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## **An Alternate Route to Policy Influence How Evaluations Affect D.A.R.E.**

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**Abstract:** Investigators of the influence of evaluations on policy decisions have noted three main routes to influence: instrumental, conceptual, and political/symbolic. This study, an inquiry into the effect of evaluations of the Drug Abuse Resistance Education (D.A.R.E.) program, found a fourth main way that evaluations exert an influence: imposed use. The Safe and Drug Free Schools office of the U.S. Department of Education obliged districts to select a program that met its "Principles of Effectiveness," which most districts construed to mean that the program had to be on the department's approved list. Because results of D.A.R.E. evaluations repeatedly showed that D.A.R.E.'s effectiveness on knowledge and attitudes was neither sustained nor led to lower use of drugs, D.A.R.E. did not make the "lists." Hence, many districts dropped or scaled back D.A.R.E. This kind of imposed use is likely to become more common when government agencies make greater demands for accountability.

**Keywords:** *evaluation use; evaluation influence; drug abuse prevention; D.A.R.E.*

**O**n our office door hangs a sign, provenance unknown, that says,

Evaluation is fallible  
Evaluation is but one source of evidence

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Evidence is but one input into policy  
 Policy is but one influence on practice  
 Practice is but one influence on outcomes<sup>1</sup>

In that spirit of humility, we investigate here the subject of the influence of evaluation on policy and practice.

During the past 40 years, much has been written on the subject of the uses of evaluation. Empirical study flourished in the late 1970s and early 1980s, in what Henry and Mark (2003) have called the "golden age" of research on evaluation use. A number of large-scale surveys were done (Caplan, Morrison, & Stambaugh, 1975; Rich, 1977; Weiss, 1979, 1980a, 1980b) to discover how prospective users made use of research and evaluation findings. There were also smaller interview studies (e.g., Patton et al., 1977), case studies (e.g., Aaron, 1978; Sheerens, 1982), observations, and collections of anecdotes.

Out of this work, and later elaborations of it, three categories emerged of the types of influence that evaluation has on policy. Although there were minor variations in categorization and different authors used somewhat different terminology, general consensus arose that evaluation was used in three main ways. (Of course, it could be ignored entirely, and that was not an uncommon fate.) Evaluations could be used (a) instrumentally, to give direction to policy and practice; (b) politically or symbolically, to justify preexisting preferences and actions, and (c) conceptually, to provide new generalizations, ideas, or concepts that are useful for making sense of the policy scene. Many authors have adopted some variant of these categories to characterize the influences of evaluation (Caracelli & Preskill, 2000; Cousins & Leithwood, 1986; Preskill & Caracelli, 1997; Shadish, Cook, & Leviton, 1991; Shulha & Cousins, 1997; Turnbull, 1998).

The first kind of use, using evaluation results as direction for decision making, is what early evaluators often expected. They thought that policy makers would read the data on program outcomes and do what the data indicated: Close down or modify ineffective programs, and institutionalize and expand programs that were working well. When decision makers use evaluation results as the basis for decisions, instrumental use is in play. Patton (1997) called it "intended use by intended users," but people beyond the immediate scene can use evaluation instrumentally as well. Instrumental use has a suggestion of immediacy: The results become the basis for decisions in the short run. But perhaps this dimension of timing is unnecessary. It might still be instrumental use if decision makers hem and haw for years before they apply results to a decision. On the other hand, if they wait too long, the results of evaluation become so admixed with other influences that it is almost impossible to discern the unique element that evaluation has contributed.

Pure instrumental use is not common. Most studies are not used as the direct basis for decisions. Decision makers pay attention to many things other than the evaluation of program effectiveness. They are interested in the desires of program participants and staff, the support of constituents, the claims of powerful people, the costs of change, the availability of staff with necessary capacities, and so on. Expectations for immediate and direct influence on policy and program are often frustrated.

The second kind of use, symbolic use, provides legitimation. Evaluation can be used to justify what decision makers want to do anyway. Evaluation can provide support for policies decided on the basis of intuition, professional experience, self-interest, organizational interest, a search for prestige, or any of the multiplicity of reasons that go into decisions about policy and practice. When writers characterize such influences as political or symbolic, they sometimes deride them. But when evaluation supports a course of action that already has advocates, there

does not seem anything wrong with using evaluation evidence to strengthen the case. Only when decision makers distort the evidence or omit significant elements of the findings does it appear that evaluation is being misused.

Much experience suggests that evaluation is often used to buttress an existing point of view. In a study of congressional committees, for example, Weiss (1989) found that when staffs of congressional committees turned to the empirical literature, they sought out evidence that would legitimate their case. This same phenomenon occurs in bureaucracies and organizational administrations.

