CTs stayed constant at 13 even though the number of students increased, driving the student-CT ratio from 37:1 to 44:1. The second level of triage had two school counselors and one Masters-level counselor on staff during the year of funding. The school continued to rely on outside counseling contracts, rather than providing the 1.5 FTE psychologist and psychiatrist as requested in the proposal. There was
significant concern among staff that the half-day per month of psychiatric services provided by contracts was inadequate to deal with the problems of many students. This shortcoming is particularly significant because 29% of students reported having made a suicide attempt in the past. While CTs in the dorms continued to provide some paraprofessional services, they spent much of the critical first two months of school either driving buses or filling out paperwork required to qualify students for IRG funding.

**Therapeutic Dormitory.** One of the proposed additions was a therapeutic dorm to provide an appropriate setting for students with serious mental health needs, who would qualify for inpatient mental health services. This innovation was unique among the three sites in the first cohort, all of whom concluded that many of their students had such serious mental health problems that it was necessary to send some of them elsewhere. A very promising model for the proposed therapeutic dormitory was developed by a counselor at this site. However, the administration initially decided not to implement this component. Midway through the school year, the administration reversed its decision and proceeded with implementation. At the time of the April site visit, the dormitory had been operating for several months and had served a total of 20 students. Concerns were expressed that: as additional professional staff had not been hired personnel assigned to the therapeutic dormitory were volunteers with no special qualifications or training, adequate protocols were not in place to guide personnel in their unfamiliar new roles, the dormitory was not supervised by a person holding a Ph.D. or an M.D., and the number of mental health professionals on staff overall at the site had decreased since the beginning of the year. As the energies of the remaining mental health personnel were being focused on operations at the therapeutic dorm, the resources to deal with the needs of other students were further compromised.

**Academic Program**

When the TRM proposal was submitted, academics appeared to be adequately addressed. According to the SY 1999-2000 school report card, the school had produced a drastic improvement in students’ academic proficiency. Eight-three percent of the students were proficient or above in math and 86% were proficient or above in language in SY 1999-2000. Therefore, the TRM proposal requested only four additional teachers to expand services in the special needs dorms (transition, opportunities, and therapeutic). This resulted in a teacher-student ratio of 1:15.3, much lower than the 1:20 ratio that existed at the comparison day school. In addition, a local university agreed to supply unpaid education majors to tutor and to assist in classrooms. A structure was in place to identify and triage students in need of academic help. Students scoring below a C in any course were required to report to the teacher of that course from 3:30 - 4:30 p.m. According to the proposal, the opportunities dorm provided an intensive learning environment for students failing one or more subjects. Therapeutic Residential Model funding augmented this existing system by providing the services of Alpha Plus (discussed in more detail later in this section) for staff development.

However, test data from 2001 and 2002 painted a less optimistic academic picture. Figure 13 shows that many AE students were performing well below their grade level in spring 2001. Furthermore, the gap in academic achievement widened from two years for 4th graders to five years for 12th graders.
Figure 13 shows the grade equivalent performance of AE students in the baseline year (4/01).

Figure 14 shows results for fifth and eighth graders on the spring 2001 state proficiency tests.
Figures 15 and 16 show Iowa Test of Basic Skills data collected in October 2001 on incoming students. The data show that, at the beginning of the academic year, a significant number of students needed remedial academic help.

During the year of TRM funding there were a number of changes to the academic program.

The majority of TRM funding used for academics at this site went to an Alpha Plus program and the addition of a large cadre of academic classroom aides, called ACAs. The Alpha Plus Learning System follows the principles promoted by Lee Jenkins (2003, 2004). Under this system, teachers were required to customize their curriculum, focusing on state objectives for each grade level. Under the previous CSAP funding, earlier versions of Alpha Plus study skills
modules had been tested for effectiveness. Figure 17 shows the relationship between individual dosage of Alpha Plus and change in GPA from CSAP reports. In all areas except social studies, GPA appeared to decrease, rather than increase, as a function of increasing dosage.

