

D.A.R.E.  
Drug Abuse Resistance Education is Ineffective at Preventing Future Drug Use in  
Adolescents (re-issued from v.5 (1))

Khadija K. Swims  
Grand Valley State University

## Introduction

D.A.R.E. (Drug Abuse Resistance Education) was created with the goal of preventing future drug use by adolescents, in response to the rampant drug epidemic occurring in the U.S. in the early 1980's. The program was based on the theory that—since 70 to 90 percent of all crimes in the U.S. were drug related—targeting children at an early age, prior to adolescence, and educating them about the dangers and legal ramifications of drug use would prevent them from becoming involved in this lifestyle and lead to a decrease in experimentation with drugs when they reached adolescence. D.A.R.E. was based on the premise that prevention was the only long-term answer to drug abuse, and that targeting children before the problem occurred would reduce, if not eradicate the problem (D.A.R.E. America 1996). Additionally, D.A.R.E. was designed with the goal of achieving several positive secondary effects: namely, reducing gang membership, violent crimes among youths and boosting self-esteem by equipping adolescents with the skills needed to resist peer pressure and intimidation to engage in these acts. The goal was to “help students both recognize and resist pressures to experiment with alcohol, tobacco, marijuana, inhalants or other drugs or to engage in violence” (Burke 2002, p.68).

Despite the high expectations, some research evaluations have indicated that the impact of D.A.R.E. on preventing future drug use among children is substantially low. In fact, a review of the research reveals that students who completed the D.A.R.E. program used drugs at the same or even slightly higher rates than youth who had not participated (Burke 2002). Other evaluations, however, maintain the program's value. Consequently, researchers, policymakers, and critics have continued to debate the effectiveness of implementing the D.A.R.E. curriculum in elementary, middle, and high schools.

In a lecture on February 26, 2006, to a CJ 605 class at Grand Valley State University, Professor Kierkus stated:

Even though numerous programs were implemented in elementary, middle, and high schools to prevent drug, alcohol, and tobacco usage this problem continues to escalate at an alarming rate among youth. Researchers and critics have debated the most effective ways to prevent future drug, alcohol, and tobacco use among children, yet there has been little consensus regarding how to combat this growing epidemic. At the crux of the debate is the choice of specific programs that most effectively prevent these addictions among adolescents. One program that is the focus of growing scrutiny is the Drug Abuse Resistance Education program, better known as D.A.R.E. (C.A. Kierkus, CJ 605 lecture, February 26, 2006).

Due to the mixed reviews of the DARE program, the focus of this evaluation will be to review the methodology and findings of prior studies of D.A.R.E., compare them to the program's design and goals, and determine whether—in terms of what the program was specifically designed to accomplish—has it achieved those objectives. Factors that may have adversely affected the program's influence on participants and possible solutions to improve program effectiveness will also be addressed. In addition, the social learning theory will be used as the theoretical framework to describe the D.A.R.E. program.

## **About D.A.R.E.**

The Drug Abuse Resistance Education program, better known as D.A.R.E., was jointly created by the Los Angeles Police Department and Los Angeles School District in 1983 (Ennett et al., 1994). D.A.R.E. was created in an effort to teach children about the importance of abstaining from drug, alcohol, and tobacco use, while at the same time boosting their self-esteem and reducing conformity to use drugs due to peer pressure (Ennett et al., 1994). Secondly, D.A.R.E. was designed to prevent adolescent involvement in gangs and other violent activities. The key element of the D.A.R.E. program was the combined effort of police officers, school administrators, teachers, parents, and the community bringing their knowledge, education, and experience to bear in teaching children about the dangers of drugs and how to resist them, thus making these individuals, along with the participating children, stakeholders in the program (D.A.R.E. America, 1996). D.A.R.E. officers are required to undergo 80 hours of special training in the areas of child development, classroom management, teaching techniques, and communication skills to prepare them to teach the D.A.R.E. curriculum (Ennett et al. 1994). In addition, they are required to participate in 40 hours of additional training in order to prepare them to teach the high school curriculum (D.A.R.E. American, 1996). This training equips the officer with the knowledge and expertise to present the curriculum and answer questions regarding drugs and crime (D.A.R.E. America 1996).

