Drug Abuse Resistance Education: 
An Assessment of the 1987-88 Kentucky State Police DARE Program

Number of Students By County 
In the 1987–88 DARE Program

- Exit Grades
- All Grades

Daviess  Boyd  Rowan  Scott

County

124558
Drug Abuse Resistance Education:

An Assessment of the 1987-88 Kentucky State Police DARE Program

John R. Faine
Department of Sociology, Anthropology and Social Work

and

Edward Bohlander
Department of Sociology, Anthropology and Social Work

July 1, 1988
Acknowledgements. Funds for the 1987-88 DARE program were made possible through a matching funds grant from the Department of Justice to the Kentucky State Police. Special thanks are extended to the DARE coordinator, Trooper Jimmy Richerson, for his patience and guidance throughout the research project. Mr. Joe Overby, Daviess County Public Schools, Drs. Frank Yeager and Duane Miller, Owensboro Public Schools, Sister Amelia Stenger, Owensboro Catholic Schools, Dr. John Brock and Mrs. Kay Freeland, Rowan County Schools, and Dr. Joel Brown, Bowling Green Public Schools, were instrumental in coordinating the collection of data within their respective school systems. A special note of thanks is also extended to the principals and teachers in the 16 schools selected for inclusion in the School Experiment portion of the study. All of the schools were especially cooperative in helping to meet our data collection needs. Special gratitude is extended to the many principals and teachers elsewhere in the DARE program throughout the commonwealth. We asked school officials we had never met to help in the evaluation phase, and they gave willingly. Finally, special thanks and recognition goes to the many parents and youth in the study. We asked parents to share their personal attitudes, and they responded immediately. We asked our fifth grade subjects to trust us with their personal viewpoints. They cooperated so willingly that any measurement error should be attributed to the instruments we have used rather than to sentiments of the subjects.
Table of Contents

List of Tables........................................................................... v
List of Figures........................................................................... vi
Highlights.................................................................................. 1
Introduction .............................................................................. 5
The Research Design ................................................................. 7
The School Experiment............................................................... 11
Results: The School Experiment.............................................. 15
The Teacher/Principal Survey.................................................. 35
The Parent Survey................................................................... 41

Appendix A. Written Teacher/Principal Comments.................... 43
Appendix B. Written Parent Comments...................................... 53
Appendix C. Supplemental Statistical Tables............................... 59
Appendix D. Survey Instruments............................................... 67
List of Tables

Table 1. Self-Esteem Items By Group and Time (All Schools). ........................................16

Table 2. Changes in Self-Esteem Between Pre- and Posttest Within Treatments by Type of School. ............................17

Table 3. ANCOVA of Change in Self-Esteem By Treatment Group and Type of School. .............................................18

Table 4. Perceived External Control By Group and Time (All Schools). ............................19

Table 5. Change in Perceived External Control Between Pre- and Posttest Within Treatments by Type of School. ..................20

Table 6. ANCOVA of Change in Perceived External Control By Treatment Group and Type of School. ..................21

Table 7. Attitude Toward the Police by Group and Time (All Schools). ............................22

Table 8. Change in Attitude Toward the Police Between Pre- and Posttest Within Treatments by Type of School. ..................23

Table 9. ANCOVA of Change in Attitude Toward the Police By Treatment Group and Type of School. ..................24

Table 10. Knowledge of Drugs by Group and Time (All Schools). ........................................25

Table 11. Change in Knowledge of Drugs Between Pre- and Posttest Within Treatments by Type of School. ..................26

Table 12. ANCOVA of Change in Knowledge of Drugs By Treatment Group and Type of School. .................................27
Table 13. Peer Resistance by Group and Time
(All Schools) ............................................. 28

Table 14. Change in Peer Resistance
Between Pre- and Posttest Within
Treatments by Type of School .......... 29

Table 15. ANCOVA of Change in Peer
Resistance By Treatment Group
and Type of School ......................... 30

Table 16. Attitude Toward Drugs by Group
and Time (All Schools) ................. 31

Table 17. Change in Attitude Toward Drugs
Between Pre- and Posttest Within
Treatments by Type of School .......... 33

Table 18. ANCOVA of Change in Attitude
Toward Drugs By Treatment Group
and Type of School ......................... 34

Table C1. Percentage Distribution of
Responses in the Teacher/Principal
Evaluation. (N=470) ......................... 61

Table C2. Percentage Distribution of
Responses in the Parental Survey
By Group .............................................. 64

Table C3. Parental Responses to "Who is the
Best Qualified to Conduct a Drug
Education Program?" ................. 65

List of Figures

Figure 1. "Do You Know Kids Who Smoke
Marijuana?" By Type of School and
Age Group of User ......................... 10

Figure 2. Teacher Evaluation of the Effect of
DARE on Students ......................... 36

Figure 3. Teacher Evaluation of DARE on the
School Environment ..................... 38

Figure 4. Teacher Opinions of DARE ... 39

Figure 5. Parent Ratings of Change of
Childrens' Attitudes During DARE
Semester and Opinions About
Drugs ............................................. 40

Figure 6. Opinion of Parents On "Who is Best
Qualified to Conduct a Drug Abuse
Program?" .................................... 42
Highlights
The report contained in this document represents the final results of an independent evaluation of the Drug Abuse Resistance Education (DARE) program as taught in four Kentucky counties during the 1987-88 school year. As documented in the following pages, the evaluation effort has included three components. These were 1) The School Experiment which tested the effects of the DARE program on fifth or sixth grade youth; 2) an Evaluation by Teachers and Principals in all of the participating schools; and 3) the Opinions of Parents of elementary school children regarding the need for drug and alcohol programs like DARE.

While the findings of the evaluation follow in this report, the major results are highlighted below.

The results of the School Experiment involving 783 students in selected elementary schools included:

* A significantly higher improvement in self-esteem among children in the DARE program. It should be noted that some improvement was also found among non-DARE students;

* A significant increase among DARE students in their understanding of drugs and alcohol;

* An increase in DARE student ability to resist peer influences;

* Strong positive increases in the attitudes of fifth grade students toward law enforcement;

* A significant decrease in positive attitudes toward drugs and alcohol following exposure to the DARE curriculum.

The results of the analysis of 470 teachers and principals responding to the evaluation survey included:

* Overwhelming support for the impact of the DARE programs on students in all of the elementary school grades;

* A positive perception of the modification of student behavior after being exposed to the DARE curriculum;

* Positive improvement of the total school environment by the delivery of the DARE program;

* Support for expansion of the DARE program to all elementary schools in the Commonwealth.

The major results of the analysis of the 360 respondents to the parents survey included:

* An overwhelming majority who saw a positive change in their children's attitudes toward drug and alcohol related issues;

* Perception of a marked positive change in their children's attitudes toward law enforcement;

* Preponderant support for the DARE program by responding parents.

In sum, it was concluded that DARE makes a difference to students exposed to the program, to teachers and principals in the targeted schools, and to the parents of fifth or sixth grade students.
Introduction

In response to a growing concern about drug use and abuse among the Commonwealth's youth, the Kentucky State Police initiated a cooperative Drug Abuse Resistance Education (DARE) program in selected counties in Kentucky. As one component of this pilot program the KSP contracted with the Social Research Laboratory of Western Kentucky University in August, 1987, to conduct an empirical evaluation of the delivery of the DARE program. This report contains the results of that evaluation.

The primary focus of the DARE program is to utilize law enforcement line personnel in delivering a sixteen week program to elementary school students. The curriculum, originally developed as a joint project of the Los Angeles Police Department and the Los Angeles Unified School District, addresses five fundamental concerns. These include:

1. Enhancement of self-concept;
2. Resistance to peer pressure;
3. Positive modification of attitudes toward law enforcement;
4. Heightened understanding and knowledge of drugs; and
5. Development of a negative attitude toward drug abuse.

In order to realize these goals, the DARE curriculum is organized into sixteen classroom sessions taught by a State Trooper. A wide range of teaching activities are used to encourage student participation and response. The DARE program combines three types of drug education by 1) providing factual information about drugs; 2) addressing attitudes, feelings, values, and self-concept; and 3) dealing directly with behavior. This

---


Sample Populations Used in the DARE Evaluation

THE SCHOOL EXPERIMENT

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Types of Schools</td>
<td>4 Types of School</td>
</tr>
<tr>
<td>8 Schools</td>
<td>8 Schools</td>
</tr>
<tr>
<td>18 Classrooms</td>
<td>16 Classrooms</td>
</tr>
<tr>
<td>451 Students</td>
<td>332 Students</td>
</tr>
</tbody>
</table>

THE TEACHER SURVEY

46 Fall and Spring Schools
470 Teachers/Principals

THE PARENT SURVEY

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>212 Parents</td>
<td>148 Parents</td>
</tr>
</tbody>
</table>

64% Response Rate
strategy is well supported by recent drug education literature. While the long-term effects of the DARE program are yet to be evaluated, the initial results of the efforts of the Kentucky State Police are addressed in this evaluation.

DARE in Kentucky: 1987-88

The Kentucky State Police with the assistance of the Kentucky Department of Education and cooperation from seven school districts across the Commonwealth initiated the delivery of the DARE program in fifty-two elementary schools. The cooperating districts included Rowan County, Boyd County, Scott County, Daviess County, Owensboro Catholic Schools, Owensboro City Schools, and Fairview Independent Schools.

Six carefully screened State Police Troopers were selected to teach the DARE curriculum in these districts. While the major emphasis of the curriculum is on the elementary “exit grade” (fifth or sixth grade, depending on the school system), the DARE instructors also had contact with all students in the earlier grades. In all, nearly 15,000 children were exposed to the appropriate level of the DARE program in the 1987-88 school year.

The Evaluation

The DARE program integrates three essential components of childhood socialization in an effort to stem drug abuse. These forces which in large part help to shape the attitudes and behavior of young Kentuckians include school, parents, and law enforcement agencies. The evaluation staff examined the relationship of the DARE program to each of these agents of socialization and control.

Previous evaluations of DARE as administered by other law enforcement agencies have shown overwhelming support for the effectiveness of the program on the part of parents, community leaders, teachers, and school administrators. Additional support for the program has been generated by documentation of positive attitudinal shifts among students targeted by the DARE project.

The present evaluation of the Kentucky State Police pilot project includes a coordinated three-phase study addressing 1) the attitudes of parents toward the program; 2) the posture of educational professionals toward DARE; and 3) an experimental test of the effectiveness of the program among targeted exit grade students.

The Research Design

The total scope of the evaluation plan for the 1987-88 Kentucky State Police DARE program is intended to answer three central questions. First, is the DARE curriculum successful in changing the attitudes and values of Kentucky elementary school students toward the use of drugs and alcohol? Second, how well is the program received by principals and teachers in the elementary school system? And third, how supportive are the parents of elementary school children toward drug education programs such as DARE?

Three distinct research endeavors were undertaken by the evaluation team in order to address each of the populations in the evaluation plan. This report contains the results of all three investigations.

The School Experiment

The impact of the DARE program on students in the terminal elementary grade (5th grade) was assessed using a research design that most closely resembled a classical research design, or more technically known as a non-equivalent control group design. Schools in the DARE program (see accompanying inserts) were first stratified according to the type of school each represented: parochial, rural, inner-city or suburban. Due to cost considerations, the phase of the evaluation was restricted to only those schools and school systems in Daviess and Rowan counties.

Eight of the elementary schools scheduled for DARE instruction during the Fall and Spring semesters were randomly selected and designated as the experimental group. These eight schools also represented each of the four types of schools in the study. A total of 18 classrooms and 451 students were designated as the experimental group.

Six of the schools in the two counties were also randomly selected and designated as the control group for the Fall semester. All of the schools were scheduled for DARE instruction in the Spring semester of 1988.

---


## Participating Schools in the DARE Program (Fall, 1987)

<table>
<thead>
<tr>
<th>County</th>
<th>School System</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boyd County</strong></td>
<td>Boyd County Schools</td>
<td>Summit Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cooper Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Durbin Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Catlettsburg Elementary</td>
</tr>
<tr>
<td></td>
<td>Fairview Independent Schools</td>
<td>Renfroe Elementary</td>
</tr>
<tr>
<td><strong>Daviess County</strong></td>
<td>Daviess County Schools</td>
<td>Highland Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maceo Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tamarack Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thruston Elementary**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Utica Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>West Louisville Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Philpot Elementary***</td>
</tr>
<tr>
<td><strong>Owensboro Independent Schools</strong></td>
<td></td>
<td>Sutton Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Estes Elementary**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seven Hills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Foust Elementary***</td>
</tr>
<tr>
<td><strong>Owensboro Catholic Schools</strong></td>
<td></td>
<td>St. Alphonsus Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blessed Mother Elementary**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>St. Martin Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>St. Mary Magdalene Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lourdes Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>St. Pius X Elementary**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Immaculate Elementary***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Precious Blood Elementary***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>St. Mary's Elementary***</td>
</tr>
<tr>
<td><strong>Rowan County</strong></td>
<td>Rowan County Schools</td>
<td>Tilden Hogge Elementary**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farmers Elementary**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clearfield Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elliottsville Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Morehead Elementary***</td>
</tr>
<tr>
<td><strong>Scott County</strong></td>
<td>Scott County Schools</td>
<td>Southern Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sadieville Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eastern Elementary</td>
</tr>
</tbody>
</table>

** Experimental group for pre- and posttest assessment.
*** Control group for pre- and posttest assessment.
<table>
<thead>
<tr>
<th>County</th>
<th>School System</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boyd County</td>
<td>Boyd County Schools</td>
<td>Cannonsburg Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eldson Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Garner Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ironville Elementary</td>
</tr>
<tr>
<td>Daviess County</td>
<td>Daviess County Schools</td>
<td>Burns Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Masonville Elementary**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Philpot Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sorgho Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stanley Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Whitesville Elementary</td>
</tr>
<tr>
<td></td>
<td>Owensboro Independent Schools</td>
<td>Cravens Elementary**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Foul Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Newion Parish Elementary</td>
</tr>
<tr>
<td></td>
<td>Owensboro Catholic Schools</td>
<td>The Cathedral School</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Immaculate Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mary Carrico Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>St. Mary's Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Precious Blood Elementary</td>
</tr>
<tr>
<td>Rowan County</td>
<td>Rowan County Schools</td>
<td>Morehead Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Haldeman Elementary</td>
</tr>
<tr>
<td>Scott County</td>
<td>Scott County Schools</td>
<td>Stamping Ground Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Great Crossing Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Garth Elementary</td>
</tr>
<tr>
<td>Warren County</td>
<td>Bowling Green School District</td>
<td>T.C. Cherry Elementary***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parker Bennett Elementary***</td>
</tr>
</tbody>
</table>

** Experimental group for pre- and posttest assessment.

*** Control group for pre- and posttest assessment.
Figure 1. "Do You Know Kids Who Smoke Marijuana?" By Type of School and Age Group of User.
Two additional control group schools were selected from Warren County for inclusion during the Spring semester. These schools were also selected on the basis of type of school (rural, parochial, inner-city and suburban) in order to match the school characteristics of the experimental group. A total of 16 classrooms were included in the control group sample representing a total of 332 students.