Conceptual use came to light when studies found that decision makers considered research and evaluation studies useful, even when they didn't act on them in direct and immediate ways (Caplan et al., 1975; Rich, 1977; Weiss, 1979, 1980a, 1980b). Decision makers might not base their next decision on the evidence, but they often found themselves influenced in more subtle ways in the longer term. This type of indirect influence was characterized as "enlightenment" (Weiss, 1980a) or "conceptual use" by Greene (1988), Patton et al. (1977), and many others. Other authors have written about it as education, organizational learning (Feldman, 1989), or cognitive processing (Cousins & Leithwood, 1986). Scholars around the world have found that conceptual influence has been the most important effect that research and evaluation have had on policy (Anderson & Biddle, 1991; Baklien, 1983; Ballart, 1998; Bienayme, 1984; Bulmer, 1987; Husen & Kogan, 1984; Radaelli, 1995). When evaluation findings percolate into the decision arena in direct and indirect ways, sometimes in the long term, they become the new common wisdom.

From time to time, a new category of use is proposed. For example, in the 1990s, discussion arose about "process uses" of evaluation. This was not so much a new kind of use as it was a new source of use, drawing on something other than the findings. It put the emphasis on the effect of participating in the process of the evaluation during its conduct. Patton characterized "process uses" as "ways in which being engaged in the processes of evaluation can be useful quite apart from the findings that may emerge from those processes" (Patton, 1997, p. 88). Process use made explicit an idea that had been implicit for a long time. But it is not parallel to the other three. Instrumental use is presumed to yield decisions of one kind or another. Conceptual use yields ideas and understanding. Political use yields support and justification for action or no action. Process use tells how evaluation's influence arose. Kirkhart (2000) did a yeoman job of integrating the idea of process use, along with other aspects of use, into a three-dimensional model.

For all the multifold elaborations of evaluation use (or evaluation "influence" as Kirkhart [2000], and Henry [2000] prefer, echoing previous suggestions by Weiss, e.g. [1979]), the three constructs of instrumental, conceptual, and political use appear to capture much of the experience in the empirical literature and practical experience.

More recently, Henry and Mark (2003) and Mark and Henry (2004) have advanced the discussion of evaluation use to a further level. They posit a set of theoretical categories—mediators and pathways—through which evaluation can exercise influence. Drawing from social science literature, they develop a "theory of change" to apply to the consequences of evaluation at individual, interpersonal, and collective levels. For example, at the level of organizational action (they prefer the term *collective action*), they posit that evaluation can exercise influence through the processes of *agenda setting*, *policy-oriented learning*, *change in policy*, or *diffusion*. This work recombines some of the existing categories of evaluation use and attempts to make the processes by which influence is exerted both conceptually distinct and better integrated. The Henry and Mark (2003) and Mark and Henry (2004) schema holds promise of illuminating pathways of influence and leading to greater systematization of research on the subject.

## Study of the Influence of Evaluations of the D.A.R.E. Program

We have conducted an empirical study of the influence of evaluation in U.S. school districts. Here we aim to bring some of the data from that investigation into the current conversation. Our findings are compatible with Mark and Henry's (2004) work because we found the same mechanisms at work that they describe, as we will discuss later. What we offer here is evidence about another mechanism by which evaluation can affect organizational action. It is a mechanism that seems likely to become more widespread in the coming years.

We began our study concerned about the neglect of evaluation findings in many important venues. When decision makers were not acting on the basis of evaluation evidence, why not? What were they attending to? We wanted empirical evidence on the main competition that evaluation faced when program decisions were being made.

We chose the case of the Drug Abuse Resistance Education (D.A.R.E.) because it seemed a strategic example of the neglect of evaluation. D.A.R.E. is a program implemented by schools, usually at the elementary school level, to keep kids off harmful drugs. Dozens of evaluations had revealed that D.A.R.E. was not effective in actually keeping young people from using drugs. Still somewhere around 70% to 80% of all school districts were implementing the D.A.R.E. program. This seemed an elegant case of nonutilization for us to study. What influences on decisions were winning out in school districts?

### Method

We began the study in 2000. We chose to focus on a purposeful sample of 16 communities in four states. We first chose the four states—Colorado, Massachusetts, Kentucky, and Illinois—based on the fact that a large-scale evaluation of D.A.R.E.'s effectiveness had been conducted in each of those states. It seemed possible that the local origin of these studies would have increased their visibility. Within each state, we selected four towns or districts<sup>2</sup> in which to conduct research. We sought state-by-state consistency at two levels. First, we limited selection to communities with populations between 40,000 and 200,000. Second, in each state, we selected two communities that used the D.A.R.E. program and two that did not. These measures were adopted to maximize comparability.

After pilot testing our interview protocols in four districts, we traveled to each of the 16 communities in our sample to conduct in-person interviews with respondents. We interviewed school district personnel involved in selecting prevention programs at district and school-site levels and community members who were influential in decisions about prevention. Because D.A.R.E. is staffed by law enforcement personnel and usually paid for by them too, we also interviewed police officials who were involved in implementing and making decisions about the program.