D.A.R.E. is currently implemented in over 80 percent of U.S. school districts in all 50 states and in 54 countries around the world (Ennett et al. 1994). More than 26 million children participate in this program yearly (Ennett et al. 1994). The D.A.R.E. program has endured due to its widespread publicity, popularity, simplicity, and low cost compared to other, more complex and expensive drug resistance programs. The cost of implementing D.A.R.E. in all school districts around the United States is estimated at 1-1.3 million dollars annually (Hanson, 2003). This seems relatively inexpensive in view of the large number of children who participate and the program's purported benefits, including not only the primary goal of preventing future drug, alcohol and tobacco use among adolescents, but secondary effects such as improving the relationship between police officers and the community, decreasing gang involvement, decreasing violent acts committed by youths, and boosting self esteem, just to name a few.

The D.A.R.E. curriculum is presented to fifth and sixth graders over a 17-week period, and includes one 45–60-minute lesson per day (Ennett et al., 1994). The program also includes special curriculums for children in kindergarten through high school students (Burke, 2002).

The K-12 D.A.R.E. curriculum lessons focuses on:

- Strong “No Use” message
- Immediate consequences
- Normative beliefs
- Consequential thinking, problem solving and conflict management
- Self-management skills
- Voluntary commitment
- Credible presenter
- Character Education – Protective factors-resiliency

- Interactive participatory learning
- Social resistance skills
- Violence prevention
- Role-modeling

The curriculum although not consistent, is occasionally taught using a variety of approaches including classroom lectures, workbook exercises, role-playing, question and answer sessions, group activities, officer facilitated work, community service, and group discussions (Ennett et al. 1994). In addition, due to the advances of modern technology, D.A.R.E. participants are shown brain imagery scans of drug users, which allow them to see the physical, mental, and emotional consequences of drug use. In addition, participants can experience the social and legal consequences of drug usage by participating in mock courtroom exercises that are included in the curriculum (D.A.R.E. America 1996).

D.A.R.E. is designed loosely based on the Social Learning Theory, which proposes that learning occurs within a social context, and that people learn from one another, including such concepts as observational learning, imitation, and modeling (Akers, 1996). Therefore, according to this theory, individuals, specifically adolescents in this case, could be taught to reframe from using drugs, alcohol, or tobacco, within the appropriate social context. Modeling the design of D.A.R.E. based on the Social Learning Theory would consist of a curriculum that produces a *differential association* against drugs, alcohol, and tobacco usage, *differential reinforcement* for abstaining from drug, alcohol, and tobacco usage, *favorable definitions* of drug, alcohol, and tobacco prevention, and the availability of role models (*imitation*) who do not use drugs (Akers, 1996). This is seen in D.A.R.E.'s curriculum lesson focus through its strong "NO USE" message, immediate consequences given for substance use, prevention lesson, and credible presenters and role models. Therefore, according to this theory, designing D.A.R.E.'s curriculum based on this model would result in adolescents refraining from drug usage, at least those where the expectations of the program. This has resulted in D.A.R.E.'s popularity among policymakers, law enforcement officials, schools, parents, and communities, who have continued to endorse D.A.R.E. as an effective method of preventing drug, alcohol, and tobacco usage among adolescents, in spite of the negative results of numerous evaluations.

## Methodology

Although the design of the D.A.R.E. program appears practical, logical, and promising in terms of preventing future drug use among adolescents, past evaluations have indicated that D.A.R.E. is ineffective in this respect and in fact may be counterproductive, causing more harm than good. Even in cases where the efforts of D.A.R.E. were praised, the effects were moderately low. A program evaluation of the D.A.R.E. program was conducted using articles obtained from a random search of various databases offered at Grand Valley State University, to determine the effects of the D.A.R.E. program. An analytical evaluation of articles obtained regarding evaluation of the D.A.R.E. program was conducted to uncover the effectiveness of the program. A detailed literature review of the articles obtained, documenting D.A.R.E.'s shortcomings are summarized below.

