

**Putnam County Public School District
Safe and Drug Free Schools
2004 – 2005 Evaluation Report**

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INTRODUCTION

The general purpose of this evaluation report is to present findings from the overall implementation and immediate impact of the District's primary SDFS initiative, *Project ALERT*®. *Project ALERT* is the primary program employed by the district as part of its overall strategy for increasing knowledge and decrease use of alcohol, tobacco and other drugs.

The report will be organized around the following topics:

- General evaluation design.
- Goals of the evaluation.
- A brief description of the program evaluated.
- A review of the evaluation methods and procedures.
- The reporting of evaluation results.

GENERAL DESIGN AND GOALS OF THE EVALUATION

The overall design for the evaluation was based on an objective attainment model. The primary purpose of the evaluation was to determine if the project's goals and objectives were met. Specifically, based on the stated objectives of the *Project ALERT* program, the evaluation was designed to validate that the program participants successfully achieved those objectives at acceptable performance levels. In addition, the impact of the program was addressed by examining differences on post-program performance measures by participants and a baseline of similar non-program students. Finally, the evaluation provides an assessment of program fidelity to ensure that the program was effectively implemented.

Description of the Program

Project ALERT is a school-based drug prevention program for middle grade youth. The US Department of Education (USDOE) and Substance Abuse and Mental Health Service Administration (SAMHSA) have designated *Project ALERT* a model program.

The goals of *Project ALERT* are:

1. To prevent adolescents from beginning to use drugs, and to prevent those who have already experimented from becoming regular users.
2. To prevent or curb risk factors which have been demonstrated to predict drug use.

Project ALERT is designed to motivate adolescents against drug use and help them acquire the skills they need to resist pro-drug pressures. The program strives to help students' achieve the following goals:

- Understand the consequences of using drugs
- Develop reasons not to use drugs
- Establish school-wide norms against drug use
- Understand the benefits of being drug-free
- Recognize that most people don't use drugs
- Identify and counter pro-drug pressures
- Resist advertising appeals
- Resist internal and social pressures to use
- Work together
- Communicate with parents
- Support others in making non-use decisions
- Recognize alternatives to substance use
- Learn how to quit using

Target Population

The target population for the 2004-05 Putnam County SDFS Evaluation was students in grades 6 - 8 who participated in the program. Because, in part, of limited resources, not all of the district middle schools participated in the program. However, this situation allowed the school that did not receive the program to serve as a comparison group.

Rationale for Evaluating the Program (Program Evaluability)

Project *ALERT* was selected as the focus of the 2004 – 2005 evaluation because: 1) it has received some limited implemented in the district in the 2002 – 2003 school year, 2) both regular teachers and prevention specialist have been trained to implement the program, and 3) the program’s objectives are aligned with the needs identified in the SDFS Need Assessment Evaluation conducted in the 2002 – 2003 school year. An additional rationale for selecting Project *ALERT* as the focus for this year’s evaluation was the hope that providing greater information about the program’s effectiveness would encourage greater adoption of the program throughout the District.

DESCRIPTION OF THE EVALUATION PROCESS

The primary focus of the evaluation was in three areas. The first was to validate that the program was implemented effectively (program fidelity). The effectiveness of the program in meeting its objectives (program outcomes) was the second area address by the evaluation. Finally, the evaluation focused on determining if there was a significant change in students’ knowledge, attitudes and behaviors regarding substance use and violence (program impact). While not a formal goal of the evaluation, an intended outcome for the evaluation process was to recommend methods for program

improvement by identifying school and/or district policies, practices and procedures that either facilitate or serve as obstacles to the implementation of the program.

Selection of the Evaluation Participants

The selection of students to participate in the evaluation study was determined by their assignment, at the beginning of the school year, to a specific health/science teacher. Students' who have been assigned to a Project *ALERT* trained teacher received the program.

Evaluation Design

The design for the evaluation was a traditional non-equivalent control group, pretest versus posttest design. Students in two schools (i.e. Beasley and Jenkins middle schools) participated in the Project Alert program while students at Q.I. Roberts middle school served as a non-equivalent control group. Students in the program received the full curriculum as well as completing both a pretest and a posttest. Students in the non-program school completed the posttest.

Evaluation Questions

Outlined below are the specific questions that guided the evaluation.

Evaluation Question 1 - Program Implementation: Was the Project Alert Program

implemented effectively?

Evaluation Question 2 - Outcome: Do results from a comparison of pretest and posttest

indicate that students have achieved program goals?

