



Effectiveness and Successful Program Elements of SOAR's Afterschool Programs

Janet L. Johnson, President

EDSTAR, Inc.

Philip Van Vleck

EDSTAR, Inc.

Jennifer S. Peach

EDSTAR, Inc.

Rita G. Lewis

EDSTAR, Inc.

Raleigh, NC

rglewis@edstar.org



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Janet L. Johnson, Philip Van Vleck, Jennifer S. Peach and Rita G. Lewis
EDSTAR, Inc.

Abstract: Project SOAR provided after-school programs that afforded expanded learning opportunities to help students succeed in local public schools and to contribute to the general welfare of the community. Program components focused on building students' academic skills and positive attitudes, aided by teachers, mentors, parent education, and local agencies. Instructional programs were conducted to help reduce drug use and violence. Activities included academic assistance, technology training, mentoring, service learning projects, and education in life skills and the arts. Parent involvement was encouraged. Behavioral and academic outcomes—especially at the high school level—were analyzed to determine program effectiveness regarding academic achievement, dropout rates, and rates and frequency of suspensions. Successful program elements and strategies are noted.

Background

Factors such as performing below grade level (Tanner, Newbold, & Johnson, 2003), living in relative poverty (Munoz, Clavijo, & Koven, 1999), or not being conversant with the majority language (Egamba & Crawford, 2003) can create almost insurmountable barriers to academic success for students.

The high school completion rate fell in all but seven states during the 1990s, a period of educational reform focused on raising academic achievement (Barton, 2005). As states have implemented higher standards and accountability measures--in part due to *No Child Left Behind*--evidence of positive results emerges (Cronin, Kingsbury, McCall, & Bowe, 2005; Education Week, 1999). But a potential downside to the toughening of standards is that students who do not meet new benchmarks can be set up for failure or dropping out.

Rapidly growing school districts have their own challenges: crowded schools, demands that outstrip services, and strained budgets and community resources (Richard, 2000; Simmons & George, 2006). When the percentage of low-income and low-achieving students increases as well, schools are pressed to provide expanded learning opportunities for all students. Afterschool programs, while a viable option, may charge fees or require participants to provide their own transportation, effectively shutting out low-income students.

Project Description

Project SOAR provided out-of-school-time programs between 2000 and 2004 to five high schools, one middle school, and one elementary school in a large, rapidly growing North Carolina school district with a mushrooming ESL population. Funded by a 21st Century Community Learning Centers (21st CCLC) grant from the U.S. Department of Education, SOAR (Super Opportunities with Afterschool Resources) afforded expanded learning opportunities to help students succeed in school and to contribute to the welfare of the general community.

SOAR--designed to meet 21st CCLC priorities, data-identified needs of students and the community, and school district goals--had several objectives, among them:

- Reduce the percentage of students failing state-mandated academic achievement tests.
- Conduct instructional programs contributing to reduced drug use and violence.
- Conduct parent education programs.
- Conduct school and community programs fostering improved relations among school students and staff, parents, local citizens, agencies, and businesses.

Participants, Program Structure, Activities

While any student could participate in SOAR, staff actively recruited students who performed below grade level in core subjects. Ninth graders, who had the highest dropout rate in the district, were given special consideration. About a third of SOAR participants were low-income students who received free or reduced-price lunch. Staff sought to provide services to all students regardless of handicap; special education students represented 23% of participants. (see Table 1.)

Sites (one per school) conducted afterschool programs 3-5 days a week, 2-3.5 hours a day, and 84-151 days a calendar year. Free transportation was provided. Each site had a coordinator who consulted with the principal to hire staff and shape the site's focus, program structure, and specific components. The grant coordinator oversaw project implementation, which included training all staff in NovaNET, CRISS, service-learning (see below), goal-setting and reflection skills. Site coordinators reinforced program expectations with staff.

SOAR provided a common operational structure while permitting sites to tailor programs to unique needs and interests.

- One site, an identified ESL school, expanded its limited two-day-per-week afterschool program to a more comprehensive four-day program under SOAR, and provided literacy education for ESL students and their parents.
- Another site, a magnet school for telecommunications and technology education, provided laptop computers for students to check out for home use.
- Two high school sites offered evening and Saturday programming, and one conducted a summer program.

SOAR focused on building students' academic skills, sense of belonging and usefulness, and personal empowerment, all features of constructive settings for students (Miller, 2003). Program activities supported these aims and SOAR's defined objectives.

