Formative Evaluation Report – Year Two: Grant to Reduce Alcohol Abuse

OVERVIEW - School Year 2003 – 2004:

The current report for the *Grant to Reduce Alcohol Abuse Project (GRAAP)* is the second and *final* formative evaluation for the identified program. The first report included a statement of program implementation strategy and reviewed the adequacy of the research design and methodology. The final summative evaluation, due at the conclusion of SY 2005, will evaluate the impact of the goals and objectives of the program.

The G*RAAP* was funded and initiated late in school year (SY) 2003. Therefore, the balance of SY 2003 (and the summer) was utilized to put the Action Plan in place at all Middle and High Schools in the School District of Palm Beach County, Florida. The GRAAP project has the potential to impact 28 Middle Schools with 40,704 students and 23 High Schools with 47,400 students (Department of Research and Development, School District of Palm Beach County, FL., SY 2004). The *GRAAP* has been in place for one complete school year (SY 2003 – 2004).

The intent of the current formative evaluation is to provide feedback on those identified Performance Indicators, which need to be in place in order to evaluate program effectiveness at the conclusion of SY 2005. Therefore, as it relates to the final evaluation, the current report proposes to: (1) examine program implementation of the Action Plan during SY 2004. (2) Examine the on going functioning of Performance Indicators, which are critical to evaluating outcome. (3) Provide a pilot study of the FACEIT program, which includes N=100 surveys: n=50 students surveys and n=50 parent surveys.

A thorough examination of the *actual number* of schools that complied with program implementation, identified in the Action Plan (see goals and objectives in the grant), has been provided in *Executive Summary* of the current report. However, the process and collection of data through Performance Indicators are reviewed here, as they pertain to outcome measures and the final evaluation.

Overview of GRAAP Goals:

The goals of the evaluation have been identified in the first year report and are broadly defined as: (1) To significantly reduce student use and abuse of alcohol. (2) To implement and/or improve: student support programs, teacher beliefs in student efficacy, improve pro-social behaviors/academic achievement, and reduce Alcohol Tobacco and

Other Drug (ATOD) use. (3) To provide families with educational programming related to reducing student alcohol use, thereby strengthening student achievement and pro-social behavior.

Research Design:

The current study is multi-method, as both qualitative and quantitative research methodologies are used. However, the study design is primarily quantitative. The design is quasi-experimental and uses a purposive sample (teacher surveys). Data analysis uses descriptive statistics for analyzing the identified three large data sources. However, a small sub-sample of students will participate in an experimental (random) design study using pretest and posttest survey research. The design of the purposed study follows a similar rationale and justification for most on site school based research methods including: administering pretest and posttest surveys, and collection of school records.

Methodology:

Broadly, the GRAAP addresses the problem of student use and abuse of alcohol, other drugs and negative social behavior. The current study proposes to obtain data from multiple sources in order to evaluate and compare student behavior from three levels: (1) District, (2) School, and (3) Individual.

(1) District Level: Three large district wide descriptive and survey data sources will assist in evaluating overall student behavior: The *State of Florida Youth Substance Abuse Survey (FYSAS), The School Environmental Safety Incident Report (SESIR)* and *Florida Comprehensive Assessment Test (FCAT).* The identified reports will provide for end of school year comparisons. However, SY 2005 *FCAT* and *FYSAS* scores will not be available by June 30, 2005, which is the deadline for submission of the final evaluation. For the purpose of year-end comparisons, the research methods call for the identified reports to provide comparisons on student alcohol and drug use trends, academic achievement scores, and number of negative behavior incidents. However, as previously stated, *FYSAS* and *FCAT* scores will not be available, therefore, SY 2003 baseline data will be compared to SY 2004 data for the identified two reports. The Department of Safe Schools will have preliminary SY 2005 SESIR data in mid June, which will allow for a comparison to be made to SY 2005 negative behavior incidents (referrals).