## Mixed Reviews

As early as 1994, Ennett, Tobler, Ringwalt, and Flewelling concluded that D.A.R.E. was ineffectual. In a comprehensive evaluation of the D.A.R.E. conduct by Ennett et al, using meta-analysis of information from 18 previous evaluations conducted in 12 states across the United States and in one province in Canada, the authors concluded that the effect on drug use in students who participated in D.A.R.E. programs was not statistically significant when compared to students who did not participate in any type of drug prevention programs or alternative programs. These programs were selected for analysis because previous program evaluations used a control and/or comparison group, incorporated a pre-test-post-test design or post-test only with random assignment, and used reliable operationalized quantitative outcome measures (Ennett et al. 1994). For each program, the authors calculated an effect size to quantify the magnitude of D.A.R.E.'s effectiveness when applied to six outcome measures that reflected the curriculum's goals (Ennett et al., 1994). The effect size is defined as "the difference between the intervention (which was the D.A.R.E. program) and the control group means for each outcome measure [which] was calculated by dividing the pooled standard deviation" (Ennett et al. 1994, p. 1395). The six outcomes measures for this evaluation included knowledge about drugs, attitudes about drug use, social skills, self-esteem, attitude toward police, and drug use (Ennett et al. 1994).

The study also found no evidence that D.A.R.E. effects were "activated once participants reach higher grades" (Ennett et al. 1994, 1399). Conversely, the evaluation points out that long-term evaluations of various D.A.R.E. programs report that the effects of the program decay over time, and therefore have little (if any) delayed impact on future drug use once the children reach higher grades (Ennet et al. 1994). The authors further conclude that D.A.R.E.'s limited influence on the drug use behaviors of adolescents does not warrant the program's popularity and prevalence; any worry that D.A.R.E. may be displacing other, more effective and beneficial drug prevention curricula (Ennett et al., 1994)

Another study conducted by Amanda Beeler in her article *D.A.R.E. Not A Future Help, Study Claims* (Chicago Tribune, 1999), tracked 2,000 students in Lexington, Kentucky, and surveyed them ten years after the completion of a D.A.R.E. program they participated in while in the sixth grade (Beeler 1999). The survey revealed that 23 percent of the children who participated in this particular D.A.R.E. program, "reported smoking at least a half pack of cigarettes a day, 30 percent consumed 40 or more alcoholic beverages, 46 percent reported marijuana usage, and 24 percent reported using other drugs, within the past year, prior to the survey" (Beeler, 1999). The results of this study were compared to a survey of individuals who had never been exposed to a D.A.R.E. program. The comparison indicated that D.A.R.E. had no effect of deterring adolescents from alcohol and drug use. In fact, youths who went through the D.A.R.E. program were just as likely to use drugs and alcohol as those who did not go through any prevention program.

In yet another evaluation, conducted at a different location in Kentucky, 1,000 former sixth-graders D.A.R.E. participants were tracked and evaluated at the age of 20, in order to test the effects of D.A.R.E. on preventing drug usage (Beeler, 1999). This study found that while D.A.R.E. made an initial impression on the children's attitudes toward drugs, it ultimately had no effect on the decision they made to use or not use drugs (Beeler, 1999). In fact, as in the study of Lexington students, the rate of drug use among these former D.A.R.E. participants was no different than individuals who did not participate in any type prevention program (Beeler, 1999). Nevertheless, the D.A.R.E program continues to be used in these school districts

An article published in the *American Journal of Public Health* (Project D.A.R.E. Outcome Effectiveness Revisited, West, 2004), confirms previous findings indicating the ineffectiveness of the D.A.R.E. program. In fact, after conducting a pre- and post-intervention assessment along with a meta-analysis of numerous D.A.R.E. programs, the authors of this article, too, reported "no effect of D.A.R.E. programs on reducing drug and alcohol usage, when compared to control conditions...there is no reported benefit of D.A.R.E. beyond what would be expected by chance" (West et al., 2004, 1029).

A study conducted by Eischens et al., evaluated the effectiveness of a D.A.R.E. Plus Project program (D.A.R.E. Plus combines extracurricular activities with the standard D.A.R.E. teaching format to reduce future drug and alcohol use in participants). The D.A.R.E. Plus program is described as a "peer-led and parent involvement program, [with] neighborhood action teams to address neighborhood and school issues related to multi-drug use and violent behavior, and youth planned extracurricular activities" (Eischens et al., 2004, p. 70). The authors used a sample comprising 2,241 seventh-grade students, in eight different schools, assigned to participate in the D.A.R.E. Plus intervention (Eischens et al., p. 2004). The students were required to participate in the same program again during the eighth grade. After completion of the program, the students were required to complete a survey evaluating the effects of the program on preventing future drug, alcohol, and tobacco usage. The study found that although participation in school-based activities decreased alcohol use among adolescents, it had no effect on drug use in students (Eischens et al., p. 2004). As was the case with previous studies, a ten-year follow up of the effect of D.A.R.E. Plus found no significant effect on drug use, resistance to peer pressure, or self esteem (Eischens et al., 2004).