Students in the experimental and control groups were twice administered a questionnaire instrument designed to measure several salient components of the DARE curriculum: self-esteem, knowledge of drugs, attitude toward drugs and alcohol, peer resistance, "perceived external control" and attitude toward the police. The first administration of the questionnaire took place before the DARE officers actually began instruction (early September, 1987 or early January, 1988). The instrument was readministered to each of the subjects in the experimental and control groups after the completion of the curriculum (early January, 1988 or late May, 1988).

More detailed information on the sample selection, instrument construction and data collection procedures for The School Experiment are reviewed below.

The Teacher/Principal Survey

An evaluation questionnaire was developed and sent to each of teachers and administrators in the schools in Boyd, Scott, Rowan and Daviess counties that received the DARE curriculum during either the Fall or Spring semesters. These evaluations were completed anonymously within schools. Results were obtained from 46 schools representing the opinions of 470 teachers and principals. More detailed discussion and results of this survey are contained in a later section.

The Parent Survey

A mailed questionnaire was also sent to the parents of each of the students in both the experimental and control groups. This questionnaire asked parents to assess behavioral or attitudinal changes in their children during the Fall semester. The attitudes of parents toward drug education programs such as DARE was also probed. Of the 539 questionnaires sent, 360 were returned for an overall response rate of 64 percent. This questionnaire was sent during the first week of January coinciding with the completion of the Fall DARE curriculum.

The School Experiment

Assessment of the impact of the DARE curriculum on students using an experimental research design was premised on the following considerations. First, the non-equivalent control group design allowed the researchers to measure the gain scores of students across salient measures before and after the 16 weeks of DARE instruction (hereafter referred to as the treatment). Second, the use of a control group made possible the same measurements on student who did not receive the DARE instruction. Third, the random assignment of schools to the experimental and control groups within the blocking variable, type of school, helped to equalize pre-existing differences between schools and residential neighborhoods.

The use of the pretest measurement and the use of a control group also strengthens the results of this investigation by controlling several sources of potential invalidity. Maturation effects in the fifth grade students during the course of a semester is controlled since both groups should mature at similar rates. The sensitivity of the subjects to the pretest is neutralized by the use of a control group. Selection bias is minimized by the random assignment of schools to the treatments. What is termed "history," the introduction of unwanted exogenous effects other than the treatment, are minimized by the random assignment of schools.

The Treatment

For the purpose of this research, the DARE program in its entirety, as delivered to fifth grade students in Daviess and Rowan counties during either the Fall semester of 1987 or Spring semester of 1988, constitutes the experimental treatment. This treatment includes a 16-week curriculum delivered once a week for approximately 45 minutes to one hour in each terminal grade classroom. The treatment also includes the informal interaction of the DARE officer with students at the school outside the classroom (recess, lunch, etc.) and all instructional materials given to students. The treatment also includes the following material goods given to each student at the graduation ceremony: graduation certificate, DARE T-shirt, DARE trophy, key chain and bumper sticker.

The Blocking Variable

The thirty-six elementary schools in the Daviess and Rowan county school systems were each assigned to one of four levels of the variable Type of School according to school characteristics. The eleven
schools in the Owensboro Catholic School system were designated as "parochial schools" and assigned to either the experimental or control groups depending on whether they were scheduled for Fall or Spring instruction. The seven schools in the Rowan County School District were designated as "rural" schools after consultation with a school board representative.

The remaining nineteen schools in the Daviess County School District and Owensboro Independent School District were designated as "parochial schools" and assigned to instruction. The seven schools in the Rowan County School District were designated as "inner-city" schools. Each was located adjacent to city housing projects, had a student body drawn from predominantly lower socio-economic families, and had approximately 90 percent of the student body enrolled for a school lunch subsidy program. An additional three schools were identified as "suburban" in the research. Each was characterized by school board personnel as serving predominantly middle class families in the outlying areas of the city. Each was also in the bottom quartile of the school district in terms of the percentage of students receiving school lunch subsidy.

Two additional schools from the Bowling Green City School District were included in the study during the Spring semester. Both schools were assigned as control groups in the study. Each was selected to match the characteristics of the Spring semester experimental group schools.

Figure 1 shows the importance of the type of school as a predictor of previous drug exposure. During the pretest students were asked three questions probing whether they knew high school aged, middle school aged or elementary school aged youth who smoked marijuana. As depicted in the figure, more than one in five fifth grade students (26 percent) reported that they knew one or more high school youth who smoked marijuana. This percentage jumped to 37 percent of the students in inner-city elementary school and 29 percent among suburban elementary school students (all of whom were in the Daviess County or Bowling Green areas). Knowledge of marijuana use by parochial students was lower (20 percent), followed by rural students (14 percent).

Knowledge of marijuana use among middle school aged youth dropped in all the elementary schools. Fifth graders attending inner-city elementary schools again reported by far the highest rate of knowledge (32 percent) followed by suburban school fifth graders (18 percent). By contrast, only 8 percent of the rural and 11 percent of the parochial students answered the question in the affirmative.

Marijuana use by other elementary school students was reported by only one in ten or eleven rural, parochial and suburban fifth graders. Inner-city student continued to have high rates of exposure, with 27 percent of the students revealing that they knew one or more elementary school children who smoked marijuana.

Instrument Construction

Previous DARE evaluations and other relevant efforts at drug and alcohol education were reviewed along with a careful reading of the actual DARE curriculum. A total of six criterion measures were defined to summarize the main components of the DARE curriculum and to record the direction of attitude change intended by the program:

(1) self-esteem;
(2) knowledge of drugs;
(3) resistance to peer pressure;
(4) attitude toward the police;
(5) attitude toward drugs; and
(6) perceived external control.

It was hypothesized that the DARE curriculum would (1) increase the self-esteem of students by fostering a positive self-image through lesson plans; (2) increase student knowledge of drugs and alcohol as an indirect product of classroom discussions; (3) make students more resistant to peer pressure by teaching resistance skills and making them aware of resistance strategies; (4) increase the degree of positive attitude toward the police by seeing a law enforcement official over a period of weeks in a non-policing role; (5) decrease the degree of positive orientation toward drugs and alcohol by informing students of the negative aspects of use; and (6) change a student's perception of external control agents (parents, teachers, police, etc.) in shaping drug attitudes.

The Self-Esteem Scale was composed of 15 questions drawn from the Rosenberg Self-Esteem Scale and the Coopersmith Self-Esteem Inventory.

5 See note 4, above.
Items were selected on the basis of face validity and minimum reading level comprehension.

The Knowledge of Drugs Scale was derived from the previous instruments used in the Los Angeles DARE evaluation as well as other items written by the evaluators. The scale was intended to assess the transmission of drug knowledge as a by-product of the DARE curriculum rather than an exhaustive inventory of the actual drug knowledge of youth.

Items in the remaining scales were derived either from previous drug and alcohol evaluation instruments or were written specifically for this evaluation by the researchers. Of the 73 attitude questions in the final instrument (see Appendix D), 11 questions were dropped from the final scales. Items were included in the final scales based on (1) face validity in relation to the concept being measured; (2) inter-item correlation (Yule's Q) with other items in the scale, and (3) item-scale intercorrelation based on a hierarchical cluster analysis of a Yules Q correlation matrix and principal axis factor solutions within scales.

Readability of the Instrument

Every effort was made to keep the final school instrument within the reading and oral comprehension level of all students. It was feared that an instrument that required a fifth grade or higher reading level would bias the results of the study, particularly since low reading level is likely to correlate with the type of school, previous exposure to drugs, and existing drug attitudes. Statements in the final instrument were, therefore, deliberately kept short and simple, with an avoidance of polysyllabic words and complex sentences. Uncommon words in the vocabulary of fifth graders were also avoided. This rule was not applied to the Knowledge of Drugs Scale since it was reasoned that the slang and proper names of drugs could be part of the curriculum.

Overall, the final instrument has a readability coefficient of 3.22. This implies that the final questionnaire requires no more than a third grade reading level in order to comprehend the questions.

Data Collection Procedures

The final questionnaire was administered to each class of fifth graders by the principal investigators. Each student was given a copy of the questionnaire. Each question was read aloud by either the researcher or a selected student in the class. The class completed the questionnaire one question at a time by combining a private reading of the question with the oral reading of the question in the classroom. It was hoped that this method would eliminate any reading deficiencies among the students since oral comprehension is assumed to be far greater, even in the worst situation, than reading comprehension.

At all times students were encouraged to give frank answers to the questions. Unlike exercises in the routine classroom, students were continually reminded

Trooper Windy Kretman helps students with the DARE word list at Thruston Elementary School. (Photograph by Allen Lake, courtesy of the Messenger-Inquirer.)
that the questionnaire administration was not a test, but, instead, a solicitation of their opinions. With the exception of the Knowledge of Drugs section, students were reminded that the most appropriate answer was unique to them and privileged from the view of other students.

Statistical Analysis

The final results of the school survey are presented in three ways. First, individual percentage responses are shown for each question. A difference of proportions test for related samples (the McNemar Test) compares the statistical significance of percentage changes between the pretest and the posttest for both the experimental and control groups. Tests indicated with one *** show that the percentage change was unlikely to occur by chance more than one in twenty times; a **** indicates a percentage change unlikely to occur by chance more than one in a hundred.

Second, a Wilcoxon Matched-Pairs Signed Rank Test was performed to compare the significance of change for each group between the pretest and posttest on the overall scale score. The Wilcoxon test was selected because all of the scales were skewed in their raw form.

Finally, each posttest scale was analyzed using analysis of covariance procedures. This procedure allowed the researchers to test for the overall significance of the treatment, the significance of type of school in producing scale scores, and the combination of treatment and type of school. The pretest score for each scale was treated as a covariate in the analysis in order to adjust for pre-existing differences among students prior to the experiment. The skewed nature of the final scale scores made it necessary to adjust each scale score with an exponential transformation prior to the analysis of variance.

Comments of teachers on . . .

"Is it appropriate for State Police Officers to teach DARE?

I do think it is appropriate for a State Police Officer to teach the DARE curriculum in the classroom. He has had special training in this particular program in Los Angeles, and student teaching while in training. In addition, the state police officer has much more reliable information on drug problems and how they are handled when detected and/or convicted as users.

No. Because our school system has for many years worked with local police and students know these people.

I think it is very important that a state police officer do the teaching in the DARE program. It would not be the least bit effective if a classroom teacher did it. The state police officer developed a wonderful relationship between the students and [herself/himself]. Children need to feel that for the police force.

Absolutely! The students respect policemen and have more respect for what they have to say. The children know that policemen have a lot of experience dealing with drugs, and individuals who use them.

Absolutely -- if none other than to develop the open relationship that we have experienced here. The children are now more apt to go to a police officer for help, especially in a drug situation.

I think children need to know a law officer in a positive situation; it teaches them the officer is a friend.

Yes. Your trooper conducted [herself/himself] in a professional manner and was able to handle the teaching as well as the personal counseling [she/he] did with students. I would highly recommend [the officer] to any school.

Yes, it's very appropriate for the state police officer to be in the classroom. It allows the child to build a positive rapport with the police officer. In many cases the child's contacts with the police has been negative. Many times he has viewed him as an arresting officer in domestic incidents.

After 18 years of teaching I've seen many programs presented and this is the best by far. I only wish my own two teenagers could have participated. Having an officer has built a positive, personal attitude toward law enforcement.

References

12 Ibid.
15 H. M. Walker and Joseph Lev. *Statistical Inference*, New York: Holt, Rinehart, and Winston, 1953. The use of the transformation did not, however, alter the statistical conclusions achieved when the scales were used in their raw (unadjusted) form.
Results: The School Experiment

This section contains the quantitative results obtained from the pre- and posttest instruments administered to the 451 experimental group students and the 332 control group students. Results are presented separately by each of the six criterion measures used in the study in the following order: self-esteem, external social control, attitude toward the police, knowledge of drugs, peer resistance and attitude toward drugs.

The results for each criterion measure are presented in a series of three tables. The first table in each group presents the actual percentage distribution of responses recorded during the pretest and posttest session both for the experimental (DARE) and control (non-DARE) groups. Since the scales were composed of both "positive" and "negative" scale items, a "scoring key" is provided in the table to facilitate interpretation. The reader should interpret each of the percentages in the first table as the percent of the students in that group who gave the desired response (shown by the key) to each question. The McNemar Test indicates whether the percentage change between the pre- and posttest was statistically significant at either the .05 or .01 level of significance.

The second table in each group summarizes the results of total scale score change in the variable between the pre- and posttest sessions. The actual "mean ranks" used in the computation of the Wilcoxon Test are omitted since they add little to the interpretation. Unless otherwise indicated, all of the statistically significant changes in the experimental group are in the predicted direction.

The third table in each set of tables summarizes the results of the ANCOVA analysis. The top of each table gives the scale means or averages on both the pre- and posttests for each group. The mean scores are presented separately for each group according to the type of school. The ANCOVA shown at the bottom of the table shows three important statistics: (1) whether or not the treatment (the DARE program) was statistically significant as shown by a probability level less than or equal to .05; (2) whether the type of school was associated with statistically significant differences in mean scores on the posttest; and (3) whether the two variables, the treatment and type of school, significantly "interact" such that it is impossible to say what the effect of the DARE program was without first knowing the type of school. In general, this latter property is not considered desirable because it causes generality of the results to be more complex and confusing.

Change in Self-Esteem

Table 1 shows the percentage of "positive self-esteem" responses on the self-esteem scale items during the pre- and posttest measurements. If the DARE program were successful in improving the self-esteem of students, we would expect that the percentage of correct responses in the experimental (DARE) group would go up appreciably from the pre- to posttest periods. We would not expect the self-esteem to improve in the control group.