Evaluation Question 3 – Program Impact: When compared to the control group, do

students who complete the program exhibit significant positive changes in knowledge, attitudes and behaviors regarding substance use and violence?

Data Collection Methods

Program implementation was assessed through the monitoring of programs using a program implementation protocol developed by the Project *ALERT*. The Safe and Drug Free Schools District Coordinator was trained in the use of the instruments and, throughout the school year, collected information regarding program implementation. Final results from the program monitoring activities were provided to the evaluation team.

Program outcome was assessed using a pre-test versus posttest design. The primary data collection instrument was a modified version of the pretest and posttest questionnaires provided by Project *ALERT* curriculum. As an “exemplary model program” these questionnaires have been previously validated for use with middle grades youth. The project evaluation team modified the instruments in the following ways:

1. Answer forms that could be machine scored were developed, and
2. The selection of specific pre and posttest items, from the project’s item bank, was made to align the items with the specific evaluation questions identified in this study.

All data was collected in the regular classroom by the teacher in accordance with the Project *ALERT* curriculum and teacher’s guide.

Procedures for Analysis of Data

A comparison of pretest versus posttest results for program participants was conducted in order to assess changes in treatment group student knowledge, attitudes and behaviors. In addition, an analysis of posttest results between students who participated in the program (i.e., treatment group) and non-program (i.e., control group) students was

conducted to validate that changes in students pretest versus posttest response were attributable to program effect.

In addition to descriptive statistics a Chi-square analysis was conducted to determine if there was a significant difference in pretest versus posttest within the treatment group and between posttest measures for the treatment and control groups. All statistical tests were conducted at the $p > .05$ level of significance.

Evaluation Limitations

Since the evaluation employs a convenience sample, the primary limitation of evaluation was the lack of a random sampling and the resulting threats to bias and generalizability. A second limitation was that of teacher bias. Since teachers “volunteered” to provide the program and there are few trained teachers, the possibility of teacher bias was high.

EVALUATION RESULTS

Presented below is a detailed summary and analysis of the data collected in response to each evaluation question.

Evaluation Question 1 - Program Implementation

Was the Project Alert Program implemented effectively? Outlined in Table 1 is a list of the participating schools and the number of student participants for each group. The population for the evaluation consisted of a convenience sample of 638 students. Five hundred and twenty one students from Beasley and Jenkins middle schools participated in the Project Alert program. The control group (i.e. comparison group) consisted of 117 students at Q.I. Roberts Middle School. All of the participating students were enrolled in health and/or science classes at the 6th, 7th and 8th grade levels.

Table 1. Participants by School and Group

	School	Count	Group		Total
			Non-Program (Control)	Program (Treatment)	
	Beasley MS	Count	0	184	184
	Jenkins MS	Count	0	337	337
	Q.I. Roberts MS	Count	117	0	117
Total		Count	117	521	638
		%	18.3%	81.7%	100.0%

As shown in Table 2, the sample of program participants was reflective of the overall demographics for the Putnam County School District and was adequate to provide valid and reliable evaluation results.

Table 2. Gender, Grade and Race of Participants

	Gender		Grade			Race				
	Male	Female	6 th	7 th	8 th	White	Black	Hispanic	Multi-racial	Other
Pretest	141	135	176	89	7	186	86	5	14	5
Posttest	128	117	149	83	10	147	71	6	12	8

A majority of the participants were in 6th and 7th grades and listed their race as either white or black. The population was almost evenly distributed between males and females.

Information from the pre and posttest, program monitoring records and teacher lesson plans indicated that the program was effectively implemented as planned.

Evaluation Question 2 - Outcomes

Do results from a comparison of pretest and posttest indicate that students have achieved program goals? The Project Alert curriculum provides student examinations to be used as pretest and posttest. The test consists of 21 items. With the exception of item 5, which is a multiple response item, all the items are “true/false” questions. Table 3 provides a comparison of pretest and posttest scores for students at Jenkins and Beasley middle schools who participated in the program.

Small, but important gains in test scores were found for all test items except items 7, 12, and 21. The lack of gain for item 7 is so small that it may be attributed to testing error. However, the results for items 12 and 21 may indicate some real confusion of the part of students about Florida law pertaining to the purchasing of cigarettes and also about the “natural” effect of marijuana.

A Chi-Square analysis was conducted to determine if the difference in pretest and posttest score was statistically significant. Significant gains were found for items 3, 9, 10, 12, 13, 14, 16, and 18 ($p < .05$).