## **Numerous Evaluations Dismiss the Effectiveness of D.A.R.E.**

A 1990 study conducted by the Canadian government found that "D.A.R.E. had no significant effect on students' use of any of the substances measured" (Cauchon 1993, p. 2). In addition, a preliminary report published by the Research Triangle Institute of Durham, N.C., based on a statistical analysis of eight D.A.R.E. programs, involving 9,500 children, concluded that D.A.R.E., "had a limited to essentially non-existent effect on drug use, although the program did have a positive effect on the participants' knowledge and attitudes about drugs" (Cauchon 1993, p.2).

A longitudinal randomized experiment of 1,584 students to estimate the effects of D.A.R.E. on attitudes, beliefs, and drug use behaviors in the year following exposure to the program, the authors concluded that D.A.R.E. had no statistically significant effect on drug use and behaviors, and had few effects on attitudes or beliefs about drugs (Rosenbaum et al., 1994). Furthermore, a follow-up study conducted by Dukes, et al., of 38 elementary school students, 21 received the D.A.R.E. program, 17 did not, the authors concluded that no significant difference were found between D.A.R.E. participants and the control group (Dukes et al., 1996). In a study conducted by Dukes et al., a follow-up survey of 356 12<sup>th</sup> graders who received D.A.R.E. programming in the 6<sup>th</sup> grade was conducted. The authors found no relationship between prior D.A.R.E. participation and later alcohol, drug, or tobacco usage in the 12<sup>th</sup> grade (Dukes, et al., 1997). A study conducted in 23 Houston public schools, using pre- and post-test questionnaires of 1,771 of fifth- grade students indicated that students who participated in the schools' program *increased* their drug, tobacco, and alcohol usage despite D.A.R.E. program instructions to resist temptations to do so (Gay, 1999). In fact, the Houston survey revealed that a significant number of the fifth graders who participated in the D.A.R.E. program were experimenting with controlled substances prior to the D.A.R.E. intervention (Gay, 1999). Additionally, the study revealed that 15 percent of students in Houston public schools had tried drugs, 18 percent tried tobacco and 32 percent had experimented with alcohol prior to participating in D.A.R.E. (Gay, 1999)

A 10 year longitudinal study of a cohort of 31 six-graders, 23 randomly assigned to receive D.A.R.E. in sixth grade, while 8 received whatever drug education was provided in their classes. Participants were assessed yearly through the 10<sup>th</sup> grade and re-contacted when they were 20 years old. The results of the study concluded that D.A.R.E. had no effect on students' drug use at any time through the 10<sup>th</sup> grade. In addition, at age 20, there was no difference between those who received D.A.R.E. and those who did not, in their use of cigarettes, alcohol, marijuana, or other drugs (Levant, 1999). An evaluation of a D.A.R.E. program conducted in Salt Lake City, Utah, found that "D.A.R.E. has little, if no effect on keeping kids from abusing drugs" (Kalb, 2001). The results of this evaluation caused such an uproar that the Mayor of the state cancelled the implementation of D.A.R.E. in public schools and publicly attacked the program. In a letter to The Salt Lake Tribune, the Mayor wrote, "our drug prevention policies have been driven by mindless adherence to a wasteful, ineffective, feel good program" (Burke 2002, 70). Finally, a study conducted by Weiss et al., concluded that "D.A.R.E. did not make the list". The authors further concluded that D.A.R.E. showed little effectiveness on knowledge and attitudes, and did not sustain nor lower use of drugs among adolescents (Weiss et al., 2005).