Some support for this thesis can be seen in Table 1. The percentage of "positive" responses in the DARE group increased in the predicted direction in 14 of the 15 items. Eight of these increases were statistically significant at the .05 or .01 levels. This is fairly strong evidence that the DARE curriculum did improve self-esteem.

Self-esteem also tended to increase, though to a much lesser extent, in the control group over the course of the semester. Small change in the direction of increased self-esteem can be seen in several of the questions. One of the questions recorded an improvement in self-esteem that was statistically significant.

Table 2 compares the significance of the change in self-esteem within each type of school when the 15 questions were summed into a total self-esteem score. Rural, parochial, inner-city and suburban schools in the DARE program showed significant improvement between the pre- and posttest periods. However, among the schools in the control group, smaller but statistically significant improvements were also shown by rural, parochial and inner-city students.

The combined effects of both the treatment and type of school are further examined in Table 3. The "adjusted" mean scores in the table show the magnitude of self-esteem improvement in each type of school. According to Table 3, both the DARE and non-DARE schools showed higher self-esteem at the end of the test semester (posttest scores) than at the beginning of the semester (pretest scores). Similarly, some differences in self-esteem can be seen among the four types of schools.

Table 3 also shows the statistical analysis to test whether or not these observed differences in self-esteem are likely to be attributable to what is termed sampling error, or variation in self-esteem caused by
<table>
<thead>
<tr>
<th>Self-Esteem Items</th>
<th>Scoring</th>
<th>DARE Students (N=451)</th>
<th>Non-DARE Students (N=332)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td></td>
<td>Like Me</td>
<td>Not Like Me</td>
<td></td>
</tr>
<tr>
<td>1. I can make up my mind without too much trouble.</td>
<td>X</td>
<td></td>
<td>68%</td>
</tr>
<tr>
<td>2. I feel I do not have much to be proud of.</td>
<td>X</td>
<td></td>
<td>79%</td>
</tr>
<tr>
<td>3. Lots of things bother me.</td>
<td>X</td>
<td></td>
<td>61%</td>
</tr>
<tr>
<td>4. I'm a lot of fun to be with.</td>
<td>X</td>
<td></td>
<td>87%</td>
</tr>
<tr>
<td>5. I don't like to be with other kids.</td>
<td>X</td>
<td></td>
<td>92%</td>
</tr>
<tr>
<td>6. I am smarter than most of the other kids in my class.</td>
<td>X</td>
<td></td>
<td>37%</td>
</tr>
<tr>
<td>7. I often feel upset at school.</td>
<td>X</td>
<td></td>
<td>68%</td>
</tr>
<tr>
<td>8. I'm often sorry for the things I do.</td>
<td>X</td>
<td></td>
<td>35%</td>
</tr>
<tr>
<td>9. I'm as nice looking as most people.</td>
<td>X</td>
<td></td>
<td>70%</td>
</tr>
<tr>
<td>10. Most kids are better liked than I am.</td>
<td>X</td>
<td></td>
<td>63%</td>
</tr>
<tr>
<td>11. Sometimes I think I am no good at all.</td>
<td>X</td>
<td></td>
<td>52%</td>
</tr>
<tr>
<td>12. I'm easy to like.</td>
<td>X</td>
<td></td>
<td>81%</td>
</tr>
<tr>
<td>13. I am as well-liked as most kids.</td>
<td>X</td>
<td></td>
<td>72%</td>
</tr>
<tr>
<td>14. I certainly feel useless at times.</td>
<td>X</td>
<td></td>
<td>46%</td>
</tr>
<tr>
<td>15. I often get discouraged at school.</td>
<td>X</td>
<td></td>
<td>54%</td>
</tr>
</tbody>
</table>

* significant difference at .05 level between pre- and posttest scores (McNemar test).
** significant difference at .01 level between pre- and posttest scores (McNemar test).
Table 2. Change in Self-Esteem Between Pre- and Posttest Within Treatments by Type of School.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>DARE Students</th>
<th>Non-DARE Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of Change</td>
<td>(N)</td>
</tr>
<tr>
<td></td>
<td>Significance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of Change</td>
<td>(N)</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>**</td>
<td>(105)</td>
</tr>
<tr>
<td></td>
<td>*</td>
<td>(57)</td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>**</td>
<td>(76)</td>
</tr>
<tr>
<td></td>
<td>*</td>
<td>(79)</td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>**</td>
<td>(126)</td>
</tr>
<tr>
<td></td>
<td>*</td>
<td>(102)</td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>**</td>
<td>(144)</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>(94)</td>
</tr>
</tbody>
</table>

* significant difference at .05 level between pre- and posttest scores, Wilcoxon Matched-Pairs Signed-Ranks Test, one-tail test.

** significant difference at .01 level between pre- and posttest scores, Wilcoxon Matched-Pairs Signed-Ranks Test, one-tail test.

Trooper Jimmy Richerson, DARE Coordinator, using a McGruff Puppet as part of his classroom presentation.
### Table 3. ANCOVA of Change in Self-Esteem By Treatment Group and Type of School.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Average Scores¹</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DARE Students</td>
<td>Non-DARE Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td>Pretest</td>
<td>Posttest</td>
<td></td>
</tr>
<tr>
<td>Rural Schools</td>
<td>107.5</td>
<td>126.4</td>
<td>103.6</td>
<td>124.3</td>
<td></td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>110.7</td>
<td>132.2</td>
<td>100.4</td>
<td>110.4</td>
<td></td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>94.0</td>
<td>107.7</td>
<td>93.9</td>
<td>104.5</td>
<td></td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>104.1</td>
<td>120.2</td>
<td>112.7</td>
<td>116.7</td>
<td></td>
</tr>
</tbody>
</table>

¹ Scale scores after exponential transformation to compensate for skewed values.

### ANALYSIS OF COVARIANCE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Covariate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Score</td>
<td>916039</td>
<td>1</td>
<td>916039</td>
<td>382.6</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE</td>
<td>9243</td>
<td>1</td>
<td>9243</td>
<td>3.9</td>
<td>0.05</td>
</tr>
<tr>
<td>Type of School</td>
<td>13063</td>
<td>3</td>
<td>4354</td>
<td>1.8</td>
<td>0.14</td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE and Type of School</td>
<td>5685</td>
<td>3</td>
<td>1895</td>
<td>0.8</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Error</strong></td>
<td>1824656</td>
<td>762</td>
<td>2395</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4. Perceived External Control By Group and Time (All Schools).

| Perceived External Control items                                                                 | Scoring |          |          |          |
|                                                                 | Yes | No | Pretest | Posttest | Pretest | Posttest |
| 1. If I drank alcohol someone would tell on me.                                             | X   |   | 86%     | 87%     | 88%     | 90%     |
| 2. If I used drugs, my parents would find out.                                              | X   |   | 95%     | 95%     | 93%     | 96%     |
| 3. If I did something wrong, the police would catch me.                                      | X   |   | 73%     | 76%     | 76%     | 78%     |
| 4. If I used drugs someone would tell on me.                                                 | X   |   | 90%     | 90%     | 92%     | 90%     |
| 5. My parents can look at me and tell if I've done something wrong.                          | X   |   | 82%     | 87%     | *       | 82%     | 78%     |
| 6. If I used drugs, my teacher would know.                                                   | X   |   | 70%     | 75%     | 70%     | 63%     | @       |
| 7. If I drank alcohol, my parents would find out.                                            | X   |   | 89%     | 90%     | 94%     | 93%     |

* significant difference at .05 level between pre- and posttest scores (McNemar test).
** significant difference at .01 level between pre- and posttest scores (McNemar test).
@ significant difference in the opposite direction predicted.
using a random sample of fifth grade students. The analysis of covariance shows that the students in the DARE program (the treatment) experienced, on the average, greater improvement in self-esteem than those fifth grade students in the control group. The effect of the DARE program was statistically significant at a .05 level. On the other hand, the mean differences in self-esteem among the four type of school was not statistically significant at the .05 level. While the DARE program did influence the self-esteem of students, the observed differences in self-esteem among the four types of schools must be attributed to sampling error since the probability level is greater than .05.

Change in Perceived External Control

Table 4 shows the percentage of responses to each of the seven questions in the perceived external control scale. A reading of the questions shows that the scale addresses the extent to which youth feel culpable for their actions in the face of the scrutiny of authority figures. Perusal of Table 4 shows high levels of such perceived control. Over 85 percent of all the fifth graders felt, for example, that "someone would tell on me" if they drank alcohol. The high percentages shown for other questions in the scale denote high levels of this sense of "external social control" among the youth.

The effect of the DARE curriculum in increasing this sense of external control is limited. Significant increases in the percentage of students giving the preferred response can be seen in only one question among those in the experimental group. One question showed a significant change among those students in the control group.

Table five further examines the scores of students on the "perceived external control" scale between the pretest and posttest. Significant improvement was shown only among rural students. Even here, the results were significant for both the experimental and control group. These results suggest that other events in the Rowan County school system are likely to have led to the changes shown rather than the DARE curriculum itself.

Table 6 compares the mean posttest scale scores among the schools. With the exception of the inner-city schools, the four experimental groups all show some improvement in the predicted direction between the pre- and posttest measurements. Control groups scores declined in all but in Rowan County were scores among the control group student jumped dramatically. The ANCOVA shows that the changes were large enough to be statistically significant at the .05 level both for the treatment and type of school. That is, these results suggest that the DARE curriculum did cause an increase in external control scores and that these scores did vary significantly among schools for DARE and non-DARE student.
Table 6. ANCOVA of Change in Perceived External Control By Treatment Group and Type of School.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Average Scores¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DARE Students</td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>34.0</td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>36.7</td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>39.5</td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>34.9</td>
</tr>
</tbody>
</table>

¹ Scale scores after exponential transformation to compensate for skewed values.

ANALYSIS OF COVARIANCE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Score</td>
<td>18392</td>
<td>1</td>
<td>18392</td>
<td>114.9</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE</td>
<td>961</td>
<td>1</td>
<td>961</td>
<td>6.0</td>
<td>0.01</td>
</tr>
<tr>
<td>Type of School</td>
<td>1937</td>
<td>3</td>
<td>646</td>
<td>4.0</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE and Type of School</td>
<td>443</td>
<td>3</td>
<td>148</td>
<td>0.9</td>
<td>0.43</td>
</tr>
<tr>
<td><strong>Error</strong></td>
<td>123202</td>
<td>770</td>
<td>160</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7. Attitude Toward the Police By Group and Time (All Schools).

<table>
<thead>
<tr>
<th>Attitude Toward the Police Items</th>
<th>Scoring</th>
<th>DARE Students (N=451)</th>
<th>Non-DARE Students (N=332)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>1. I would like to be a policeman.</td>
<td>X</td>
<td>36%</td>
<td>41%</td>
</tr>
<tr>
<td>2. Policemen make me nervous.</td>
<td>X</td>
<td>52%</td>
<td>69%</td>
</tr>
<tr>
<td>3. Most policemen go out of their way to keep a kid out of trouble.</td>
<td>X</td>
<td>81%</td>
<td>88%</td>
</tr>
<tr>
<td>4. Most policemen don’t understand a kid’s problems.</td>
<td>X</td>
<td>60%</td>
<td>72%</td>
</tr>
<tr>
<td>5. Police have no right to tell kids what to do.</td>
<td>X</td>
<td>62%</td>
<td>68%</td>
</tr>
<tr>
<td>6. Most policemen like to pick on kids.</td>
<td>X</td>
<td>92%</td>
<td>95%</td>
</tr>
<tr>
<td>7. Most policemen like to help kids.</td>
<td>X</td>
<td>95%</td>
<td>96%</td>
</tr>
<tr>
<td>8. Most policemen are pretty nice guys.</td>
<td>X</td>
<td>90%</td>
<td>96%</td>
</tr>
<tr>
<td>9. Most policemen like to act tough.</td>
<td>X</td>
<td>59%</td>
<td>66%</td>
</tr>
<tr>
<td>10. Most policemen are honest.</td>
<td>X</td>
<td>93%</td>
<td>95%</td>
</tr>
<tr>
<td>11. I have a lot of respect for the police.</td>
<td>X</td>
<td>90%</td>
<td>94%</td>
</tr>
</tbody>
</table>

* significant difference at .05 level between pre- and posttest scores (McNemar test).
** significant difference at .01 level between pre- and posttest scores (McNemar test).
### Table 3. Change in Attitude Toward the Police Between Pre- and Posttest Within Treatments by Type of School.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>DARE Students</th>
<th>Non-DARE Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of Change</td>
<td>(N)</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>** (105)</td>
<td>-- (57)</td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>** (76)</td>
<td>* (79)</td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>** (126)</td>
<td>-- (102)</td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>** (144)</td>
<td>-- (94)</td>
</tr>
</tbody>
</table>

* significant difference at .05 level between pre- and posttest scores, Wilcoxon Matched-Pairs Signed-Ranks Test, one-tail test.

** significant difference at .01 level between pre- and posttest scores, Wilcoxon Matched-Pairs Signed-Ranks Test, one-tail test.

---

**Change in Attitude Toward the Police**

Youth in the schools selected for the School Experiment were asked a series of eleven questions regarding their attitudes and perceptions of law enforcement. Table 7 summarizes the percentage of responses given during the pre- and posttest for both the experimental and control groups.

The change in the attitudes of fifth graders in the DARE program was strong and in the predicted direction. Table 7 shows that the responses to all eleven questions changed in the preferred direction. For example, in response to the statement "policemen make me nervous", approximately two out of three students answered "no" during the posttest compared with only half of the students during the pretest. Using the McNemar Test of differences of proportions, eight of the eleven scale items showed significant change in the predicted direction.

The change in the attitudes of DARE youth toward the police was significant across all schools. As shown in Table 8, DARE students in all four types of school experienced an improvement in their attitudes toward the police. Significant improvement in control group attitudes toward the police can be seen on only one of the questions in Table 7 and only among parochial students in Table 8. It is suspected that this small change may be explained by teachers using the pretesting in the control group as an opportunity to talk about the upcoming DARE curriculum the next semester (an interaction of pretesting and treatment).

The overall significance of change in student attitudes about the police is further examined in Table 9. Mean scale scores increased in the predicted direction among all of the experimental schools. As shown in the previous table, rural and parochial students in the control group also changed in the preferred direction. The analysis of covariance on attitude toward the police yields the following conclusions: (1) the DARE program does cause a significant improvement in the attitudes of students toward the police; and (2) attitudes toward the police do not vary significantly among different types of schools. Among students in the experimental group, the greatest change in attitude was recorded among suburban students who went from a mean score of 71.3 at the pretest to 84.7 during the posttest. Attitudes toward the police varied considerably within type of school suggesting that the variable is heavily influenced at the local level.