Academic support and enrichment:

- Regular day teachers from the school, assisted by community volunteers and student mentors, provided small group and individualized instruction in core academic subjects and computer technology, areas critical to North Carolina graduation requirements. Research has found one-on-one tutoring particularly effective in after school programs, and using day teachers helps ensure continuity with school curricula (ERIC Clearinghouse on Urban Education, 1998).
- All teachers received training in CRISS, an instruction method designed to teach students learning strategies (CRISS, 1995; Santa, 2004).
- Staff also provided academic support for Limited English Proficient students, and preparation for Scholastic Aptitude Tests (SATs).
- NovaNET (Pearson Digital Learning, Inc.), an online computer application for skill remediation and recovery of high school course credit, helped students build skills and stay on track for graduation.
- Sessions in the arts (visual, dance, music) provided enrichment opportunities for participants, important in igniting students' interests and developing personal goals (Birmingham, Pechman, Russell, & Mielke, 2005).

Life skills and health education: SOAR participants received training in life skills (understanding oneself and others, health and nutrition topics). Mentoring--which can benefit students behaviorally, academically, and socially (Brewster & Fager, 1998; Herrera, 1999)--was provided for at-risk students.

In an effort to reduce drug use and violence, which were the main causes for student suspensions in this district, several sites collaborated with a local drug awareness organization to conduct workshops on peer pressure (promising in reducing drug use, according to Hawkins, Catalano, & Miller, 1992) and conflict resolution (helpful in improving climate and increasing students' use of pro-social skills, according to Cochrane & Saroyan, 1997).

Program staff at one site collaborated with teachers to record discipline problems during and after school with grant-funded computer software, a practice that has shown promise in reducing unwanted behaviors (Levine-Brown, 1993). Sharing this information kept school and after school staff informed about students' behavior, providing everyone with the "whole story."

Family involvement: Recognizing the importance of involving families in program planning (ERIC Clearinghouse on Urban Education, 1998), staff sought out parents to serve on an advisory committee at each school. Parents also were involved in student-led conferences, field trips, and special events. SOAR offered parents education in parenting skills, literacy, technology and workplace skills, and health and social services. Extended hours at one high school's media center provided families access to resources twice a week.

Service-learning: Each SOAR site sought to strengthen ties between the schools and the community by including service-learning activities, which have been shown to foster students' engagement and academic skills, respect for diversity, sense of connection, and awareness of

community needs (Billig, 2002). Participants tutored elementary school children, taught senior citizens how to use the Internet, helped the community food bank, and built a playground for a community center, depending upon the needs of the site's community. Staff helped students reflect on their learning and how they were advancing their skills.

Outcomes

An outside evaluator assessed relevant behavioral and academic indicators to measure progress toward achieving objectives. Indicators were quantitative data available from the school system, which meant SOAR did not have to collect extra quantitative data beyond attendance. Of the 1,180 students (including 810 high school students) given the opportunity to participate in SOAR for the 2003-2004 school year, 331 (28%) declined. The students who elected not to participate (all but 2 of whom were high school students) were used as a control group. Outcomes for SOAR (treatment group) students were compared to outcomes for control group students to determine the effect of SOAR programs. For consistency, only the high school students were compared for treatment and control groups.

Treatment and control groups were demographically similar, as Table 1 illustrates. About half the students in each group had at least one academic risk factor (e.g., a failed course, failed standardized test, grade retention, or failed competency test).

Table 1
Comparison of Control and Treatment Group Populations

Population	Subpopulation	Control group		Treatment group	
		Count	Percent	Count	Percent
Total	--	329	100%	479	100%
At least one academic risk factor	No	162	49%	218	46%
	Yes	167	51%	261	55%
Gender	Female	128	39%	261	55%
	Male	201	61%	218	46%
Race	African American	180	55%	250	52%
	Caucasian	128	39%	171	36%
	Hispanic	9	3%	35	7%
	Other	12	4%	23	5%
Limited English Proficient	No	322	98%	431	90%
	Yes	7	2%	48	10%
Lunch	Free	90	27%	142	30%
	Reduced price	20	6%	18	4%
Special needs	No	222	67%	368	77%
	Yes	107	33%	111	23%

Academic Outcomes

More SOAR students took advanced level courses (e.g., Algebra I, Geometry, Biology, Physics) compared to control group students, and this comparison was statistically significant. Pass rates also tended to be higher for the treatment group compared to the control group for most end-of-course tests, although these differences were not statistically significant.