(2) School level: Student data is collected from both qualitative and quantitative reports and include: questionnaire surveys, school source logs and student empowerment group logs. Two teacher surveys will be administered during SY 2004 – 05. The first questionnaire will be administered to a sub-set of teachers pretest and posttest. The survey queries teachers on perception of student efficacy with a focus on: academics, risky behavior and pro-social skills. The first pretest survey will be administered late SY 2004 and posttest will be administered in the spring of SY 2005. The second teacher questionnaire survey will be administered *posttest* only to a sub-set of teachers who teach the model programs, *Too Good for Drugs* and *Project Northland.* The second survey was developed to evaluate program implementation and will be administered in late spring of SY 2005.

(3) Individual Level: Through SSAAY student records will be collected, matched and compared (see Executive Summary). Two data sets will be collected at the student level. The first data set will make up questionnaire survey results, pretest and posttest, from both parents and students who participated in the FACEIT program. The second data set will be generated through SSAASY. The second data set is made up of randomly selected and matched student groups: (1) those students who have participated in FACEIT, and (2) those students who have not participated. The two student groups will be compared on academics, referrals and recidivism of AOD discipline referrals.

Data Analysis:

The software program *Statistical Package for Social Science (SPSS)* will manage the large amount of student records and various data. All analysis of data will be conducted through SPSS. The data include but is not limited to: academic records, attendance, discipline referrals, demographics, student surveys, parent surveys and teacher surveys. The software program SSAASY will be utilized to hold all school and student records and interface with *SPSS*. The software program *Atlas.ti* will be used to manage and analyze the large amount of qualitative data.

(1) Program Implementation:

As previously mentioned, the Action Plan in GRAAP calls for improvement of teacher efficacy in issues of student empowerment. The outcome measure in the grant calls for a 10% improvement in teacher efficaciousness, however, the generally accepted

statistical significance of $p<.05$ will be applied in analyzing any differences between pretest and posttest scores (first survey). The Action Plan for improving teacher efficacy includes staff development and training, which was in place at the conclusion of SY 2004, and is fully explained in the Executive Summary section of this report. The pretest and posttest survey will be developed with assistance from the staff of the Department of Safe Schools who has developed a highly successful Efficacy program (at select schools in the district) with assistance from the Efficacy Institute.

The Action Plan (see pages 21 – 23 of the grant) calls for the implementation of two Model Programs: *Too Good for Drugs* and *Project Northland*. In order to evaluate the level of program implementation, *An Approach to Assessing the Fidelity of Prevention Programs* (second survey), developed by Dr. Wayne Harding at the Education Development Center, Inc., is being utilized. All program facilitators are being asked to complete the fidelity tool. The tool will assist in providing more accurate outcome measures, which impact the final evaluation and include: (1) Programmatic changes, which inevitably occur at schools, i.e., program fidelity and adaptation. (2) Provide a highly accurate number of student participation in the identified programs across schools. (3) Demonstrate the differences of program effectiveness among students and across grade levels and demographics. (4) Provide for specific programmatic data for replication of the program and/or study.

The GRAAP Action Plan calls for implementing and/or improving the CORE Team, a student assistance program, across all middle and high schools by the conclusion of SY 2005. A more thorough examination of the implementation of CORE Teams at schools across the district can be found in the Executive Summary of this report. In order to evaluate the impact of CORE Teams the qualitative report includes: CORE Team logs, student empowerment group logs and Safe School Ambassador logs (a youth development and violence prevention program).

(2) Performance Indicators:

FYSAS, FCAT and *SESIR* are highly reliable data sources and are generated on a yearly basis. However, as previously mentioned, the two identified data sources will not have been published by the study deadline date (see Methodology). Preliminary *SESIR* SY 2005 data can be generated in mid June, by the school district, prior to the study

deadline date, therefore, incidents of ATOD use and incidents of violent behavior can be compared to baseline data. CORE Team implementation is fully described in the Executive Summary of this document. CORE Team members have been collecting data through activity logs and case plans. The Listening Technology Voice Server (LTVS) has not been utilized to this date. However, the Group Interactive Feedback Technology (GIFT) was tested during SY 2005, an unknown number of students were contacted and asked five questions regarding their use of alcohol (see Appendix). The results have not been analyzed to this date.