**Change in Knowledge of Drugs**

A total of eleven questions were used to test for changes in the knowledge of youth about drugs and alcohol. Each of these questions, along with the percent of subjects answering each question correctly, are shown in Table 10. For the most part, students in the DARE program showed an improved understanding of drugs and alcohol. Seven of the eleven questions...
Table 9. ANCOVA of Change in Attitude Toward the Police By Treatment Group and Type of School.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Average Scores&lt;sup&gt;1&lt;/sup&gt;</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DARE Students</td>
<td>Non-DARE Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td>Pretest</td>
<td>Posttest</td>
<td></td>
</tr>
<tr>
<td>Rural Schools</td>
<td>72.9</td>
<td>80.8</td>
<td>65.3</td>
<td>73.2</td>
<td></td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>73.7</td>
<td>84.9</td>
<td>67.3</td>
<td>72.8</td>
<td></td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>60.6</td>
<td>71.2</td>
<td>69.3</td>
<td>72.1</td>
<td></td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>71.3</td>
<td>84.7</td>
<td>75.4</td>
<td>76.0</td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> Scale scores after exponential transformation to compensate for skewed values.

ANALYSIS OF COVARIANCE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Score</td>
<td>105396</td>
<td>1</td>
<td>105396</td>
<td>176.0</td>
<td>0.00</td>
</tr>
<tr>
<td>Main Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE</td>
<td>8625</td>
<td>1</td>
<td>8625</td>
<td>14.4</td>
<td>0.00</td>
</tr>
<tr>
<td>Type of School</td>
<td>4305</td>
<td>3</td>
<td>1435</td>
<td>2.4</td>
<td>0.07</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE and Type of School</td>
<td>2149</td>
<td>3</td>
<td>716</td>
<td>1.2</td>
<td>0.31</td>
</tr>
<tr>
<td>Error</td>
<td>462309</td>
<td>772</td>
<td>599</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Table 10. Knowledge of Drugs by Group and Time (All Schools).

<table>
<thead>
<tr>
<th>Knowledge of Drugs Items</th>
<th>Scoring</th>
<th>DARE Students (N=451)</th>
<th>Non-DARE Students (N=332)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>True</td>
<td>False</td>
<td>Pretest</td>
</tr>
<tr>
<td>1. Stimulants make your heart beat faster.</td>
<td>X</td>
<td></td>
<td>67%</td>
</tr>
<tr>
<td>2. Alcohol is called a stimulant.</td>
<td>X</td>
<td></td>
<td>36%</td>
</tr>
<tr>
<td>3. Alcohol can damage certain parts of the body such as the liver or the heart.</td>
<td>X</td>
<td></td>
<td>95%</td>
</tr>
<tr>
<td>4. Marijuana is a pill you swallow.</td>
<td>X</td>
<td></td>
<td>86%</td>
</tr>
<tr>
<td>5. LSD is a hallucinogen.</td>
<td>X</td>
<td></td>
<td>57%</td>
</tr>
<tr>
<td>6. Marijuana leads to being hooked on heroin.</td>
<td>X</td>
<td></td>
<td>17%</td>
</tr>
<tr>
<td>7. Cocaine is smoked.</td>
<td>X</td>
<td></td>
<td>57%</td>
</tr>
<tr>
<td>8. If people have too much to drink they can sober up if they drink some black coffee or take a cold shower.</td>
<td>X</td>
<td></td>
<td>38%</td>
</tr>
<tr>
<td>9. Crack and marijuana are the same thing.</td>
<td>X</td>
<td></td>
<td>60%</td>
</tr>
<tr>
<td>10. Cocaine is a pill you swallow.</td>
<td>X</td>
<td></td>
<td>84%</td>
</tr>
<tr>
<td>11. Teenagers are too young to be alcoholics.</td>
<td>X</td>
<td></td>
<td>20%</td>
</tr>
</tbody>
</table>

* significant difference at .05 level between pre- and posttest scores (McNemar test).
** significant difference at .01 level between pre- and posttest scores (McNemar test).
@ significant difference in the opposite direction predicted.
Table 11. Change in Knowledge of Drugs Between Pre- and Posttest Within Treatments by Type of School.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>DARE Students</th>
<th>Non-DARE Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of Change</td>
<td>(N)</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>**</td>
<td>(105)</td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>**</td>
<td>(76)</td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>**</td>
<td>(126)</td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>**</td>
<td>(144)</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>(57)</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>(79)</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>(102)</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>(94)</td>
</tr>
</tbody>
</table>

* significant difference at .05 level between pre- and posttest scores, Wilcoxon Matched-Pairs Signed-Ranks Test, one-tail test.
** significant difference at .01 level between pre- and posttest scores, Wilcoxon Matched-Pairs Signed-Ranks Test, one-tail test.

showed statistically significant improvement in the predicted direction. One of the questions (#8) showed significant change in the opposite direction predicted.

Some change in the knowledge of drugs in the control group is also shown in Table 8. However, this change is rather erratic -- of the three significant changes between the pre- and posttest measurements, two were in the direction of less, rather than more actual drug/alcohol knowledge.

Table 11 further suggests that the DARE curriculum led to a significant improvement in knowledge of drugs. Pretest to posttest scores were statistically significant in the experimental group, regardless of the type of school in which the program was taught. None of the control groups recorded significant change over the course of the semester.

Comparisons of the mean (adjusted) scores of students between the two time periods also shows the effect of the DARE program. All of the schools in the program showed an improvement in knowledge between the pre- and posttest; all of the schools in the control group showed a small decline or no change in knowledge. Table 12 further tests the data for the overall significance of change for both the treatment and the blocking variable, type of school. According to the analysis of covariance results, the treatment (the DARE program) was significantly associated with improved knowledge scores. Differences among the four type of schools, however, were not significant.

Comments of teachers on . . .

"Would you recommend DARE?"

Yes. I would like to see it taught throughout Junior High.

Yes! Drugs are such a problem today, and an early prevention program is greatly needed. This program needs to be in all levels of schooling.

Without any reservations, I would highly recommend DARE to any fellow principals or teachers. It is a great foundation instruction on which we, as teachers, can build upon with the students.

Yes, using local police officers in our case.

Yes! I have told many teachers at other schools about what went on here and how effective it was in our school.

Yes. I think it is being done at a very impressionable age and will therefore be very effective. It was also done very professionally.

Yes, I would recommend DARE in all schools. My only complaint is that younger students needed more education about what to do when their peers pressure them.

Yes. The program was excellent. It teaches the children in a positive way the dangers of drugs and yet lets the children learn to respect police officers.
Table 12. ANCOVA of Change in Knowledge of Drugs By Treatment Group and Type of School.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>DARE Students</th>
<th></th>
<th>Non-DARE Students</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>44.3</td>
<td>53.8</td>
<td>45.8</td>
<td>42.6</td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>34.8</td>
<td>50.7</td>
<td>42.0</td>
<td>42.0</td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>37.6</td>
<td>49.1</td>
<td>39.3</td>
<td>39.7</td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>43.7</td>
<td>57.8</td>
<td>41.4</td>
<td>41.8</td>
</tr>
</tbody>
</table>

1 Scale scores after exponential transformation to compensate for skewed values.

---

ANALYSIS OF COVARIANCE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Score</td>
<td>26452</td>
<td>1</td>
<td>26452</td>
<td>63.6</td>
<td>0.00</td>
</tr>
<tr>
<td>Main Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE</td>
<td>27261</td>
<td>1</td>
<td>27261</td>
<td>65.5</td>
<td>0.00</td>
</tr>
<tr>
<td>Type of School</td>
<td>2509</td>
<td>3</td>
<td>836</td>
<td>2.0</td>
<td>0.11</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE and Type of School</td>
<td>929</td>
<td>3</td>
<td>310</td>
<td>0.7</td>
<td>0.52</td>
</tr>
<tr>
<td>Error</td>
<td>320935</td>
<td>771</td>
<td>416</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 13. Peer Resistance by Group and Time (All Schools).

<table>
<thead>
<tr>
<th>Peer Resistance Items</th>
<th>Score</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Pretest</td>
<td>Posttest</td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>1. It's hard for me to say &quot;no&quot; to my friends.</td>
<td>X</td>
<td></td>
<td>53%</td>
<td>63%</td>
<td>**</td>
<td>56%</td>
</tr>
<tr>
<td>2. If you say &quot;no&quot; too often you won't have any friends.</td>
<td>X</td>
<td></td>
<td>51%</td>
<td>68%</td>
<td>**</td>
<td>56%</td>
</tr>
<tr>
<td>3. It's better to keep your feelings to yourself.</td>
<td>X</td>
<td></td>
<td>71%</td>
<td>81%</td>
<td>**</td>
<td>64%</td>
</tr>
<tr>
<td>4. I usually give in to my friends when they pressure me.</td>
<td>X</td>
<td></td>
<td>74%</td>
<td>83%</td>
<td>**</td>
<td>76%</td>
</tr>
<tr>
<td>5. I don't know how to say no to my friends.</td>
<td>X</td>
<td></td>
<td>66%</td>
<td>73%</td>
<td>*</td>
<td>68%</td>
</tr>
<tr>
<td>6. When my friends are doing something wrong, it's hard for me to walk away.</td>
<td>X</td>
<td></td>
<td>63%</td>
<td>69%</td>
<td></td>
<td>60%</td>
</tr>
<tr>
<td>7. If my friends drank beer, I probably would too.</td>
<td>X</td>
<td></td>
<td>92%</td>
<td>95%</td>
<td></td>
<td>93%</td>
</tr>
<tr>
<td>8. If I don't do what my friends want me to do, I'll be all alone.</td>
<td>X</td>
<td></td>
<td>76%</td>
<td>84%</td>
<td>**</td>
<td>73%</td>
</tr>
</tbody>
</table>

* significant difference at .05 level between pre- and posttest scores (McNemar test).
** significant difference at .01 level between pre- and posttest scores (McNemar test).
Table 14. Change in Peer Resistance Between Pre- and Posttest Within Treatments by Type of School.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>DARE Students</th>
<th>Non-DARE Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significance</td>
<td>(N)</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>*</td>
<td>(105)</td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>**</td>
<td>(76)</td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>**</td>
<td>(126)</td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>**</td>
<td>(144)</td>
</tr>
</tbody>
</table>

* Significant difference at .05 level between pre- and posttest scores, Wilcoxon Matched-Pairs Signed-Ranks Test, one-tail test.
** Significant difference at .01 level between pre- and posttest scores, Wilcoxon Matched-Pairs Signed-Ranks Test, one-tail test.

Change in Peer Resistance

Eight questions were used to test for improvements in the ability of students to resist peer pressure, as shown by the statements in Table 13. Examination of the percentage of preferred responses over the course of the treatment shows strong support for the DARE program. The percentage of students rejecting the statement "if you say 'no' too often you won't have any friends" went from a little over half during the pretest to two in three at the posttest. Similar improvement is shown in the first question, "It's hard for me to say 'no' to my friends." Each of the eight questions shows greater peer resistance at the end of the DARE program. Six of the response changes among the students in the experimental group were significant at either a .05 or .01 probability level. Only two of the changes in the control group were significant.

Table 14 tests the significance of the change in scores on the peer resistance scale for both the experimental and control groups. As expected, each of the four types of school in the experimental group recorded significantly higher scores on the peer resistance scale. However, two of the control groups changed significantly in peer resistance over the course of the semester (parochial and inner-city students).

Table 15 further examines this improvement by analyzing the mean scores within each of the treatment and type of school categories. The summary analysis of covariance shows that the DARE program did produce greater peer resistance. Differences in the effectiveness of the program among the four types of schools were not significant.

A Parent's Comments on DARE...

As a nurse, I have seen the harmful effects of drugs. I am very impressed with your DARE program and sincerely hope this program will receive the funding and support required. Not only was my 5th grader impressed, but my 2nd and 1st graders were equally impressed by the "friendly" policeman. I believe that now more than any other time, children need to be exposed in a non-threatening manner to the policemen whose dedication is much to be admired. Parents are telling little children "you'd better be good or a policeman will arrest you," just as they tell them "be good or the nurse will give you a shot." The thoughts of my children being exposed to drugs is terrifying to me. I know that drug abuse in our county middle-school is a fact and I believe the only way to arrest this problem is to educate our children with the real threat that drugs can kill. Thank you for allowing my child to talk about this among his peers and affirming that NO is an acceptable answer to just another of the situations in which he shall be faced with in this very "hurry up and grow up" society we now live in.
Table 15. ANCOVA of Change in Peer Resistance By Treatment Group and Type of School.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>DARE Students</th>
<th>Non-DARE Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>34.4</td>
<td>39.2</td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>35.8</td>
<td>42.1</td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>27.6</td>
<td>38.4</td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>36.0</td>
<td>42.3</td>
</tr>
</tbody>
</table>

1 Scale scores after exponential transformation to compensate for skewed values.

ANALYSIS OF COVARIANCE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Score</td>
<td>70598</td>
<td>1</td>
<td>70598</td>
<td>280.1</td>
<td>0.00</td>
</tr>
<tr>
<td>Main Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE</td>
<td>4265</td>
<td>1</td>
<td>4265</td>
<td>16.9</td>
<td>0.00</td>
</tr>
<tr>
<td>Type of School</td>
<td>150</td>
<td>3</td>
<td>50</td>
<td>0.2</td>
<td>0.90</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE and Type of School</td>
<td>1088</td>
<td>3</td>
<td>363</td>
<td>1.4</td>
<td>0.23</td>
</tr>
<tr>
<td>Error</td>
<td>194314</td>
<td>771</td>
<td>252</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 16. Attitude Toward Drugs by Group and Time (all Schools).