Analysis of competency tests (in computers, math, and reading) showed that the same percent of students (93%) took these tests from both the control and treatment groups. The rate at which students passed these tests was also comparable between the control group (86.2%) and treatment group (89.9%). However, significantly more students in the treatment group passed the district's computer performance test compared to the students in the control group (91.5% vs. 84.9%).

Data from the second year of the program showed that students who regularly attended SOAR (30 or more days) surpassed state-defined standards of academic growth on end-of-course tests. (North Carolina uses a growth model using students' past performance to predict their expected gains in various subjects; see <http://abcs.ncpublicschools.org/abcs/> for an explanation.) As a group, the regular attendees surpassed growth standards at a rate higher than any high school in the district.

SOAR students in Grades 4, 5, and 7 exceeded expected gains in reading achievement, but elementary and middle school students did not make expected gains in math at any grade level. Although these outcomes do not look positive, it is possible these students would have performed more poorly without SOAR. This pattern was the case at the high school level for some end-of-course tests that had control groups for comparison.

Behavioral Outcomes

Both the treatment and control groups had an increase in the number of students suspended, and the number of times they were suspended, in 2003-2004, compared with 2002-2003. However, statistically this increase was significantly higher for the control group. Thus, although suspension rates for the SOAR students increased, they were dramatically less than the increase in suspensions for the control group. (Many students in both groups were considered high risk; it may be that the longer high-risk students remain in school, the greater the chance they will get into trouble.)

Table 2

Number of Students Suspended in Control and Treatment Groups

Group	Total students	Suspensions during 2002-2003 school year		Suspensions during 2003-2004 school year	
		Count	Percent	Count	Percent
Control group	329	65	19.8%	92	28.0%
Treatment group	479	77	16.1%	92	19.2%

Other Outcomes

The treatment group had a statistically significant ($\alpha=0.05$) fewer percent of dropouts than the control group. Twelve (2.5%) of the SOAR students dropped out of high school compared to 21 (6.4%) of the control group students. Differences in the dropout rates between the treatment and control groups were most dramatic for at-risk, male students in Grades 9 and 12.

Three out of the seven sites advanced beyond academic support to address students' sense of belonging, usefulness, and personal empowerment. These sites enjoyed a stable leadership history, which provided the vision and direction needed to implement all the program components in ways appropriate to distinct student groups.

At one such site, in addition to numerous community service projects, students held fundraising events to finance their after school programs after the grant ended. Community support for this high school site, aided by a small-town setting and continuity in leadership, resulted in contributions from a wide range of businesses and organizations. Students reported feeling more connected to school, and part of a community, as they gained the support and guidance of adults.

Program Replication

SOAR staff noted several program components and strategies that supported successful implementation and project objectives:

- **Encourage diverse participation.** Offering services (e.g., SAT preparatory courses) to attract students with varied interests and needs resulted in students' willingness to participate regularly in SOAR and kept the program from being stigmatized. At the five high schools, SOAR attendance increased, on average, 248% over the course of the project, and served demographically varied groups of students.
- **Connect programs to the school day.** One site coordinator worked directly with classroom teachers to support students; another site ran a before-school component to prepare students for upcoming English Language Program concepts and vocabulary. Schools modified components to build transferable academic skills and strategies, and two high schools started freshman transition programs under SOAR.
- **Provide stable leadership where possible,** which helped SOAR "grow" involvement of faculty (to tutor and to refer students) and the larger community. College students, parents, high school students, youth development workers, and members of the business community volunteered their time to work with SOAR students.
- **Familiarize school staff and faculty as quickly as possible with program services.** The longer it took to create general awareness of a site's program, the more slowly the program grew. Once faculty understood SOAR services, they began to identify and refer students who could benefit from the program.
- **Use an online curriculum for course credit recovery.** One SOAR site coordinator remarked: "Students will tell you that they wouldn't be in school if they didn't have this opportunity. Oftentimes, failing a course is just overwhelming for some students. They feel like it's over for them, that they can't succeed if they re-take the course, and that, therefore, they won't graduate. NovaNET is an empowering tool."

- **Enlist support of school administrators.** Without exception, the more successful SOAR sites received strong backing from school administrators, who spread awareness of the project and allotted funds that helped pay for such extras as transportation after school or for field trips. Staff members who took over underdeveloped programs were quick to note lack of administrative support in previous years as a factor that inhibited growth.
- **Use ongoing evaluation to refine the program.** To determine if SOAR was having the desired results, staff and the program evaluator went beyond surveys and documenting attendance to defining a control group for comparing relevant academic and behavioral data. Documenting implementation in an ongoing, systematic way also helped staff spot and correct problems.

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