The Teacher Efficacy survey is currently being developed with assistance from the Department of Safe School's on-going efficacy program (see Program Implementation). With assistance from *Too Good for Drugs,* the *FACEIT* Program has developed a student survey, *FACEIT Student Survey*, and a parent survey, *FACEIT Parent Survey*. Moreover, a Teacher Evaluation of Program Implementation survey questionnaire was developed to gauge treatment fidelity and quality of implementation. A total of n=24 facilitators completed the pilot study of the identified survey, which will be analyzed during the summer of SY 2004.

FACEIT Program Pilot Study:

Overview:

The *FACEIT* Program began 1/31/04 and offered programming at five (5) sites with two (2) facilitators. As of 5/14/04, the *FACEIT* Program was offered at (7) seven sites with (24) twenty-four facilitators. As of 5/14/04, 242 students and one or both parents and/or family members had completed the program. Student data was collected across participating GRAAP schools to review AOD recidivism from 1/31/04 to 5/14/04. Of the students who did not attend the FACEIT Program, three (3) students had repeat AOD discipline referrals. One student elected to enter the FACEIT Program on their second AOD referral. Of those students who completed the FACEIT Program zero (0) had repeat AOD referrals.

In order to examine the impact the *FACEIT* program on students and their families and to test the questionnaire survey, a pilot study was conducted on the program. There were two sets of surveys, one for students and one for parents. The first set of data examines the student questionnaire survey results followed by the parent results.

The Sample: The pilot study sample is purposive and a one group only pretest - posttest design. Beginning in mid February, students and their parents were asked to complete a Likert scale questionnaire survey, prior to beginning the program. The posttest was given either pre- or post survey and/or gave questionable responses. Two groups of students participated in the study: (1) mandatory – the student was court ordered to attend, and (2) choice – the student's school offered the program in lieu of suspension or other action. In the current study, 21 students were mandatory and 29

Student Demographics

Academics	A – B	B – C	C – D	Unknown
Male	9	15	9	4
Female	4	6	1	2

were choice. Mandatory students were required to take eight (8) classes; choice students were required to take three (3) classes. 52% of male participants took (3) classes and 62% of females took (3)

Grade Level	7th	8th	9th	10th	11th	12th	Out
Male	5	3	14	5	7	2	1
Female	1	2	4	2	2	2	0

Participants	Total	Black	White	Hispanic	Other
Males	37	2	25	9	1
Females	13	0	7	5	1

classes. As shown, 74% of the participants were male. Nearly 73% of male participants had a B – C average, or above. The female numbers are too small to draw conclusions, however, the trend is the same as the male students, i.e., their grades are also B – C and above. Both male and female participants are predominately White; male 68% and female 54%. 76% of the male and 69% of the female participants do not qualify for free lunch, an indication of socio-economic status (SES). That is, the participants are primarily middle to upper SES. The highest numbers of participants were in the 9th grade, this is true of both male and female students.

There were sixteen (16) male parent participants and thirty-four (34) female parent participants, or 68% of the parent participants were female. 70% of parents participated with their son and 28% participated with their daughter.

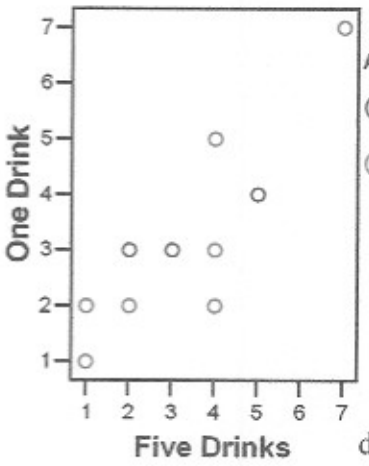
Participant - Age	26-23	34-41	42-49	50-	Unknown
Male Parent	0	6	8	1	1
Female Parent	1	12	14	6	1

Shown in the table to the left are the parent age categories.