A number of reasons were postulated to explain these unexpected findings. The amount of time taken up by Alpha Plus may have cut into the time available for students to do their homework. The encouragement given to students who may otherwise have dropped out of school, may have led to their staying in school and further decreasing the overall GPA. Observers noted that a number of staff administering the curriculum were poorly trained, and implementation may have been an issue. As a result of these findings, the school decided to scale back Alpha Plus to only those students who needed academic help. At the beginning of TRM funding in fall 2001, however, the school turned again to an upgraded Alpha Plus program to make a concerted effort to reform its academic system and increase scores on proficiency tests. At the beginning of the year, under the leadership of an Alpha Plus coordinator, teachers laid out objectives to match state proficiency testing standards. Alpha Plus trainers worked extensively with teachers throughout the year to orient them to state test criteria and to improve students’ study skills. The focus shifted to “teaching to the test,” with teachers required to develop classroom plans to cover one or more test-related objectives per day.

In order to allow teachers to focus more intensively on subjects, the school changed to a block schedule. This change gave teachers fewer - but longer - class periods. According to ACAs and a focus group with students, some of the teachers did not adjust to this change. They continued to do lectures and homework assignments at the previous length, leaving students to their own devices for the remainder of the time in the block. Teachers expressed frustration that they were trying to teach criterion-level information when their students were too far below grade level to understand the material. The pace left little time to remediate students’ academic deficits. Adding to the stress, midway through the year, the Iowa Test of Basic Skills replaced the state test as the proficiency standard, and teachers were required to reorganize their schedule of objectives to meet the new criteria. In addition, the Morningside program - designed to address gaps in basic skills - was introduced late in the school year, but teachers had little enthusiasm or
energy left by that time. Teachers reported a highly stressful year, which was rendered tolerable only by the presence of the ACAs who acted as classroom aides, assisted with classroom order, and eliminated the need for the school to hire substitute teachers.

The addition of 85 students between SY 1999-2000 and SY 2001-2002 was matched by an increase of only 3 certified teachers. The bulk of TRM funding went to hiring 30 additional educational aides, bringing the number to 34. The majority of the new aides were classified and paid as CTs and referred to as ACAs. Among this group, some individuals were in graduate programs, some were social workers, and a few were teachers and nurses. These individuals had more education than the typical classroom aide and were being paid considerably more than other classroom aides. Discussions with students and the ACAs indicated that most of the ACAs were not being optimally used:

- A focus group of high school students identified only one CT who they had observed doing anything other than running the occasional errand.
- Some ACAs reported that their supervising teacher did not know what to do with them and had them doing little other than photocopying and grading papers.
- Some ACAs with psychology backgrounds had been told it was not their job when they attempted to counsel students asking for help.
- While several ACAs said they were working hard and were needed in their assigned classroom, most of the ACAs expressed the opinion that their abilities were not being used.
- Several ACAs reported that the teachers to whom they were assigned took advantage of their presence to take time off, using them as substitute teachers. One ACA had acted as a substitute teacher for 30 hours during the past four weeks.

The opportunities dorm that had been providing remedial academic help in previous years was eliminated in favor of intensive study sessions. Students failing any subject were required to attend study sessions from 4:30 – 8:30 p.m., Monday through Thursday. Site visits to these sessions, however, revealed that less than one-quarter of the students who were required to attend were actually present. The school also initiated a policy of not awarding failing grades in an attempt to build self-esteem. Students were allowed to redo assignments in study hall to bring inadequate homework up to a C level. Teachers expressed some concern that students were being given the unrealistic message that they would have unlimited chances to redo work and, therefore, that they did the minimum.

**Career Guidance.** Lack of career guidance had been an ongoing problem at AE. A computer program to provide information about post-secondary options to students was ordered but was not implemented during the year of funding.

**Tutors.** The evaluator found no evidence that the tutors provided through the state university programs were being used.

**Physical Health Components**

The physical needs of the students were being met. Food service in the cafeteria provided adequate nutrition at three meals a day, seven days a week. A school nurse was hired with TRM funding.
The school had athletic fields and a gym. The proposal had identified significant gaps in recreational activities and requested an additional four recreation staff, but only one was hired. Students complained that there was a significant lack of weekend activities. Many found the intensive Monday through Thursday study schedule to be a bore, with very few activities scheduled on weeknights. Twenty percent of the staff reported that “lack of after school and weekend activities” was a major problem. Many students were observed to be aimlessly wandering the campus when they were not studying.