Item	Test	Percent		% Gain
		True	False	
1. Some people become dependent on marijuana or alcohol as a way to feel good or to escape their problems.	Pretest	93.8%	6.2%	
	Posttest	97.5%	2.5%	3.94
2. Tobacco is a highly addictive drug, which means the body becomes physically dependent on it very quickly.	Pretest	89.1%	10.9%	
	Posttest	92.5%	7.5%	3.81
3. It's more dangerous to drive when you're drunk than when you are high on drugs.	Pretest	50.0%	50.0%	
	Posttest	25.1%	74.9%	49.8*
4. Teenagers who smoke often have "smoker's breath" and yellow teeth.	Pretest	89.6%	10.4%	
	Posttest	91.3%	8.7%	1.90
6. People who smoke don't become addicted to cigarettes until several years after they start smoking.	Pretest	12.7%	87.3%	
	Posttest	7.8%	92.2%	5.61

Item	Test	Percent		
		True	False	% Gain
7. Loosing control when you are drunk or high means you may do something you wouldn't do if you were not high.	Pretest	90.9%	9.1%	
	Posttest	89.8%	10.2%	No Gain
8. Of everyone who has lung cancer, over 85% got it from smoking.	Pretest	91.7%	8.3%	
	Posttest	94.3%	5.7%	2.83
9. Alcohol can be deadly. If you drink enough it can kill you.	Pretest	83.5%	16.5%	
	Posttest	95.1%	4.9%	13.89*
10. Smoking just one cigarette a week can cause coughing, wheezing, and excessive phlegm production.	Pretest	69.8%	30.2%	
	Posttest	82.8%	17.2%	18.62*
11. Almost any drug, if used for a long time, causes physical or mental dependency.	Pretest	91.3%	8.7%	
	Posttest	94.3%	5.7%	3.28
12. It is legal to sell cigarettes to any teenager.	Pretest	35.9%	64.1%	
	Posttest	26.9%	73.1%	No Gain
13. Marijuana damages your lungs.	Pretest	81.0%	19.0%	
	Posttest	95.9%	4.1%	18.39*
14. Alcohol is responsible for the deaths of more teenagers than any other substance.	Pretest	61.5%	38.5%	
	Posttest	72.3%	27.7%	17.56*
15. Smoking relaxes you even when you've never tried cigarettes before.	Pretest	31.0%	69.0%	
	Posttest	37.8%	62.2%	21.93*
16. Having a bad "high" on marijuana means you might feel anxious, scared, uptight, or even terrified.	Pretest	74.3%	25.7%	
	Posttest	90.5%	9.5%	21.80*
17. Each year nearly 20 million people try to quit smoking in the United States, but only about 3 percent have long-term success.	Pretest	86.5%	13.5%	
	Posttest	90.1%	9.9%	4.16
18. My parents talk to me about tobacco, alcohol, and other drugs.	Pretest	72.1%	27.9%	
	Posttest	84.8%	15.2%	17.61*
19. Marijuana smoke contains some of the same carcinogens and toxic substances as tobacco, sometimes in higher concentrations.	Pretest	76.1%	23.9%	
	Posttest	79.9%	20.1%	4.99
20. The dangers of smoking marijuana are much more serious than they were in the 1960's especially since the strength of the marijuana now available has increased more than 275 percent.	Pretest	85.1%	14.9%	
	Posttest	87.2%	12.8%	2.46
21. Because marijuana is a "natural" substance, it is a safe alternative to drugs.	Pretest	15.6%	84.4%	
	Posttest	19.6%	80.4%	No Gain

Note: Item 5 was a multiple response item, therefore, mean comparisons could not be made.
*Statistically significant gain at the $p < .05$ level of confidence.

Overall, gains were made on 85.7% of the test items and statistically significant gains were found for 44% of the items that had gains between pretest and posttest. These

data indicate that the Project Alert program did achieve its goals of changing students' knowledge and attitudes about alcohol, tobacco and other drugs.

Evaluation Question 3 – Program Impact

When compared to control group, do students who complete the program exhibit significant positive changes in knowledge, attitudes and behaviors regarding substance use and violence? Table 12 provides a report of the posttest comparison between the control group, students at Q.I. Roberts who did not receive the program, and students at Beasley and Jenkins and who did receive the program. Except for items 6 and 16, students in the program group always had a higher correct score on each posttest item. As discussed earlier, these reversed scores may be a factor of testing error (i.e. poor test questions) than actual differences in group learning.