Results:

The pilot study has small numbers, which are unreliable for drawing statistical conclusions. Therefore, the results are provided with caution. The pilot study was conducted in order to examine trends in the data and test the questionnaire surveys.

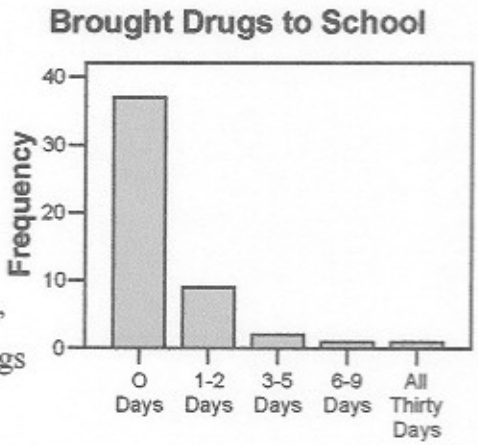
A paired sample *t*-test indicated no significant difference on pretest and posttest responses on question one, which asked respondents: *In the past 30 days, on how many days did you have at least one drink of alcohol?* (*t*-test=1.0, N=50, *p*=.32). However, when data was disaggregated by *mandatory* or *choice* (attended 3 or 8 sessions), a significant difference was found among students who attended 3 classes (*t*-test=3.36, n=25, p<.003), but not 8 classes (*t*-test= -.72, n=21, p=.47) in fact the mean was slightly higher on posttest scores. Similar results were found on the question: *During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row?* (*t*-test =1.0, N=49, *p*=.28). Disaggregated data: 3 classes attended was not statistically significant from pretest to posttest, however, the findings were marginal and may demonstrate a trend (*t*-test=1.8, n=26, p<.08) and 8 classes attended (*t*-test=.22, n=21, p=.82).



A strong positive relationship was found between those students who had one drink of alcohol in thirty days and those students who binge drank alcohol (*r* =.873, *p*<.000).

A statistically significant difference was not found between pre- and post- scores for all students (*t*-test=1.5, N=49, p=.12) on the question: *In the past thirty days, how many days did you use drugs*? However, a statistically significant difference was found on disaggregated data for students who attended 3 classes (*t*-test=2.7, n=26, p<.01), but not for those students who attended 8 classes (*t*-test=.20, n=21, p=.83).

Students tended to not bring alcohol to school. This finding is true of both pretest and



Most students did not bring drugs to school (N=50), however, in a thirty day period, nine students brought drugs to school 1 –2 days, two students brought drugs to school 3 – 5 days, one student 6 – 9 days and one student brought drugs to school all thirty days on pretest scores. Those numbers dropped on posttest scores: five students brought drugs 1 –2 days, one student 3 – 5 days, and one students brought drugs to school all thirty days.

The next three tables exam questions six, seven and eight on the student survey.

Using alcohol and other drugs is safe for me as long as I use it in moderation.

	Frequency Pretest	Percent Pretest	Frequency Posttest	Percent Posttest	Difference
Disagree	29	58%	29	58%	-
Somewhat Disagree	8	16%	10	20%	4%
Somewhat Agree	9	18%	5	10%	8%
Agree	4	8%	4	8%	-

On pretest scores the large majority of respondents felt that alcohol and drugs were not safe to use in moderation. An 8% improvement was found in student perception that AOD use *was not safe* even in moderation on posttest scores.

There are clear rules in my home stating that I am not allowed to use alcohol and other drugs.

	Frequency Pretest	Percent Pretest	Frequency Posttest	Percent Posttest	Difference
Disagree	1	2%	2	4%	2%
Somewhat Disagree	1	2%	1	2%	-
Somewhat Agree	7	14%	10	20%	6%
Agree	40	80%	36	72%	8%

The majority of student responders felt there where rules at home that clearly stated they were not allowed to drink alcohol or use drugs. These findings are highly consistent with parent responses: on pretest 94% of parents and on posttest 92%, felt there were clear rules at home against drug use.

I feel comfortable talking with my parents or caregivers about alcohol and other drugs.