Outcome Data

Outcome data tracked a number of indicators. Retention rate was considered the major indicator of a successful program. In addition, quantitative data were used to evaluate such key indicators of developmental success as school bonding, peer and social bonding, adaptability and stress management, meaning and identity, and academic achievement.

Retention Rate. Figures 18 and 19 compare retention in SY 2000-2001 and SY 2001-2002. Both analyses are based on the population that enrolled on or before September 30 of the school year. As some 12th grade students graduated midyear, the retention analysis looked only at grades 4-11.

Figure 18
Yearly Retention of Original Cohort by Grade at AE

Figure 19 diagrams the cumulative percentage of dropouts from this cohort by month. No difference can be seen in the retention rates before and after TRM was implemented. The sharpest increase in the dropout rate occurred during in January 2002, coinciding with a reorganization of four dormitories, the shifting of caseloads, and the diminution of the residential CTs’ roles. There was no significant difference in retention between the baseline year of SY 2000-2001 and SY 2001-2002.
School Bonding

Students’ Attitude toward School. The students’ attitude toward school was tapped prior to any intervention (1996), after the CSAP funding (2001), and at the end of the TRM Project (2002) by asking them to respond to the item “I like school.” Figure 20 shows the distribution of their responses.

The majority of students reported liking school “some” or “a lot” at all data collection points.
Figures 21 and 22 show student responses in spring 2001 prior to TRM funding, and spring 2002 at the end of the year of TRM funding, on two ADAS items: “My teachers like me” and “My teachers respect me.”

Responses show the majority of students felt they were liked and respected by their teachers “some” or “a lot.” There was a shift in the seventh-eighth grade group toward feeling more respected and liked by their teachers between spring 2001 and 2002. As the teaching personnel had not changed between these two time points, the improvement may be due to the presence of the additional classroom aides who both assisted and related to the students, as well as providing assistance to harried teachers.
BOARDING SCHOOL REFORM: 
EVALUATION OF THE THERAPEUTIC RESIDENTIAL MODEL PROGRAM

Peer and Social Bonding

Alienation. Figure 23 shows cross-sectional percentages of students responding affirmatively to a Jessor item regarding feeling “left out.” Feelings of being left out trended toward a slight decline for the youngest age group from spring 2001 to spring 2002.

Interpersonal. Figure 24 shows the percentages of students scoring low to markedly low on the BarOn Interpersonal scale. There was no decrease in the percentage of students needing help in this area. While the youngest and oldest students had similar percentages for males and females, analysis of spring 2002 scores found that the middle age group had a gender gap, with males at 78% and females at 38%.
Social Responsibility. Figure 25 shows that there was no change in percentage of students agreeing with the statement “It’s not up to me to help out when people I know are having problems.”

Behavioral Indicators. The TRM program began during a period when the site had a stable behavioral situation. At the beginning of CSAP funding five years previously, students reported fights occurring on a daily basis, while school attendance was not enforced and incidents were carelessly tracked. Implementation of the CSAP tracking system to monitor and appropriately discipline students, and use of CSAP-funded staff to monitor halls and provide prevention activities, had helped to turn this situation around. By the end of CSAP funding in 1999 the number of violent incidents was low, given the population level of 500-600 students, and it changed little across the following interval year and TRM year. Sixty violent incidents were reported in SY 1999-2000, 62 in SY 2000-2001, and 52 in SY 2001-2002. Alcohol use, previously shown in Figure 4, increased from spring 2001 to spring 2002, going from 23% to 31% in 7th and 8th graders in cross-sectional analysis, from 17% to 29% in 9th and 10th graders, and from 25% to 38% among 11th and 12th graders.

Prior to the baseline measure in spring 2001, the campus had lost its drug dog and experienced a steep upsurge in marijuana use among the younger students. After the dog was replaced and security was doubled, marijuana use decreased from 68% to 50% among 7th and 8th graders, from 54% to 49% among 9th and 10th graders, and from 46% to 38% among 11th and 12th graders (see Figure 3).

The enhanced surveillance may also account for a decrease in cigarette use in the middle age group of students during SY 2001-2002 (previously shown in Figure 5).

Adaptability and Stress Management.