## **Using the Right Ruler**

Despite the numerous research evaluations revealing the ineffectiveness of the D.A.R.E. program, equal numbers of studies assert the program's effectiveness. Upon closer examination, however, the evidence states otherwise. It is important to note that the measures of "success" are often intermediate aspects of the program or positive results of secondary variables, and not the program's intended focus of preventing drug, alcohol and tobacco use in adolescents. D.A.R.E.'s success should be based on reduction of *all*

*three* of its targeted behaviors; drug use, alcohol use, and tobacco use. However, the positive evaluations endorsing D.A.R.E often praise these programs for reducing one bad habit while often actually *increasing* another bad habit (e.g., lower use of alcohol but increasing drug usage).

For instance, a study concluded in 2004 indicated that D.A.R.E. programs have been shown to be effective in reducing substance abuse in adolescent boys. However, that same study reported that, while this D.A.R.E. program reduced drug abuse, it actually increased alcohol use among adolescent boys (Hansen, 2004). Another report about a D.A.R.E. program in Houston Texas, indicated that DARE had a “positive effect” on children who participated in the program. According to the study, based on pre-test and post-test questionnaires given to fifth graders, the results indicated that the Houston DARE program made a, significant change in children’s attitudes, beliefs and/or opinions regarding drug use and awareness, peer pressure to use drugs, learning resistance techniques and ways to say “NO,” managing stress, and making decisions about risky behavior (Gay 1999). However, while the Houston DARE program may have changed, the way children “felt” about drug use and awareness, among a variety of other variables, the program failed to have a positive effect on preventing actual future drug and alcohol use among adolescents, which is D.A.R.E.’s intended focus.

Evaluators in Illinois used a survey given to teachers, parents, and principals regarding “their overall satisfaction” with D.A.R.E to rate the success of the state’s D.A.R.E program. The experiences of the children who participated in the program were not considered nor were surveys conducted to discover if the program prevented future drug usage in these program participants. Although the procedures for implementing D.A.R.E. takes into account the input and support of the community such as, parents, teachers, and school administrators, the perceptions of these stakeholders about the program’s success do not constitute an adequate measure of the program’s effect on deterring future drug, alcohol and tobacco use.

Similarly, a 2006 report conducted by the Surgeon General on youth violence found some positive results of the D.A.R.E. program (including improved attitudes towards the police). However, the report concludes that children who participate in the traditional D.A.R.E. curriculum, implemented in grades five and six, are as likely to use drugs as those who do not participate in D.A.R.E. It is clear from a brief review of project evaluations regarding the D.A.R.E. program, results of these evaluations often lack validity that is, evaluator’s are not always measuring what they are supposed to be measuring: the effects of the program on deterring future drug, alcohol, and tobacco use among adolescents. This suggests that although the programs had many positive secondary results (i.e., increased self-esteem, good decision-making skills, and positive relationships with police) these successes are inconsistent with the program’s primary goal, which is to “help students both recognize and resist pressures to experiment with alcohol, tobacco, marijuana, inhalants or other drugs or to engage in violence” (Burke 2002, 68). These variables are clearly not the only variables being measured

The only noteworthy accomplishment of the D.A.R.E. program was its successful delivery system, which is supported by a strong marketing package. In addition, D.A.R.E. is cost-effective because it relied on the efforts of trained volunteer law enforcement officers to facilitate classroom lectures (Burke 2002). For these reasons D.A.R.E. continues to be endorsed in spite of numerous negative evaluations.

### **Implementing D.A.R.E.**

More than 90 percent of the articles analyzed for this study conclude that D.A.R.E. is not effective at preventing future drug, alcohol and tobacco use among adolescents. This high failure rate may be attributed to inconsistencies in program implementation. For instance, in various D.A.R.E programs reviewed for this report, the programs were only implemented over a ten-week period (in elementary schools), as opposed to the 17-week curriculum specified in the program design. Additionally, although the program is designed to be implemented throughout the school years, from kindergarten through the twelfth grade, the vast majority of school districts offering the program only use the elementary school design (Beeler, 1999). This has led critics to argue that D.A.R.E is implemented too early in a child's development, when children are too young to understand the concept of peer pressure to use drugs and fail to remember how to deal with this problem once they reach middle school (Youth Violence: A Report of the Surgeon General, 2006).