Table 4. Comparing Program (Treatment) and Non-Program (Control) Group Posttest Results				
Test Item	Group	Percent		% Difference
		True	False	
1. Some people become dependent on marijuana or alcohol as a way to feel good or to escape their problems.	Control	91.5%	8.5%	
	Treatment	97.5%	2.5%	+6.0*
2. Tobacco is a highly addictive drug, which means the body becomes physically dependent on it very quickly.	Control	89.7%	10.3%	
	Treatment	92.5%	7.5%	+2.8
3. It's more dangerous to drive when you're drunk than when you are high on drugs.	Control	50.4%	49.6%	
	Treatment	25.1%	74.9%	+25.3*
4. Teenagers who smoke often have "smoker's breath" and yellow teeth.	Control	80.3%	19.7%	
	Treatment	91.3%	8.7%	+11.0*
6. People who smoke don't become addicted to cigarettes until several years after they start smoking.	Control	9.6%	90.4%	
	Treatment	7.8%	92.2%	+1.8

Item	Group	Percent		% Difference
		True	False	
7. Loosing control when you are drunk or high means you may do something you wouldn't do if you were not high.	Control	91.4%	8.6%	
	Treatment	89.8%	10.2%	(-1.6)
8. Of everyone who has lung cancer, over 85% got it from smoking.	Control	86.2%	13.8%	
	Treatment	94.3%	5.7%	+8.1*
9. Alcohol can be deadly. If you drink enough it can kill you.	Control	86.3%	13.7%	
	Treatment	95.1%	4.9%	+8.8*
10. Smoking just one cigarette a week can cause coughing, wheezing, and excessive phlegm production.	Control	69.8%	30.2%	
	Treatment	82.8%	17.2%	+13.0*
11. Almost any drug, if used for a long time, causes physical or mental dependency.	Control	84.3%	15.7%	
	Treatment	94.3%	5.7%	+10.0*
12. It is legal to sell cigarettes to any teenager.	Control	29.1%	70.9%	
	Treatment	26.9%	73.1%	+2.2
13. Marijuana damages your lungs.	Control	77.4%	22.6%	
	Treatment	95.9%	4.1%	+18.5*
14. Alcohol is responsible for the deaths of more teenagers than any other substance.	Control	59.5%	40.5%	
	Treatment	72.3%	27.7%	+12.8*
15. Smoking relaxes you even when you've never tried cigarettes before.	Control	35.7%	64.3%	
	Treatment	37.8%	62.2%	(-2.1)
16. Having a bad "high" on marijuana means you might feel anxious, scared, uptight, or even terrified.	Control	71.6%	28.4%	
	Treatment	90.5%	9.5%	+18.9*
17. Each year nearly 20 million people try to quit smoking in the United States, but only about 3 percent have long-term success.	Control	80.3%	19.7%	
	Treatment	90.1%	9.9%	+9.8*
18. My parents talk to me about tobacco, alcohol, and other drugs.	Control	74.1%	25.9%	
	Treatment	84.8%	15.2%	+10.7*
19. Marijuana smoke contains some of the same carcinogens and toxic substances as tobacco, sometimes in higher concentrations.	Control	74.4%	25.6%	
	Treatment	79.9%	20.1%	+5.5
20. The dangers of smoking marijuana are much more serious than they were in the 1960's especially since the strength of the marijuana now available has increased more than 275 percent.	Control	80.3%	19.7%	
	Treatment	87.2%	12.8%	+6.9
21. Because marijuana is a "natural" substance, it is a safe alternative to drugs.	Control	28.2%	71.8%	
	Treatment	19.6%	80.4%	+8.6
Note: Item 5 was a multiple response item, therefore, mean comparisons could not be made.*Statistically significant difference at the $p < .05$ level of confidence.				

As the between group comparison indicates, students who participated in the program had statistically significant ($p < .05$) higher posttest scores than control group on

12 of the 20 test questions. These results lead us to conclude that participation in the program exhibit significant positive changes in knowledge, attitudes and reported behaviors regarding substance use and violence.

SUMMARY AND RECOMMENDATIONS

Program information and test data indicates that the Project Alert program had a significant, positive impact on the middle school students who participated in the program. We recommend that the district maintain and expand the program, or other suitable curricula, to other middle school students and groups.

REFERENCES

Posavac, E. and Carey, R. (2004). Program evaluation: Methods and case studies (6th Ed.), Upper Saddle River, NJ: Prentice Hall.