<table>
<thead>
<tr>
<th>Attitude Toward Drugs Items</th>
<th>Score</th>
<th>DARE Students (N=451)</th>
<th>Non-DARE Students (N=332)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Pretest</td>
</tr>
<tr>
<td>1. Its okay to drink a little beer.</td>
<td>X</td>
<td></td>
<td>16%</td>
</tr>
<tr>
<td>2. There's nothing wrong with smoking cigarettes as long as you don't smoke too many.</td>
<td>X</td>
<td></td>
<td>23%</td>
</tr>
<tr>
<td>3. Kids who take drugs seem more grown up.</td>
<td>X</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>4. Kids who smoke cigarettes regularly can quit anytime they want.</td>
<td>X</td>
<td></td>
<td>21%</td>
</tr>
<tr>
<td>5. It is okay for kids to drink alcohol as long as they quit before it becomes a habit.</td>
<td>X</td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>6. Teenager who drink alcohol are more grown up.</td>
<td>X</td>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>7. Kids who use drugs have more friends.</td>
<td>X</td>
<td></td>
<td>6%</td>
</tr>
<tr>
<td>8. If I smoked crack I would become addicted.</td>
<td>X</td>
<td></td>
<td>21%</td>
</tr>
<tr>
<td>9. LSD can make people so crazy they think they can fly.</td>
<td>X</td>
<td></td>
<td>9%</td>
</tr>
<tr>
<td>10. People who smoke marijuana might have deformed children.</td>
<td>X</td>
<td></td>
<td>8%</td>
</tr>
</tbody>
</table>

* significant difference at .05 level between pre- and posttest scores (McNemar test).
** significant difference at .01 level between pre- and posttest scores (McNemar test).
@ significant difference in the opposite direction predicted.
Trooper Mike Klein and Gary Heck, Kentucky Department of Education, hand out graduation certificates in Scott County.

Trooper LaDonna Johnson goes one on one to deliver the DARE message.

Trooper Don Pillow and one of the 8,000 Daviess County DARE students.
Table 17. Change in Attitude Toward Drugs Between Pre- and Posttest Within Treatments by Type of School.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>DARE Students</th>
<th>Non-DARE Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significance</td>
<td>(N)</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>--</td>
<td>(105)</td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>--</td>
<td>(76)</td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>**</td>
<td>(126)</td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>--</td>
<td>(144)</td>
</tr>
</tbody>
</table>

* significant difference at .05 level between pre- and posttest scores, Wilcoxon Matched-Pairs Signed-Ranks Test, one-tail test.
** significant difference at .01 level between pre- and posttest scores, Wilcoxon Matched-Pairs Signed-Ranks Test, one-tail test.

Change in Attitude Toward Drugs

Table 16 shows the eleven attitude questions used in the attitude toward drugs and alcohol scale. Unlike the previous scales, the hypothesis being tested is that the DARE program will lead to lower scale scores, or a less positive attitude or orientation toward the use of drugs and alcohol. Examination of the pretest responses in both the experimental and control groups shows that the vast majority of students began the semester with a pre-existing negative posture toward drugs and alcohol. For example, only about one in six fifth graders (16 percent) said it was "okay to drink a little beer." Only one in five students thought that "kids who take drugs seem more grown up." Only 6 percent of the DARE subjects started the program thinking that "kids who use drugs have more friends."

Was the DARE curriculum successful in producing even more negative attitudes among the fifth graders? Table 16 implies a tentative "yes." Students in the DARE program reported less favorable attitudes during the posttest session on all but one of the statements. Four of the percentage changes in the experimental group were statistically significant in the predicted direction.

Change in mean attitude scale scores among the groups according to type of school are tested in Table 17. In the experimental group, rural, parochial, and suburban schools did not show a significant decline in attitude toward drugs and alcohol. A statistically significant decline was recorded only among DARE students in the inner-city program. None of the control group schools changed during the course of the semester.

Table 18 further investigates the attitude changes among students by first comparing the mean scores of students between the pretest and the posttest. More negative attitudes (declining scores) are shown by all of the experimental group categories. Change in scores among the four types of schools in the control group was erratic with a movement toward less favorable attitudes in the parochial schools and a more favorable attitude among the suburban control group students.

The analysis of variance results show that the DARE program did produce more negative attitudes toward drugs when the DARE students are combined regardless of type of school. Attitudes toward drugs did not vary significantly among types of school nor did the type of school influence the overall effectiveness of the DARE curriculum in producing more negative attitudes.
Table 18. **ANCOVA of Change in Attitude Toward Drugs By Treatment Group and Type of School.**

<table>
<thead>
<tr>
<th>Type of School</th>
<th>DARE Students</th>
<th></th>
<th>Non-DARE Students</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Rural Schools</td>
<td>4.1</td>
<td>3.1</td>
<td>5.0</td>
<td>4.7</td>
</tr>
<tr>
<td>Parochial Schools</td>
<td>5.8</td>
<td>3.2</td>
<td>4.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Inner-city Schools</td>
<td>5.2</td>
<td>3.1</td>
<td>6.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Suburban Schools</td>
<td>3.2</td>
<td>2.5</td>
<td>2.0</td>
<td>4.6</td>
</tr>
</tbody>
</table>

1 Scale scores after exponential transformation to compensate for skewed values.

**ANALYSIS OF COVARIANCE**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Score</td>
<td>6267</td>
<td>1</td>
<td>6267</td>
<td>106.9</td>
<td>0.00</td>
</tr>
<tr>
<td>Main Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE</td>
<td>425</td>
<td>1</td>
<td>425</td>
<td>7.2</td>
<td>0.00</td>
</tr>
<tr>
<td>Type of School</td>
<td>314</td>
<td>3</td>
<td>105</td>
<td>1.8</td>
<td>0.15</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DARE and Type of School</td>
<td>167</td>
<td>3</td>
<td>56</td>
<td>0.9</td>
<td>0.42</td>
</tr>
<tr>
<td>Error</td>
<td>45270</td>
<td>772</td>
<td>58</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Teacher/Principal Evaluation

This section of the preliminary report contains the quantitative results of an evaluation questionnaire sent to the teachers and administrators in fifty-two schools targeted in the Fall and Spring semesters. The results reflect the opinions of 470 teachers and administrators from the 46 schools which responded to the survey. Statistical tables reflecting these responses may be found in Appendix C, Supplemental Statistical Tables, and the instrument itself may be found in Appendix D, Survey Instruments.

Overall, the responses of teachers and principals to the DARE program were highly positive in both quantitative assessments and in comments solicited on the survey questionnaire (see Appendix A, Written Teacher Comments). Three major areas of concern to teachers were examined. These included 1) the perceived effects of the DARE program on students; 2) the impact of DARE on the total school environment; and 3) an assessment of the quality and impact of DARE as delivered by State Troopers.

Findings

Figure 2 shows that in eleven of twelve concerns addressed, teachers and principals perceived overwhelming positive benefits to students as a result of the DARE program. Nearly 95 percent agreed that project DARE made a positive impression on children in class and the school.

While the data indicated some ambivalence as to whether the program caused an overall improvement in student behavior, it showed an extremely positive...
Figure 2. Teacher Evaluation of the Effects of DARE on Students.

- More Responsible
- Willing to Discuss
- Positive to Police
- Aware of Consequences
- Likely to say "No"
- Deal with Drugs
- More Peer Resistant
- Negative about Drugs
- More Self-Esteem
- Improved Behavior
- Knowledge Carry-Over
- Positive Impression

Legend:
- □ Strongly Disagree
- ■ Disagree
- ○ Undecided
- ● Agree
- □ Strongly Agree
perception of the modification of childrens behavior and attitudes addressed by the DARE curriculum. Teachers and principals agreed that as a result of the DARE program students 1) developed a more positive attitude toward law enforcement (94.6 percent); 2) are better equipped to deal with drug-oriented situations (82.3 percent); 3) are better able to resist peer pressure (61.9 percent); 4) have more negative attitudes about drug use (83.2 percent); 5) have shown an increase in self-esteem (54.9 percent); and 6) are more likely to say “no” to negative behavior (81.6 percent); 7) are more aware of the consequences of drug use (82.6 percent); 8) carried over DARE knowledge to other subjects (77.2 percent); and 9) are more willing to discuss problems relating to drugs (74.7 percent).

Figure 3 shows the respondents’ perceptions of the DARE program on the total school environment. As in Figure 2, teachers and principals showed ambivalence regarding the positive effects of the program on the general disciplinary atmosphere of the school. Only 20 percent agreed that the program had a positive effect on disciplinary problems, while 20.6 percent responded negatively. Almost 60 percent of teachers and administrators were undecided on this question.

In other areas, the respondents saw positive benefits to the school environment derived from the delivery of the DARE program. A majority (76.2 percent) agreed that school staff awareness of drug abuse problems and ways to deal with them were increased. Outside involvement of the DARE officer (parent involvement, presentations in other classes, or recess and lunch with students, among other activities) was a valuable addition to the program. Fully 66.6 percent expressed the view that the overall learning
Figure 3. Teacher Evaluation of DARE on the School Environment.

Comments of teachers on . . .

"Would classroom teachers have obtained the same results?"

Perhaps. But I think the children were more interested and attentive with the police officer's presentation. I think they would be greatly disappointed if a teacher taught it next year as opposed to an officer.

Teachers would have obtained more positive results because they are trained to teach.

No -- I feel the officer was better informed and more knowledgeable on the subject than myself.

No. I feel the officer gains attention from the students the minute (s)he walks into the classroom. The students are eager to participate in the DARE program.

No, the students are used to us every day (just like their Moms) -- what do we know about drug abuse? Whereas the State policeman has been there!

No. (S)he knows what (s)he's talking about. (S)he sees it and lives it everyday. Most teachers are too naive (including me!)

I do not think classroom teachers could have obtained the same results as police officers. Students had great respect for the officer in uniform, his/her experience, and the self-esteem (s)he exemplified. It provided students the opportunity of knowing the officer is a real friend who cares about them; as opposed to the officer who comes to the door with "bad news" for their home.

No! The students have a different feeling about police officers than they do teachers. Students are not used to being around a state policeman. In my classroom the children were always very attentive. They weren't afraid of him, they were very respectful. They all liked him/her very much.

No! The police officer in uniform brings in total changed atmosphere in the classroom. (S)he also is an outside source whom children tend to listen to more. The police officer also creates an atmosphere of trust with the students - - thus if they ever needed help in the community they could turn to an officer.
Figure 4. Teacher Opinions of DARE.

- Parents Like Dare
- Taught Statewide
- Like Dare Taught
- I Support Dare

- Recommends Dare
- Teachers
- Approp. for Police

Legend:
- Strongly Agree
- Agree
- Undecided
- Disagree
- Strongly Disagree

Legend:
- No
- Qual. No
- Undecided
- Qual. Yes
- Yes
Figure 5. Parent Ratings of Change of Children’s Attitudes During DARE Semester and Opinions About Drugs.

Rating of Child’s Attitudes

- MORE SELF-ASSURED
- INCREASED MATURITY
- POSITIVE STATEMENTS
- NEGATIVE ATTITUDES
- INCREASED UNDERSTAND

Percent "AGREE"

Parental Attitudes-About Drugs

- TEACH DRUG ABUSE
- PARENTS NOT ABLE
- KIDS NOT EXPOSED
- ABUSE NOT WIDESPREAD

Percent "YES"
environment was enhanced by having the DARE program presented during the Fall semester.

Specific opinions of teachers and principals are shown in Figure 4. As the figure indicates, teachers showed an overwhelming composite supportive posture toward the DARE program. Most (79.6 percent) indicated that they saw parental support for the program. They also showed strong agreement (92.5 percent) for the delivery of the DARE program at a statewide level. With the levels of support by teachers and principals it should come as no surprise that over 97 percent of the teachers said they personally liked the DARE program, and that they "liked" the fact that DARE was in their school (97 percent).

Figure 4 also shows that 98 percent of the teachers and principals would recommend the DARE program to other school systems. Additionally, respondents appreciated the fact the police delivered the program. Most (90.6 percent) agreed that the classroom teacher should not be central in the delivery of the DARE program.

In sum, the data collected for the teacher/principal evaluation show remarkably high levels of support. As an important constituency, these educational professionals have expressed satisfaction with the program and therefore may be counted on for continued support in later delivery efforts.

The Parent Survey

The third component of the Fall semester DARE evaluation was a survey of the parents of the exit grade students in both the experimental and control group. This instrument was designed to collect two major types of information. First, parents were asked to assess any drug related behavioral or attitudinal changes in their children during the Fall term. Second, the attitudes of parents toward drug education programs such as DARE were examined.

Findings

The quantified results of the survey (Table C2 in Appendix C: Supplemental Statistical Tables) as well as the qualitative, written remarks of parents (Appendix B: Written Parent Comments) showed few differences between the parents of children in the control group as opposed to those of parents of experimental group participants. Two reasons can be cited for this similarity of attitude. First, parents have a tendency to view the actions, or more specifically to report the behavior of their child, in a socially acceptable light.

Therefore, the positive responses of both experimental and control group parents (see Figure 5) regarding their children demonstrated positive changes. Second, the instrument itself was mailed to the control group parents at the beginning of the second semester DARE program in which their children were now participants. This fact could account for a contamination factor of unknown proportions.

The results of the survey show that over 90 percent of the 360 parents responding show positive changes in their childrens' attitudes, self-concept, knowledge of drugs and attitudes toward law enforcement. Over 98 percent also indicated their children had shown an increased maturity about the hazards of alcohol and drug abuse. These results show at least a heightened sensitivity on the part of parents to the relationship between the factors of central concern addressed by the DARE program.

Parents responding did indicate that the drug problem, even at the elementary level, was indeed serious. Only 13.2 percent believed that children did not get exposed to drugs until they are in high school. Yet, over 90 percent agreed that they as parents could do something about their childrens' use of drugs. Therefore, it might be said that parents were aware of the potential for drug abuse in elementary school children and that they were willing to do their parts in combatting the problem.

There was virtual unanimity among parents regarding the provision of drug education. Over 99 percent of those responding indicated that drug abuse programs should be taught in all elementary schools. There was less unanimity, however, regarding parents' views of who would be best qualified to conduct drug education programs (see Table C3: Appendix C). Parents were equally split between State Police and Drug Educators in terms of who should teach drug education programs (32 percent each). Over 18 percent of selections indicated that local police should conduct drug education programs, while the balance selected classroom teachers (8.3 percent) or reformed drug abusers (9.4 percent).

In sum, the responses elicited from the mailed questionnaire to parents provided no tangible differences between the experimental and control group parents. However, all parents showed an awareness for potential for drug abuse among young children, and a need for drug education programs in elementary schools.
Figure 6. Opinion of Parents on "Who Is Best Qualified to Conduct a Drug Abuse Programs?"

Comments of Teachers on . . .