Flaws in the program's original design have also contributed to the D.A.R.E.'s shortcomings. Despite the extensive training received by law enforcement officers, they are not always well equipped to teach the D.A.R.E. curriculum (Ennett et al., 1994). Furthermore, the presence of a uniformed police officer may actually do more harm than good in the classroom. Some children may be intimidated by the officer, which may affect their performance in the program; in other cases, pre-existing negative relationships between law enforcement officers and the community—a situation that is not uncommon in minority communities may exist, adversely affecting the outcome of participants in the program. D.A.R.E. assumes that the presence of these officers in the classroom will foster strong police and community relationships, an assumption that often proves to be unfounded.

### **One Size Does Not Fit All**

Perhaps the most basic factor contributing to the ineffectiveness of many replications of D.A.R.E. is the fact that the program was originally designed for a specific setting however, it has been applied as a "one size fits all" remedy in diverse communities throughout the United States. School districts may adopt the standard D.A.R.E. design after no more than a cursory Web search, without taking into account the unique characteristics of their particular school district or the fact that the standard version of D.A.R.E. may not be appropriate for their community. Alternatively, school and community leaders may realize that D.A.R.E. is not a perfect fit however, may be desperate to stem the growing tide of substance abuse and violence among teenagers, and decide to implement the program anyway.

## **If Not D.A.R.E., Then What?**

The ongoing criticism of D.A.R.E. and the search for alternatives have prompted the National Institute of Drug Awareness (NIDA) to establish certain criteria to pinpoint a successful drug prevention program. Specifically, NIDA suggests that a successful program should:

- Target the most critical age groups
- Provide multiple years of intervention
- Include a well tested, standardized intervention with detailed lesson plans and student materials
  
- Teach drug resistance skills through interactive methods
  
- Foster pro-social bonding to the school and community
  
- Contain appropriate content (teach social competence and drug resistance skills that are culturally and developmentally appropriate, promote positive peer influence, promote anti-drug social norms, emphasize skills training teaching methods and include an adequate dosage: 10 to 15 sessions in the first year and another 10 to 15 booster sessions), and
  
- Retain core elements of the effective intervention design (implementation fidelity), training, and monitoring and undergo periodic evaluation

A number of promising programs meet the NIDA criteria. These programs include:

- Project Alert
- Life Skills Training Program (LST)
- All Stars Plus

Project Alert is a drug prevention program designed for middle school students (Ellickson, 2003). Project Alert is based on the social influence method of prevention, particularly the “health belief model, which focus on cognitive factors that motivate healthy behaviors, social learning model which emphasizes social norms and significant others as key determinants of behavior, and the self-efficacy theory of behavior change which views the belief that one can accomplish a task as essential to effective action” (Ellickson, 2003, p. 1831). Project Alert has been proven effective in both preventing and reducing cigarette and marijuana use among eighth graders (Ellickson, 2003).

The final program identified by Burke (2002) as a promising alternative to D.A.R.E. is the Life Skills Training Program (LST) is a three-year, classroom-based, substance abuse intervention program geared at middle and junior high school students (Burke, 2002). LST is designed to teach self-management and general personal and social skills, as well as drug resistance skills and normative education. A large-scale evaluation of this program, consisting of 6,000 students from 56 different schools, found that students who

participated in the program were less likely to use tobacco, alcohol, and marijuana by the end of high school.

## Limitations

Limitations to this evaluation consist of the small sample of articles obtained to conduct the evaluation analysis of the D.A.R.E. program. In addition, secondary data were used to evaluate the program, which posed huge limitations to the evaluation of the D.A.R.E. program. Secondary data, although convenient for evaluation purposes, could not account for inherent biases or errors made by the authors.

## Looking to the Future

A comprehensive review of the D.A.R.E program has concluded that this program is ineffective in preventing future drug, alcohol and tobacco use in adolescents. Although D.A.R.E. has certain positive aspects, it has failed to achieve the goal for which it was designed. Numerous programs are currently being evaluated as alternatives to D.A.R.E., but their long-term effects on preventing future drug, alcohol and tobacco usage have yet to be determined therefore. This has proven that alternative approaches are needed when considering programs dealing with adolescent substance use. Most importantly, multilevel programs that include multiple strategies and take into consideration the environment and social and interpersonal factors have proven to be most effective (Eischens et al., 2004). School districts should attempt to create programs that are specific to needs in their districts. In addition, seeking input and insight from the students who participate in school-based prevention programs may also be helpful in improving the success of these programs. Until a more efficient and effective solution to preventing future substance use in adolescents is discovered, further research in the subject is warranted. Nevertheless, even with the best interventions, no matter how great a drug, alcohol, and tobacco prevention program claims to be, it will be impossible to prevent all teenagers from *ever* using alcohol, tobacco, or drugs.