	Frequency Pretest	Percent Pretest	Frequency Posttest	Percent Posttest	Difference
Disagree	11	22%	7	14%	8%
Somewhat Disagree	6	12%	6	12%	-
Somewhat Agree	14	28%	12	24%	4%
Agree	19	38%	23	46%	8%

A small improvement was found on student perception of feeling comfortable talking to their parents about drugs and alcohol. On pretest scores, 66% (70% posttest) student responders felt comfortable talking to their parents about ATOD. A significantly higher percentage of parents perceived they could comfortably talk to their child about ATOD use: 94% on pretest scores and 90% on posttest scores.

Discussion:

As mentioned previously, the current study sample is small and findings and

The large majority of student respondents were white males who are mid to high socio-economic status. It is not clear why the large populations of Black students in Palm Beach County are not equally represented in the sample. There could be multiple reasons for small numbers of Black students participating in the program. The majority of respondents describe themselves as having B to C or higher school grades.

A paired sample *t*-test did not find a statistically significant difference on pretest and posttest responses on questions of alcohol and drug use, when the total population, N=50, was tested. However, when the sample was disaggregated by classes attended, a statistically significant difference was found between pretest and posttest scores on students who attended three classes, but not on students who attended eight classes. This finding is counter intuitive, but it may be that students who are court ordered into the program are more heavily involved in AOD activity and use. That is, by the time a student is involved with the courts he/she may have a more serious AOD addiction.

A strong correlation ($p<.000$) was found between student respondents having one drink of alcohol in a thirty day period and binge drinking. That is, those respondents who had one, or more, alcohol drinks in a thirty-day period were highly likely to binge drink.

The respondents did not tend to bring alcohol to school. However, they were more likely to bring drugs to school. Pretest scores showed that 74% of respondents did not bring drugs to school, therefore, 26% did bring drugs to school. There was a significant improvement on posttest scores, 84% of students did not bring drugs to school and 14% did, yielding a drop of 12%.

Parent Survey:

The parent survey asked ten (10) questions:

The first three questions focused on the physical and emotional effects of ATOD use on adolescents. On pretest scores, parents overwhelmingly agreed they understood the physical and emotional effects on their child of, (1) alcohol use, 94% (94% posttest score), (2) marijuana use, 96% (94% posttest score) and, (3) tobacco use 90% (84%

posttest score). The largest discrepancy was found in parent belief on knowledge of tobacco; 6% fewer parents felt they understood the physical and emotional effects of AOD on posttest scores.

The next three questions focused on parent understanding of school consequences when a student was caught with drugs or alcohol. Parents overwhelmingly agreed they knew what the consequences were of (1) alcohol at school, 94% (88% on posttest score), (2) marijuana at school, 88% (94% posttest score) and, (3) tobacco at school, 88% (90% posttest score).

The seventh question queries parent belief on drug use as being OK as long as their child is not caught. On pretest scores 6% (14% on posttest scores) of parents agreed ATOD use is OK as long as their child does not get caught (see recommendation as it is the researcher belief the higher posttest scores represents a problem in survey construction).

The final three questions on the parent survey query parent effectiveness. Question eight asks if there are clear rules at home against ATOD use. On pretest scores 74% (84% posttest score) agreed there were clear rules at home on ATOD use. Question nine asks parents if they can comfortably talk with their child about ATOD use. On pretest scores 94% (90% posttest scores). Question number ten asks parents if they believe they parent effectively. On pretest scores 84% (80% posttest scores) felt they were effective parents.

Recommendations:

(1) Explore the issue that there is an under representation of Black students participating in the FACEIT Program.

(2) The 9th grade appears to be a "hot spot" for student referrals of ATOD use. Run a query on student records to examine if there are a higher number of students with ATOD referrals in the 9th grade, across all middle and high schools; focus programming appropriately.

(3) The parents pretest scores on knowledge on all issues of ATOD use were extremely high; this phenomenon raises a red flag. However, the reason behind parents believing they have knowledge is not clear. Staff may want to incorporate a question and answer