Figure 26 shows the percent of students whose responses on the BarOn in spring 2001 and spring 2002 revealed a lack of confidence in their ability to deal with situations. While the percentage of students scoring low was similar for males and females in the middle age group,
there were gender differences for both the youngest (males 31%, females 75%) and oldest (males 60%, females 35%) students, indicating an age x gender interaction. Older females gained in their confidence in their ability to meet challenges, while older males' confidence decreased.

![Figure 26](image)

**Figure 26**
Percentage of AE Students Scoring Low to Markedly Low on BarOn Adaptability Scale

Similar percentages of male and female students scored low on stress management. Overall, there was no change on this measure from spring 2001 to spring 2002 (Figure 27). The percentage of students at this site who scored low on stress management is similar to that of their same-age peers in the general population.

![Figure 27](image)

**Figure 27**
Percentage of AE Students Scoring Low to Markedly Low on BarOn Stress Management Scale
Meaning and Identity

Figures 28 and 29 show the percentage of students agreeing with the Jessor items “Hardly anything I’m doing in my life means very much to me” and “I sometimes feel unsure about who I really am.” There was no change on either measure during the period of the TRM project.

Figure 28
Percentage of AE Students Agreeing: “Hardly anything I'm doing in my life means very much to me.”

Figure 29
Percentage of AE Students Agreeing: “I sometimes feel unsure about who I really am.”

Figure 30 shows the percentage of students in spring 2001 and spring 2002 scoring low to markedly low on the BarOn Intrapersonal scale. As fall baselines were not available for both years and as all data were anonymous on these surveys, it was not possible to ascertain why there were shifts in spring outcomes.
Academic Achievement

Figure 31 shows proficiency levels after the last year of CSAP funding (SY 1999-2000), the interval year of SY 2000-2001, and the year of TRM funding (SY 2001-2002). The number of students scoring in the partially proficient range increased significantly in the interval year compared with the last year of CSAP funding, although there may have been some questions about inclusiveness of the testing in those years. When SY 2000-2001 and SY 2001-2002 were compared, there was a slight shift upward in language but a matching shift downward in math. Overall, the data support the teachers’ perceptions that teaching on-grade objectives left them no time to remediate students’ deficits in math.
Discussion

This site had a number of advantages. The prior existence of an innovative prevention program on campus had motivated both staff and students. The proposal submitted by this site contained a number of innovative elements that had been piloted and had shown promise. However, under TRM funding most of these elements were not developed and in some cases were cut back or eliminated.

Therapeutic Residential Model funding with resultant program changes did not increase mental health services. Because of changes to the administrative team and the loss of the key architect of the TRM proposal, program changes were at odds with the needs presented in the proposal and with the strategies proposed to deal with those needs. Instead, administrative decisions made during the year of TRM funding reflected that belief that an emphasis on athletics and academics was the best remedy for dealing with mental and behavioral problems. Significant TRM funds went into the classroom and also into a “boot camp” approach to the remediation of academic deficits. From the perspective of a research design, this situation was fortuitous. The site functionally qualified as a placebo condition. Because of its inclusion in the baseline and outcome data-gathering system, and the sizable infusion of supplemental TRM funds, it was possible to use this site to examine post-hoc hypotheses. Namely, if sites are given supplemental funds to be used at their discretion, that are equal to those per capita given to sites implementing approved programs, is there a concomitant improvement in outcomes? The findings showed:

- No significant increase in retention
- No increase in cultural pride
- No decrease in alienation related to identity or meaning
- Mixed results in substance use. Substitution of interdiction for prevention and counseling appeared to reduce marijuana and cigarette use, but alcohol use increased.
- No change in percentage of students in need of help with intrapersonal skills, stress management, or adaptability.
- No overall improvement in academic proficiency.

Findings at this site indicate that increasing revenue to sites without increasing mental health resources results in no change in the critical outcome measures of student success. These findings underscore the belief that no positive changes can occur in residential boarding schools unless the mental health needs of the students are addressed.

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BOARDING SCHOOL REFORM: 
EVALUATION OF THE THERAPEUTIC RESIDENTIAL MODEL PROGRAM 151

References


Footnote

1 CSAP = Center for Substance Abuse Prevention
SAMHSA = Substance Abuse and Mental Health Services Administration
PHS = Public Health Service
DHHS = Department of Health and Human Services