"Is it more appropriate for a local police officer to teach DARE?"

I think either officer who is trained to teach DARE would be okay.

I would rather see a local police officer. The children might relate better with an officer from their own locality.

No -- children may be too familiar with local authority but ... this could be yes also. Children may feel more comfortable with a familiar face.

I have dealt with both local and state police officers in the classroom and feel that either one would do an excellent job.

Yes. They would get to know the officer in their community this way.

Yes. The local officer is more familiar with the local "hangouts" and can create a more realistic imaginary situation.

No, I believe it is almost more important for a state trooper to teach this program. Not, to say, that the local police would not do a good job, but I believe state representation is more forceful for both, teacher and student.

Yes. The students would be more at ease around a local person, and may know them. They would make more of an impact with them.

As long as the officer has had the DARE training I don't believe it is real important who teaches it in a large community. In a small community where many of the children may already know some of the local police I think it would be better to have a state policeman teach the class.

Not necessarily. The only reason that it may be more appropriate is for the convenience. It also may be nice if both a local and a state police officer gave one presentation. The local police officer could talk only about the community they live in.
Appendix A

Written Teacher Comments
Written Teacher Comments

Even my 4 year old quoted his 9 year old brother. When my husband and I were making comments on pregnancy and drugs, the little one said, "Don't do drugs!"

Kindergarten.

Children get to keep their DARE books with info in it - T-shirts [and] trophies help even as reminders as children grow older. They have these to fall back on if they are tempted to try drugs even once.

5th grade.

I really appreciate having the Program the first semester of the school year because the DARE's objective, techniques, and other parts of the curriculum can be reinforced throughout the remaining months of the school year. I feel this will have more lasting impressions than if it were Semester II, and I could have no follow-up contacts with the students during a summer.

I feel the DARE Notebooks, graduation exercises with diploma, etc. is of great importance to students. They treasure these, and so do the parents. Many parents expressed their appreciation of it for their child. They could see great advantages in it.

5th grade.

Trooper X did an excellent job while here, but (s)he didn't get to spend a lot of time with our grade level.

3rd grade.

I feel that the downfall of our nation will be drug and alcohol abuse. I feel anything that we can do to enlighten parents and students will only help us in the future.

Also, I feel these kids need a friend. One that has a head on their shoulders and can help them think clearly.

5th/6th grade.

Trooper X was an excellent spokesperson for the DARE Program. The kids loved X and (s)he had good rapport with the teachers.

4th grade.

Trooper X did an outstanding job with the DARE program, and I am looking forward to having X back next year.

Administrator.
My students enjoyed this program and really looked forward to the class.
7th/8th grade.

Trooper X did an excellent job teaching my class about drugs, etc. It was a very good experience for all of us.
3rd/4th grade.

The students really enjoyed the visits and the program itself. They still talk about it.
Kindergarten.

Trooper X did a great job. The children really looked forward to the sessions. I wish (s)he had had time for more than 4 sessions with my students.
1st grade.

It's great!
4th grade.

Keep the program. It's working!
2nd grade.

I have observed a definite excitement and commitment from all the students.
K-5th grades.

Keep up the good work!
Kindergarten.

For 45 minutes per week my fifth grade class was totally involved in what Officer X had to say and they believed every word!
5th grade.

I hope the DARE program does continue.
5th grade.

Please continue next year.
2nd grade.

Please continue the program.
3rd grade.

Please continue.
2nd grade.

I hope this program is continued.
3rd grade.

It would be beneficial if the lower grades K-3 had a longer running program.
1st grade.

This is one of the best programs in education. Too bad it wasn't started five or six years ago. Money well spent. Trooper X did an excellent job, very professional and dedicated.
5th grade.

The police officer that taught DARE to my students was very professional and had good rapport with students. They looked forward to the visits. Their ability to remember what Trooper X taught them impressed me.
Kindergarten.

I feel that this has been one of the best outside programs we have had at school.
2nd grade.

Please keep DARE program in school!
3rd grade.

I strongly support this program. It is a great asset to our school system!
2nd grade.

The officer, Trooper X, was great with the children. Even the ones who were "afraid" of X in beginning really felt as if (s)he was their friend by the end of the program.
5th grade.

Trooper X did an excellent job in our school system. (S)he promoted discussions and developed a good relationship with the students.
4th grade.

Great Program! Worthwhile!
3rd grade.

I strongly believe that DARE is an effective Drug Prevention Program.
1st grade.

Super job done by our officer.
4th grade.

A fine program. I hope it can be implemented in the future.
2nd grade.

Excellent program, Trooper X had terrific rapport with the students.
Kindergarten.

Office we had was very good with the classes, interested, concerned and helpful. (S)he projected a different image than most images children have of the State Police.
2nd grade.

Trooper X did an outstanding job while at our school. (S)he was well received and respected. I also have attended meetings in the community where X spoke, promoting DARE, or dealt with parents concerned with their childrens well being.
1st-6th grades/LD.

Project DARE is an excellent program. It was very motivational and gave the students something to think about and be aware of.
Administrator.

Trooper X was super in his/her knowledge. I feel the program would not have been as successful as it was without his/her input.
5th grade.

Great program -- Trooper X did an excellent job.
3rd grade.

Its a good project. I hope it will become a part of all schools in the state.
3rd grade.
The officer working with Project DARE was excellent. I believe (s)he had a great impact on the outcome of the success of the program.
2nd grade.

I would like to continue the program. However, I would like to have the option of condensing curriculum (compacting) and reducing the time to one hour every other week for 6 sessions. The type of student I teach would be able to handle this format.
5th grade, Special Program.

It's an excellent program. My 5-6 year old students looked forward to the trooper's visits to our classroom (as well as our school). They listened intently and have remembered much of the material introduced to them. Kindergarten.

I was very pleased to have had the opportunity of having the DARE program in our school. It is indeed my hope that it will be continued in future years and expanded to include all grade levels.
Administrator.

I hope the DARE program will continue. I think it's very beneficial for the students.
5th grade.

It would have been better if the program would have been more regular! The weeks off Trooper X missed upset the kids!
2nd grade.

It is certainly an asset to the school.
Administrator.

Not enough time was spent with my grade -- missed sessions were not made up and we only had 2 sessions.
3rd grade.

I teach 2nd grade. The program was very limited in my class and I am not sure that it did make a difference in the students' ability to say no and feel good about themselves. But with continuance of the program each year and with reinforcement each year I do think it will make a difference. Thanks!
2nd grade.

I feel the program is very good. I feel with first grade students it should be used the second semester, because at times my students' attention spans were too short to follow what the officer was saying.
1st grade.

This is an outstanding program. School systems are foolish if they don't accept this program. It provides so much for the curriculum and enhances the student's self image as well as their feeling about police officials. It has been a privilege to have this program in my classroom.

My one concern is that as the teacher of a split class I was unable to observe the teaching of the program since I had to supervise my other students. I truly felt cheated!
4th/5th grade.

Thank you for your concern -- and sharing valuable talents.
1st grade.

Please continue this program for each grade every year.
2nd/3rd grade.

I did not get to attend any of the lessons but the feedback I received from my students was really positive.
4th/5th grade.
Policemen must be made aware that they have a commitment to be at the school at a certain time. The children were very disappointed when they didn't show at the last minute or left to go to a meeting.

3rd grade.

Our teacher related exceptionally well to the students and the faculty. (s)he was very sociable and well-liked by the students and staff of our school.

3rd grade.

I would like to see maybe more structure to the program on the upper levels. By this I mean more time spent on the dangers of drugs and how to say no. There has been a lot of time spent already on positive self concepts. I feel at this age perhaps we need to hit them a little harder with the facts.

4th grade.

Offer community courses.

5th grade.

The DARE program is but one of the many steps that we as teachers and parents need to take to enable our children to make wiser decisions. This program is important in that the students are taught ways to resist that ever present and potent 'peer pressure.' This program was great!

Administrator.

The idea behind the DARE is great, however my students didn't benefit from the DARE Program because: (1) They only met with DARE officer 2 20-minute sessions and (2) one of these sessions was with a group of 50 other children.

Kindergarten.

Officer X did an excellent job and was well prepared.

4th/5th grade.

Excellent program.

Special Program.

I don't think the positive aspects of the program will be evident until later when the children face the drug and alcohol problems from more of their peers.

5th grade.

My students really enjoyed the program. If it keeps any of them from getting involved in drugs, it was well worth it!

4th/5th grade, Special Ed.

Trooper X did a wonderful job. My second graders listened and believed every word (s)he said. They felt comfortable enough to talk about problems they had encountered. I feel (s)he made a positive impression on my students.

2nd grade.

I think police officers need to remember to be on time and be prepared for their lessons.

4th grade.

I think it is vital for the DARE officer to be prepared for handling discipline within the classroom as (s)he is teaching. Without the control, much of the time is wasted.

4th grade.

It was a great program. Trooper X did a fantastic job working with the students as well as relating to them. My thanks to him/her.

3rd grade.

I strongly believe in this program. I think there should be more follow-up in the lower elementary grades.

1st grade.

I strongly support the DARE program.

4th grade.

As a classroom teacher, I was given the opportunity to observe the total program from the very start. From this observation I saw a great many good results from the program. The students' feedback was very positive. They could relate to the person in charge, they were very motivated by the well-planned structure of this program. Very Valuable Program!!!

5th Grade.

This is the best program I have seen in a long time.

Administrator.

Trooper X did a wonderful job. (s)he made a definite impact on our students. I feel (s)he changed a lot of students' attitudes towards state police officers.

Head Start.

I think the state police officer that did the DARE program was excellent. The children were enthused and actually loved the program.

5th grade.

Officer X did an extremely good job! Students learned many beneficial things from him/her.

1st grade.

Our program did not last long enough. It was a good introduction but should have been for the entire semester.

4th grade.

I cannot stress too much the importance of the police officer in the classroom. The children now view the officer and thus the state police as a source of help rather than a source of punishment. His/her ability to relate personal experiences established his/her authority that a classroom teacher would not have. Trooper X could not be excelled. I only hope other officers can meet his/her standards. This program should become an integral part of Kentucky schools.

5th grade.
It will probably come with experience, but officers should have some knowledge of how to keep children on the subject and not let them get off track and waste valuable time.

1st/2nd grade.

The state policeman who taught our DARE program did an excellent job. The students responded to his/her lessons and discussed things they learned during the day. I would like to see this program continued in the Elementary [School] and then also give the Middle School and High School the opportunity to be a part of this program.

3rd grade.

Good programs, need good teaching Officers.

4th grade.

I felt this program was geared too high for second grade. If more materials had been available on their grade level the children would have gotten much more out of this.

2nd grade.

I would like to see DARE become a year long program.

3rd grade.

I have enjoyed the program and so have the students.

1st grade.

Please come back to my fifth grades as I have inherited a group of fourth graders who will need it.

5th grade.

Trooper X did an outstanding job! The material was presented in an interesting and motivational manner. I do feel that the program would have had more effect on student behavior, classroom environment, etc. if the officer were in the classroom more. At the primary level we only had 4 30 minute sessions.

2nd grade.

This program could be valuable if the person (officer) in charge acts in a professional manner with students and staff.

4th grade.

Officers need more training in techniques of dealing with small children.

1st grade.

The police officer needs to use visuals, not just the books. Be On Time.

Kindergarten.

The officer responsible for DARE was absent 2/5 of our class meetings.

4th grade.

My comment comes as a suggestion. The teacher being in the classroom during DARE class may be necessary because of school law. If so, I understand. It does, however, take away from the officers power. The officer would be much more effective if (s)he used a stiffer disciplinary effort without the teacher present. Kids expect the "tough guy" and it would help to practice it. Just my viewpoint, and I don't mind being in class during DARE.

5th grade.

Trooper X did an excellent job instructing the children!

2nd/3rd/4th grade.

Trooper X did an outstanding job with my students. They just love him/her!

4th grade.

Use of A-V material.

3rd grade.

Good program!

2nd grade.

We have no way of knowing how effective the program is, but, I have found that the more information you receive on any given subject helps you to make more intelligent choices.

4th/5th grades.

I feel like the DARE program is excellent! The children really enjoyed participating. I wish 4th grade could have had more time with the program. Please include us in time next year, as fifth grade had this year! I think it's necessary for fourth graders!

4th grade.

GREAT PROGRAM!

5th grade.

More time spent with officer would be helpful. First grades should be taught individually by class instead of two classes together.

1st grade.

May we always have DARE and more drug programs and self esteem programs.

2nd grade.

Excellent program. Continue it and involve more grades.

3rd grade.

(Officer) only met with our classes 3 times -- I think it should be more -- if (s)he misses because of illness or any other reason, that time should be made up.

1st grade.

It is a wonderful program. The children loved it and the rapport between the officer and the children and teachers was great!

Special Program.

DARE visits were sporadic.

4th grade.
More visual aids; more "what if" situations, role playing; more visitors.
1st-5th grades/Special Program.

The police officer assigned to us was late many times because of the distance (s)he travelled. With only three hours, we find it necessary to stick to our schedules as strictly as possible.
Kindergarten.

More time with 1st graders please!
1st grade.

We often had to change our daily schedule when the officer was late. It would help if (s)he were able to keep on schedule. There were 50 children in each group -- working with 25 at a time would be better -- it is too distracting to work with a large group.
Kindergarten.

I would have really gained a lot of important things had I been exposed to the DARE program when I was younger. Children today NEED the DARE program.

The result my not be seen for many years, but they will definitely be evident. Schools need more positive programs such as DARE! I vote to keep it up!!
6th grade.

I would like to see the DARE program extended to include more grades. It is very difficult to evaluate this program when the trooper did not get to visit my classroom regularly. I do know that my class was very impressed with the two visits from the trooper.
5th grade.

Trooper X was superb.
5th grade.

As always time or lack of it -- feeling rushed -- one person spread thin to make any relationship other than 5th graders in a school this size.
Administration.

I personally feel this program has made a great impact on my classroom. All the students have participated, all are enthused, and all have learned. I see a change in attitude about drugs.
5th grade.

Children today know fewer and fewer restraints. Having the officer here regularly may have made some impression on them. Children are taking less and less responsibility for their own actions. Teachers all work to change this, but having a fresh face back up with their own program certainly can't hurt.
2nd grade.

My classroom had only 3 DARE lessons thus their experience was very limited.
3rd grade.

Keep the program going! We need to work at this level to make our young people aware of this critical situation.
Administration.