## References

- Akers, R.L. (1996). Is differential association/social learning cultural deviance theory? *Criminology* 34(2).
- Beeler, A. (1999, August 2). D.A.R.E. Not A Future Help, Study Claims. *Chicago Tribune*.
- Burke, M. R. (2002, September). School-based substance abuse prevention: Political finger-pointing does not work. *Federal Probation*, 66(2).
- Cauchon, D. (1993, October 11). Studies Find Drug Program not Effective. *USA Today*.
- D.A.R.E. America. (n.d.). *The Official D.A.R.E. America Website*. Retrieved February 18, 2006, from [www.Dare.com](http://www.Dare.com).
- Dukes, R.L., Stein, J.A., & Ullman, J.B. (1996). Three-Year Follow-Up of Drug Abuse Resistance Education (D.A.R.E.), *Evaluation Review* 20(49).

- Dukes, R.L., Stein, J.A., & Ullman, J.B. (1997). Long-Term Impact of Drug Abuse Resistance Education (D.A.R.E: Results of a 6-Year Follow-Up, *Evaluation Review* 21(4).
- Dusenbury, L., & Falco, M. (1996, May). Keys to drug -abuse prevention. *The Education Digest*, 61(9).
- Dusenbury, L., & Falco, M. (1995). Eleven components of effective drug abuse prevention curricula. *Journal of School Health*, 65(10).
- Eischens, A., Komro, K. A., Perry, C. L., & Bosma, L. M. (2004). The Association of Extracurricular Activity Participation with Substance Use among Youth in the DARE Plus Project. *American Journal of Public Health Education*, 35(2).
- Ellickson, P. L., McCaffery, D. F., Ghosh-Dastidar, B., & Longshore, D. L. (2003, November). New inroads in preventing adolescent drug use: Results from a large scale trial of Project Alert in Middle Schools. *American Journal of Public Health*, 93(11), 1830-1836.
- Ennett, S. T., Tobler, N. S., Ringwalt, C. L., & Flewelling, R. L. (1994, September). How effective is drug abuse resistance education? A meta-analysis of Project DARE outcome evaluations. *American Journal of Public Health*, 84(9).
- Ennett, S. T., Rosenbaum, D. P., & Flewelling, R. (1994). Long-term evaluation of Drug Abuse Resistance Education. *Addictive Behaviors*, 19.
- Gay, B. (1999). Drug education programs fail in Houston. *Society*, 36(2).
- Hansen, W. B. (2004). All Stars Plus: a competence and motivation enhancement approach to prevention. *Health Education*, 104(6).
- Kalb, C. (2001, February 26). DARE checks into rehab. *Newsweek*, 137(9).
- Lynam, D. (1999). Does the D.A.R.E. program work? *American Teacher* 84(2).
- Perry, C., Komro, K., Veblen-Mortenson, S., & Bosma, L. (2000). The Minnesota DARE Plus project: Creating community partnership to prevent drug use and violence. *Journal of School Health*, 70(3).
- Rosenbaum, D.P., Flewelling, R.T., Bailey, S.L., Ringwalt, C.L., & Wilkinson, D.L. (1994). Cops In the Classroom: A Longitudinal Evaluation of Drug Abuse Resistance Education (Dare). *Journal of Research in Crime and Delinquency*, 31(3).
- The Surgeon General. Retrieved February 7, 2006, from <http://www.mentalhealth.samhsa.gov/youthviolence/surgeongeneral>.
- Weiss, C.H., Murphy-Graham, E., & Birkeland, S. (2005). An Alternative Route to Policy Influence: How Evaluations Affect D.A.R.E. *American Journal of Evaluation*, 26(12).
- West, S. L., & O'Neal, K. K. (2004, June). Project D.A.R.E. Outcome Effectiveness Revisited. *American Journal of Public Health*, 94(6).