Thanks!
4th grade.

This was a good program. I would like to see it spread over a longer period of time.
1st grade.

This program is very valuable. Under no circumstances should it be discontinued. It needs to be expanded!
K-6th Grade, LD.

The DARE officer was late quite often. This meant our time was greatly reduced. Following a set schedule is very important in school. The children were disappointed when (s)he didn't show or was late and we hadn't known about it ahead of time.
Special Programs.

It is important for the DARE representatives to be prompt and consistent. Classrooms have specific routines and schedules and it is important to the children that these schedules are maintained when possible. It is also important that the children develop a trust in and can rely on a police officer.
Kindergarten.

I would like to have had a schedule of what was to be discussed each visit. Conflict of schedules sometimes.
5th grade.

Would like to see DARE used in all grades next year.
1st grade.

Our officer made some teachers feel very uncomfortable at times. I feel as though this needs to be corrected.
2nd grade.

Irregular scheduling.
2nd/4th grade, Remedial.

Trooper X was very professional. (S)he established good rapport with the students. A very good job.
6th grade.

Trooper X is very professional and has done an excellent job.
6th grade.

Very professional! Did a great job!!
4th/5th grade.

I believe in the program and feel they are doing a great job.
3rd grade.
Trooper X works very well with the children. They like and respect him/her.

I like the idea of a state trooper coming into the classroom to demonstrate a friendly, positive, and caring side and not someone to fear. Many children have that attitude from an early age. Trooper X was an excellent role model and did a super job teaching. 3rd grade.

My classes really looked forward to the arrival of Trooper X. They didn’t have the drug class until 1:00 but they started looking for him/her that morning. They loved him/her.

Definitely a very interesting and fulfilling program. It is obviously very much needed in our present society. 6th grade.

I especially liked the playground experience which the students had with the Trooper. They like having adults play with them and I think that they will have a better attitude toward all police officers because of the time spent together during recess and in the classroom. 3rd grade.

Good program—Keep it up! Kindergarten.

A very good program. 4th grade.

I like the philosophy, content and structure of this program. It fits this age of student. The program should be continued.

I feel that DARE is a good program. However, it does not begin early enough to truly be effective. By the time these students are in the 5th grade they will have or may be attempting to experiment with drugs and alcohol. I feel that there should be a program such as DARE as early as Kindergarten. 3rd grade.

We were not the class involved in this program but the state police officer did an marvelous presentation with the younger children. They really related to him/her and what (s)he was talking about.

We are grateful to everyone that had apart in preparing the DARE program and including our Catholic Schools in the program.

Could be less visits—2 or 3 would be enough. 1st grade.

It’s an excellent program. Continue it with a trooper.

1st grade.
Thanks.
2nd/3rd grades.

I like the idea for the emphasis to be put on 5th grade. 4th grade has "Just Say No."
4th grade.

It was informal and the class felt they got to know the officer.
2nd/3rd grades.

Hope to see more emphasis (on drugs) in lower grades. Cannot start too soon.
1st/2nd grade.

Good program.
Administration.

The children have greatly benefitted from this program. There is so much material to cover and so little time. I wish DARE could be a yearly, instead of semester, program.
5th grade.

This program was enjoyed by me as well as by my students...I was pleased to watch them learn how to stand up to situations they may soon have to face.
1st/2nd grade.

I think it was a good program and the children got the feeling they can trust and talk to an officer.
5th grade.

The officer was great, but the information included a lot of what we already teach. Maybe it could go into more detail.
2nd grade.

Trooper X took a personal interest in the students and was very positive in his/her approach in teaching "drug education."
4th grade.

Trooper X has done an excellent job. The children love him/her and were very attentive. (S)he has definitely made an impression on them.
1st grade.

I wish more time could be spent with 4th graders. There is much more that could be done with them.
4th grade.

My 3rd grade students loved the DARE program and the trooper who taught it. They learned a lot and I feel this will stick with them.
3rd grade.

If every officer has the success that Trooper X had here DARE will be a resounding success. I just wish we had had him/her for a much more intensive program and a longer time.
1st grade.

Our state policeman was very effective and did an excellent job. The children enjoyed his/her visits tremendously.
1st grade.

Officer X had good discipline and the children were always eager for his/her class and program.
2nd grade.

Trooper X used good teaching skills when doing the weekly DARE programs.
6th grade.

They learn things that are not just related or applied to drugs but to their total self, such a building self-esteem.
5th grade.

We really enjoyed Trooper X. (S)he has really established a good rapport with the students. The fact that (s)he is willing to go out on the playground and be with them at play says a lot about his/her involvement in the DARE program. (S)he wants the kids to be free with him/her to discuss problems they may have.
4th/5th grade.
Appendix B

Written Parent Comments
Written Parent Comments

The DARE program is a great program. My son really liked Trooper X and the DARE program. Thanks alot.

I definitely feel that the DARE Program has produced a very positive attitude on our child and I think it is very important to reach these young children so that maybe the peer pressure in the future will be not to use drugs. I hope there can be another program for [name] next year.

Trooper X did a fantastic job. I assume (s)he has had special drug education as well as experience in teaching children.

As a parent of two, I would like to take this opportunity to thank all those responsible for the DARE program. Trooper X became a friend to my children. They talk about him/her frequently. When we are out traveling they are always watching for his/her cruiser.

I would like to say I think [name] has learned alot from this program and I think he will share it with others and also remember this always. I hope they keep this program active throughout his school years. Thanks again.

[Name] enjoyed the Drug Abuse Program very much. He’s proud to wear his T-shirt and has his certificate hanging up in his room in a frame. I feel as though this will help him in the future as far as reminding him of what he did learn and hopefully when he looks at it, it will always give him the courage to say no and stand up for what he knows is right. I appreciate the time that has been taken for my son. I also have a daughter in second grade and I hope this program continues so that she also will be able to participate. Thank you.

I’m really pleased that our school has an opportunity to participate in the program.

We think the DARE program should certainly be continued. [Name] has really learned a lot this year and it also gave her a new respect for the police in general, and especially Officer X.

I was much impressed with this program and believe it should have lasted through the whole school year.
...I want to tell you that [name] has shown great concern over this matter and really enjoys the program. In the 4th grade she was in "Just Say No." I believe in your programs and want to say thank you for your concern for today's children.

The DARE program at [School] was very impressive. The children were very attentive. They all loved Trooper X. Thank you.

Your program is great! I think it is changing the course of our children's future toward a brighter, safer future!!

The program at [School] was a success because of the quality people involved. Trooper X was excellent and had the support of Thruston's teachers and well as parents.

I'm really pleased with the drug abuse program. It has really done [name] good; he has talked about it alot. He has made a sign for his bedroom door that reads "Say No To Drugs".

This was a tremendous program. [Name] has really been influenced by Trooper X. I'm so grateful that she will be exposed to this again next year at the middle school.

I appreciate the work Trooper X did; (s)he should be well recommended. Thank you.

Thank you for exposing my children to this program.

Thank you for the work you are doing!

Thank you for being concerned about [name]. I feel she is a very intelligent child. She asks questions about anything she doesn't feel sure about. I'm glad there's people who still care. Thank you.

I think this is an excellent program!! Thanks so much. I'm not aware of any drug problems in elementary schools in our area even though there may be some. Educating the children now and at early ages will help prevent it.

Very pleased with drug education!!

[Name] has a very positive reaction to the DARE program. She and all of her class enjoyed Trooper X. She also seems to have become more mature and self confident. This is a very good program.

I was very pleased when [name] informed me that there was a State Police Officer talking to them about drug abuse. I think the Police Officer did a good job.

I was a helper in the "Just Say No" program last year and I feel that both programs are worthwhile and should stay in our school system.

Note: stiffer penalties need to be imposed on Drug Abusers (Pushers) even if parents of minors receive punishment for neglect.

I feel that this program was a great opportunity for the children to see the State Police in a teaching role. Also, it gave my daughter a better understanding of the role of the State Police in the community. My husband and I were very impressed with the program and pleased with the effect it had on our daughter.

My children particularly liked the officer they dealt with.

The fourth grade class went to the Just Say No Rally. They didn't get much out of it. It has to be on the age level for them to understand. They are getting alot out of it right now.

I'm very proud of our school systems in educating the children about drugs. ...I think it is great.

My [name] really took this program to heart. I don't think she will ever fool with drugs or alcohol. Thank you very much.

As a nurse, I have seen the harmful effects of drugs. I am very impressed with your DARE program and sincerely hope this program will receive the funding and support required. Not only was my 5th grader impressed, but my 2nd and 1st Graders were equally impressed by the "friendly" policeman. I believe that now more than any other time, children need to be exposed in a non-threatening manner to the policemen whose dedication is much to be admired. Parents are telling little children "you'd better be good or a policeman will arrest you," just as they tell them "be good or the nurse will give you a shot." The thoughts of my children being exposed to drugs is terrifying to me. I know that drug abuse in our county middle-school is a fact and I believe the only way to arrest this problem is to educate our children with the real threat that drugs can kill. Thank you for allowing my child to talk about this among his peers and affirming that NO is an acceptable answer to just another of the situations in which he shall be faced with in this very "hurry up and grow up" society we now live in.
I also have a 13 year old in the Middle School and he was talking the other day about the program and he made the statement that a lot of his friends said they are making such a big deal about the drugs that is almost makes you want to try it. I know he wasn't [I hope] but maybe the older children need a different approach to the program. I feel it's great for the younger ones; both my 3rd and 5th graders are really afraid of drugs and it comes from Trooper X and when they see him/her they speak and (s)he does also. I like the idea of children learning that the police are not the bad guys but their friends.

Both of our children, 3rd and 5th grade, have participated in Project DARE. It is wonderful! Trooper X is superb! This is a most important project and definitely the place to begin with drug education. It has also established excellent communication between children and the police. Please pass on our strong, positive feelings about this project!

I think this is a very good program for 4th and 5th grade students.

I think that your drug abuse program is great. Wish all schools could participate in one of the programs.

Officer X did an outstanding job. (S)he should be congratulated!

Trooper X did a very good job. Thank you from the whole family. We all learned a lot.

As a teacher, I am now going through the DARE program with my 5th grade students at [School]. I think Trooper X is doing an excellent job and I hope the program is continued in the coming years. The people who were responsible for starting this program are to be commended by all who are interested in our young people. Thank you.

[Name] has been very impressed by Trooper X; he is always excited about school on a day when Trooper X will be there. Please convey a message to the state troopers to always conduct themselves (on- and off-duty) in a manner which commands respect from our young people.
Appendix C

Supplemental Statistical Tables
Table C1.  Percentage Distribution of Responses in the Teacher/Principal Evaluation.  (N=470)

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project DARE has made a positive impression on the children in my class (or school for principals).</td>
<td>0.4</td>
<td>1.5</td>
<td>3.2</td>
<td>40.3</td>
<td>54.5</td>
</tr>
<tr>
<td>2. I support the DARE Project.</td>
<td>0.4</td>
<td>0.2</td>
<td>1.7</td>
<td>19.0</td>
<td>78.6</td>
</tr>
<tr>
<td>3. I would like to see DARE taught in this school in the future.</td>
<td>0.4</td>
<td>0.4</td>
<td>2.3</td>
<td>20.3</td>
<td>76.5</td>
</tr>
<tr>
<td>4. I believe that DARE should be taught statewide at additional grade levels.</td>
<td>0.4</td>
<td>0.9</td>
<td>6.3</td>
<td>27.1</td>
<td>65.4</td>
</tr>
<tr>
<td>5. Students have carried over knowledge and skills they learned in DARE to other subjects.</td>
<td>0.4</td>
<td>3.3</td>
<td>19.0</td>
<td>54.0</td>
<td>23.2</td>
</tr>
<tr>
<td>6. The classroom learning environment in general has been enhanced.</td>
<td>0.7</td>
<td>4.6</td>
<td>28.2</td>
<td>42.7</td>
<td>23.9</td>
</tr>
<tr>
<td>7. I believe the non-classroom activities by the DARE Officer (parent involvement, presentations in other classes, recess and lunch with the students) are valuable additions to the program.</td>
<td>0.7</td>
<td>1.3</td>
<td>15.9</td>
<td>36.5</td>
<td>45.6</td>
</tr>
<tr>
<td>8. Parents support DARE.</td>
<td>0.2</td>
<td>1.5</td>
<td>18.7</td>
<td>48.8</td>
<td>30.8</td>
</tr>
<tr>
<td>9. DARE has helped improve student behavior at school.</td>
<td>2.4</td>
<td>13.3</td>
<td>52.7</td>
<td>22.5</td>
<td>9.0</td>
</tr>
<tr>
<td>10. There are fewer disciplinary problems.</td>
<td>3.1</td>
<td>17.5</td>
<td>59.6</td>
<td>15.5</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Percentage Distribution of Responses in the Teacher/Principal Evaluation. (Cont’d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Undecided</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>11.</td>
<td>There has been an increase in students' self-esteem.</td>
<td>1.3</td>
<td>3.1</td>
<td>40.7</td>
<td>43.3</td>
</tr>
<tr>
<td>12.</td>
<td>Students have more negative attitudes about drug use.</td>
<td>1.7</td>
<td>2.0</td>
<td>13.1</td>
<td>50.2</td>
</tr>
<tr>
<td>13.</td>
<td>Students are better able to resist peer pressure.</td>
<td>0.2</td>
<td>3.5</td>
<td>34.5</td>
<td>44.3</td>
</tr>
<tr>
<td>14.</td>
<td>Students are better equipped to deal with drug-oriented situations.</td>
<td>0.4</td>
<td>1.3</td>
<td>15.9</td>
<td>67.6</td>
</tr>
<tr>
<td>15.</td>
<td>Students are more likely to say &quot;no&quot; to negative behavior.</td>
<td>0.2</td>
<td>1.3</td>
<td>16.9</td>
<td>57.6</td>
</tr>
<tr>
<td>16.</td>
<td>Students are more aware of the consequences of their actions.</td>
<td>0.4</td>
<td>1.1</td>
<td>15.9</td>
<td>58.3</td>
</tr>
<tr>
<td>17.</td>
<td>Students have more positive attitudes toward police officers and authority.</td>
<td>0.2</td>
<td>0.7</td>
<td>4.6</td>
<td>46.2</td>
</tr>
<tr>
<td>18.</td>
<td>School staff awareness of drug abuse problems and ways to deal with them have been increased.</td>
<td>0.6</td>
<td>4.1</td>
<td>19.0</td>
<td>53.3</td>
</tr>
<tr>
<td>19.</td>
<td>Students are more willing to openly discuss problems related to drugs.</td>
<td>0.7</td>
<td>2.8</td>
<td>21.8</td>
<td>53.6</td>
</tr>
<tr>
<td>20.</td>
<td>Students are taking more responsibility for their actions.</td>
<td>0.4</td>
<td>4.6</td>
<td>43.4</td>
<td>40.6</td>
</tr>
</tbody>
</table>
Table C1. Percentage Distribution of Responses in the Teacher/Principal Evaluation. (Cont'd)

<table>
<thead>
<tr>
<th>No</th>
<th>Qualified No</th>
<th>Undecided</th>
<th>Qualified Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2</td>
<td>0.7</td>
<td>0.9</td>
<td>2.3</td>
<td>95.9</td>
</tr>
<tr>
<td>43.3</td>
<td>9.4</td>
<td>34.7</td>
<td>5.9</td>
<td>6.7</td>
</tr>
<tr>
<td>96.2</td>
<td>4.4</td>
<td>4.1</td>
<td>3.2</td>
<td>2.2</td>
</tr>
<tr>
<td>0.5</td>
<td>0.5</td>
<td>0.9</td>
<td>2.3</td>
<td>95.9</td>
</tr>
</tbody>
</table>

21. Do you think it is appropriate for a state police officer to teach the DARE curriculum in the classroom?

22. Do you think it is more appropriate for a local police officer to teach DARE than a state police officer?

23. Based on your knowledge of how DARE has operated in your community, do you think that classroom teachers would have obtained the same results with the DARE curriculum as police officers?

24. Would you recommend DARE to your fellow (principals/teachers)?
Table C2. Percentage Distribution of Responses in the Parent Survey By Group.

<table>
<thead>
<tr>
<th>Question</th>
<th>All Parents (N=360)</th>
<th>Experimental Group Parents (N=212)</th>
<th>Control Group Parents (N=248)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since the beginning of the school year, has [name]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. shown an increased understanding of illegal drugs? (% YES)</td>
<td>98.1%</td>
<td>99.1%</td>
<td>96.7%</td>
</tr>
<tr>
<td>2. shown more negative attitudes toward the use of illegal drugs? (% YES)</td>
<td>93.9%</td>
<td>94.8%</td>
<td>92.6%</td>
</tr>
<tr>
<td>3. made positive statements about the police? (% YES)</td>
<td>95.5%</td>
<td>95.8%</td>
<td>95.1%</td>
</tr>
<tr>
<td>4. shown an increased maturity about the hazards of alcohol and drug abuse? (% YES)</td>
<td>98.4%</td>
<td>98.1%</td>
<td>98.7%</td>
</tr>
<tr>
<td>5. become more self-assured and confident? (%YES)</td>
<td>90.3%</td>
<td>89.6%</td>
<td>91.2%</td>
</tr>
<tr>
<td>Do you, as a parent, agree or disagree with the following statements?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Drug abuse among elementary school students is not as widespread as many people think. (% AGREE)</td>
<td>22.5%</td>
<td>20.4%</td>
<td>25.5%</td>
</tr>
<tr>
<td>7. Most children do not get exposed to drugs until they are in high school. (% AGREE)</td>
<td>13.2%</td>
<td>10.2%</td>
<td>17.4%</td>
</tr>
<tr>
<td>8. Parents are not able to do much about their children’s use of drugs. (% AGREE)</td>
<td>5.4%</td>
<td>4.6%</td>
<td>6.7%</td>
</tr>
<tr>
<td>How do you feel about drug education programs in the elementary school?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Drug abuse programs should be taught in all elementary schools. (% YES)</td>
<td>99.7%</td>
<td>99.5%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Table C3. Parental Responses to "Who is the Best Qualified to Conduct a Drug Education Program?"

<table>
<thead>
<tr>
<th></th>
<th>Votes</th>
<th>Percent of Votes</th>
<th>Percent of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Police</td>
<td>294</td>
<td>32.0</td>
<td>80.3</td>
</tr>
<tr>
<td>Local Police</td>
<td>169</td>
<td>18.4</td>
<td>46.2</td>
</tr>
<tr>
<td>School Teachers</td>
<td>76</td>
<td>8.3</td>
<td>20.8</td>
</tr>
<tr>
<td>Drug Educators</td>
<td>294</td>
<td>32.0</td>
<td>80.3</td>
</tr>
<tr>
<td>Other</td>
<td>86</td>
<td>9.4</td>
<td>23.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>251.1%</td>
</tr>
</tbody>
</table>
Appendix D

Survey Instruments

School Survey
Teacher/Principal Survey
Parental Survey
Student Information Sheet

1. Do you have any older brothers or sisters? If yes, please give their names and ages.

<table>
<thead>
<tr>
<th>Brothers</th>
<th>Age</th>
<th>Sisters</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Who do you live with?

3. Do you play on any sports teams (baseball, softball, soccer, football, basketball or others)? If yes, which?

4. Do you belong to any clubs (4-H, Boy Scouts, Girl Scouts, Book Club or others)?

5. Do you go to Church or Sunday School every week?

   YES____ NO____

6. Do you play a musical instrument? If yes, what?

Total Battery NCE Score:_____

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
**Instructions:** Read each sentence. Circle either "Like Me" or "Not Like Me."

Like Me / Not Like Me 1. I like to read.
Like Me / Not Like Me 2. I can make up my mind without too much trouble.
Like Me / Not Like Me 3. I feel I do not have much to be proud of.
Like Me / Not Like Me 4. Lots of things bother me.
Like Me / Not Like Me 5. I'm a lot of fun to be with.
Like Me / Not Like Me 6. I don't like to be with other kids.
Like Me / Not Like Me 7. I am smarter than most of the other kids in my class.
Like Me / Not Like Me 8. I often feel upset at school.
Like Me / Not Like Me 9. I'm often sorry for the things I do.
Like Me / Not Like Me 10. I'm as nice looking as most people.
Like Me / Not Like Me 11. Most kids are better liked than I am.
Like Me / Not Like Me 12. Sometimes I think I am no good at all.
Like Me / Not Like Me 13. I'm easy to like.
Like Me / Not Like Me 14. I am as well-liked as most kids.
Like Me / Not Like Me 15. I certainly feel useless at times.
Like Me / Not Like Me 16. I often get discouraged at school.

STOP. DO NOT TURN PAGE
PART B.

Instructions: Read each sentence. Circle either "True" or "False."

1. Stimulants make your heart beat faster.  
   True / False

2. Alcohol is called a stimulant.  
   True / False

3. A person can die from drinking too much alcohol.  
   True / False

4. Crack and marijuana are the same thing.  
   True / False

5. Cocaine is a pill you swallow.  
   True / False

6. LSD is a hallucinogen.  
   True / False

7. All drugs can be dangerous.  
   True / False

8. Cocaine is smoked.  
   True / False

9. If people have too much to drink they can sober up if they drink some black coffee or take a cold shower.  
   True / False

10. Marijuana is a pill you swallow.  
    True / False

11. Teenagers are too young to be alcoholics.  
    True / False

STOP. DO NOT TURN PAGE
PART C.

Instructions: Read each sentence. Circle either "Yes" or "No."

Yes / No 1. If I drank alcohol someone would tell on me.
Yes / No 2. It's hard for me to say "no" to my friends.
Yes / No 3. If you say no too often you won't have any friends.
Yes / No 4. It's okay to drink a little beer.
Yes / No 5. If I drank alcohol I would probably throw up.
Yes / No 6. It's better to keep your feelings to yourself.
Yes / No 7. There's nothing wrong with smoking cigarettes as long as you don't smoke too many.
Yes / No 8. If I used drugs, my parents would find out.
Yes / No 9. Kids who take drugs seem more grown up.
Yes / No 10. If I did something wrong, the police would catch me.
Yes / No 11. It's wrong for people to take drugs.
Yes / No 12. I never want people to think I'm a chicken.
Yes / No 13. Kids who smoke cigarettes regularly can quit anytime they want.
Yes / No 14. I would like to be a policeman.
Yes / No 15. Good kids never use drugs.
Yes / No 16. I usually give in to my friends when they pressure me.
Yes / No 17. It is okay for kids to drink alcohol as long as they quit before it becomes a habit.
Yes / No 18. Policemen make me nervous.
Yes / No 19. If your best friend offers you a drug, you have to take it.
Yes / No 20. If I got caught using drugs, my parents would send me away.
Yes / No 21. People who use drugs won't go to heaven.
Yes / No 22. I don't know how to say no to my friends.
Yes / No 23. Most policemen go out of their way to keep a kid out of trouble.
Yes / No 24. Most policemen don't understand a kid's problems.
Yes / No 25. Police have no right to tell kids what to do.

STOP. DO NOT TURN PAGE
Instructions: Read each sentence. Circle either "Yes" or "No."

Yes / No 1. If I use drugs someone would tell on me.
Yes / No 2. Most policemen like to pick on kids.
Yes / No 3. Teenagers who drink alcohol are more grown up.
Yes / No 4. Most policemen like to help kids.
Yes / No 5. Kids who use drugs have more friends.
Yes / No 6. It is wrong for people to drink.
Yes / No 7. My parents can look at me and tell if I've done something wrong.
Yes / No 8. If I smoked crack I would become addicted.
Yes / No 9. Most policemen are pretty nice guys.
Yes / No 10. If I used drugs, my teacher would know.
Yes / No 11. Most policemen like to act tough.
Yes / No 12. Most policemen are honest.
Yes / No 13. Marijuana leads to being hooked on heroin.
Yes / No 14. People who smoke marijuana might have deformed children.
Yes / No 15. If I drank alcohol, my parents would find out.
Yes / No 16. When my friends are doing something wrong, it's hard for me to walk away.
Yes / No 17. If my friends drank beer, I probably would too.
Yes / No 18. If I don't do what my friends want me to do, I'll be all alone.
Yes / No 19. I have a lot of respect for the police.
Yes / No 20. LSD can make people so crazy they think they can fly.
Yes / No 21. Drug pushers try to force kids to use drugs.
Yes / No 22. I know high school kids who smoke marijuana.
Yes / No 23. I know junior high kids who smoke marijuana.
Yes / No 24. I know kids my age who smoke marijuana.
Western Kentucky University is assisting the Kentucky State Police in an evaluation of the DARE Program. As part of this evaluation, faculty and principals are being asked to respond to a series of questions regarding their opinions of the program's content, effect, and delivery. Please DO NOT put your name on this questionnaire. All responses will be held as strictly confidential. Results will not be presented in an identifiable form.

I. Background of Evaluator. Before answering the questions below, please provide the following personal information:

1. What is your primary responsibility? ___ teaching ___ administration ___ other (e.g., LD, EMH, Library, PE, music, etc.)

2. If you are primarily a teacher, what grade(s) have you taught this year? ______

3. How long have you been a full-time elementary school teacher? ___ 1-3 years ___ 4-6 years ___ 7-9 years ___ 10+

4. What is your gender? ___ male ___ female

II. DARE Opinions. Please answer the following attitude questions by circling the response that best summarizes your opinion: SD (Strongly Disagree); D (Disagree); U (Undecided or No Opinion); A (Agree); SA (Strongly Agree).

1. Project DARE has made a positive impression on the children in my class (or school for principals).

2. I support the DARE Project.

3. I would like to see DARE taught in this school in the future.

4. I believe that DARE should be taught statewide at additional grade levels.

5. Students have carried over knowledge and skills they learned in DARE to other subjects.

6. The classroom learning environment in general has been enhanced.

7. I believe the non-classroom activities by the DARE Officer (parent involvement, presentations in other classes, recess and lunch with the students) are valuable additions to the program.

8. Parents support DARE.

9. DARE has helped improve student behavior at school.

10. There are fewer disciplinary problems.

11. There has been an increase in students' self-esteem.

12. Students have more negative attitudes about drug use.

13. Students are better able to resist peer pressure.

14. Students are better equipped to deal with drug-oriented situations.

15. Students are more likely to say "no" to negative behavior.

16. Students are more aware of the consequences of their actions.

17. Students have more positive attitudes toward police officers and authority.

18. School staff awareness of drug abuse problems and ways to deal with them have been increased.

19. Students are more willing to openly discuss problems related to drugs.

20. Students are taking more responsibility for their actions.

(Please Complete Backside)
III. Personal Evaluation. All responses will be reported anonymously.

1. Do you think it is appropriate for a state police officer to teach the DARE curriculum in the classroom? Why?

2. Do you think it is more appropriate for a local police officer to teach DARE than a state police officer? Why?

3. Based on your knowledge of how DARE has operated in your community, do you think that classroom teachers would have obtained the same results with the DARE curriculum as police officers? Why?

4. Would you recommend DARE to your fellow (principals/teachers)?

5. Other comments:
To the Parents of Jane Doe:

Over the past few months the Kentucky State Police have been teaching a drug abuse program in selected elementary schools across Kentucky. Western Kentucky University is conducting an independent poll of parents across the State. We are interested in your attitudes toward such a program and your personal observations about the attitudes of your own child.

Please help us by taking the time to answer the questions below. A stamped return envelope has been provided. All responses will be held strictly confidential and read only by the research team here at the university.

According to our records, Jane is a student at the Kentucky Elementary School. Since the beginning of this school year, has Jane:

1. shown an increased understanding of illegal drugs? ___yes ___no
2. shown more negative attitudes toward the use of illegal drugs? ___yes ___no
3. made positive statements about the police? ___yes ___no
4. shown an increased maturity about the hazards of alcohol and drug abuse? ___yes ___no
5. become more self-assured and confident? ___yes ___no

Do you, as a parent, agree or disagree with the following statements?

6. Drug abuse among elementary school students is not as widespread as many people think. ___agree ___disagree
7. Most children do not get exposed to drugs until they are in high school. ___agree ___disagree
8. Parents are not able to do much about their children's use of drugs. ___agree ___disagree

How do you feel about drug education programs in the elementary school?

9. Drug abuse programs should be taught in all elementary schools. ___yes ___no
10. If yes, who is best qualified to conduct such a program? (check one or more)

___ State Police officers
___ local police officers
___ school teachers
___ special drug educators
___ other (please specify): __________________________

Thank you for your time and cooperation. Drs. John Faine and Edward Bohlander, Department of Sociology (502)-745-2291