We used a snowball technique to identify additional respondents by first contacting the school district administrator responsible for prevention and then asking for the names of other people to interview. We conducted brief follow-up telephone interviews with officials from each district in the early spring of 2003. In all, we conducted 128 interviews in the districts.

To analyze data from these interviews, we created a coding scheme, coded the interviews using the qualitative data analysis software package Atlas.ti, and checked for interrater reliability. On the basis of the coded data, we created a case study for each community, outlining themes in the decision-making process and local-level officials' responses to evaluation evidence. We then examined the cases for crosscutting themes. Finally, to verify those themes, we returned to

**Table 1**  
**Pseudonymous Communities in Our Sample Listed**  
**by the Status of the D.A.R.E. Program at Time of Data Collection (N = 16)**

Status	Community Name (pseudonym)
Never had D.A.R.E.	Carlsburgh, MA Hatsfield, CO Total: 2
Dropped D.A.R.E. prior to first interview (2001)	Orchard Grove, MA Westview, CO Hawkins, IL Gardner, IL Marlboro, KY Princeton, KY Total: 6
Dropped D.A.R.E. by follow-up interview (2003)	North Fork, KY Riverton, CO Total: 2
Still have D.A.R.E. <sup>a</sup>	Clovertown, IL Dover, KY Trimble Falls, KY Cartersville, CO Hilltown, MA Cedar Point, MA Total: 6
	Grand Total: 16

Note: D.A.R.E. = Drug Abuse Resistance Education.

a. Although these communities technically still have the D.A.R.E. program, almost all have scaled back significantly for lack of funding. Several also run programs that appear on the U.S. Department of Education list as "effective."

the coded interview transcripts and gathered evidence in support of, and in contradiction to, our arguments.

Table 1 lists the (pseudonymous) communities and the status of the D.A.R.E. program at the time we conducted the interviews. You will notice that six of the non-D.A.R.E. communities actually had D.A.R.E. at one time but had already discontinued the program by the time we arrived for interviewing. By the time we conducted brief follow-up interviews in 2003, two additional districts had dropped the program.

Elsewhere, we tell the story of the six school districts that are maintaining D.A.R.E. in the face of the evaluation data (Birkeland, Murphy-Graham, & Weiss, in press). Here we describe the stories of the eight districts that dropped D.A.R.E. (both prior to our first interview and at the time of our follow-up interview) as well as two districts that technically still run the D.A.R.E. program, but on a very small scale (Cedar Point, Massachusetts, and Cartersville, Colorado). In these stories you will see evidence of instrumental, political, and conceptual use, and also a new type of use, previously unaccounted for—probably because it is making a debut on the evaluation scene. We had fun trying to name this new type of use and came up with enforcement use, carrot-and-stick use, obligatory use, and pressured use. It is a type of use that comes about because of pressure from outside. In this article, we adopt the term *imposed use*, with an occasional nod to carrot-and-stick use.

What distinguishes this type of use is that program stakeholders are obliged to pay attention to evaluation results. In this case, they would lose their funding if they did not agree to adopt a program that had been proved effective through scientific inquiry. The government funding

agency did not say that districts had to use any particular program; there was no “enforcement” in the sense of prescribing a single course of action. What was prescribed was attention to scientific evidence. School districts had to show evidence that any program they implemented was reducing students’ use of drugs. Districts were not prepared to undertake evaluation themselves and sought assistance in identifying effective programs.

## Background

### Evaluations of D.A.R.E.

D.A.R.E. was the first nationally recognized school drug prevention program. Developed jointly in 1983 by the Los Angeles Police Department and the Los Angeles Unified School District, statistics provided by D.A.R.E. America show that the program was being used by more than 80% of school districts in America in 2001. The core D.A.R.E. curriculum is a one-semester course taught 1 hour a week by a trained, uniformed police officer, usually to fifth- or sixth-grade students. It has a standard curriculum that focuses on the dangers of drugs, techniques for resisting peer pressure to use drugs, and skills for dealing with stress. Hundreds of evaluations have been conducted of D.A.R.E., as it is the largest and best-known program of its kind. Most of the evaluations of D.A.R.E. found that students gained in knowledge about drugs, and most of the studies found that students’ attitudes about drug taking and their social skills improved, especially right after the program (Aniskiewicz & Wysong, 1990; Clayton, Catarello, Day, & Walden, 1991; DeJong, 1987; Nyre, 1984; Ringwalt, Greene, Ennett, & Lachan, 1994; Rosenbaum & Hanson, 1998). However, studies that followed up on students almost uniformly reported that D.A.R.E. had little or no effect on drug use behavior (Clayton et al., 1991; Clayton, Catarello, & Johnstone, 1996; Ringwalt et al., 1994; Rosenbaum & Hanson, 1998).

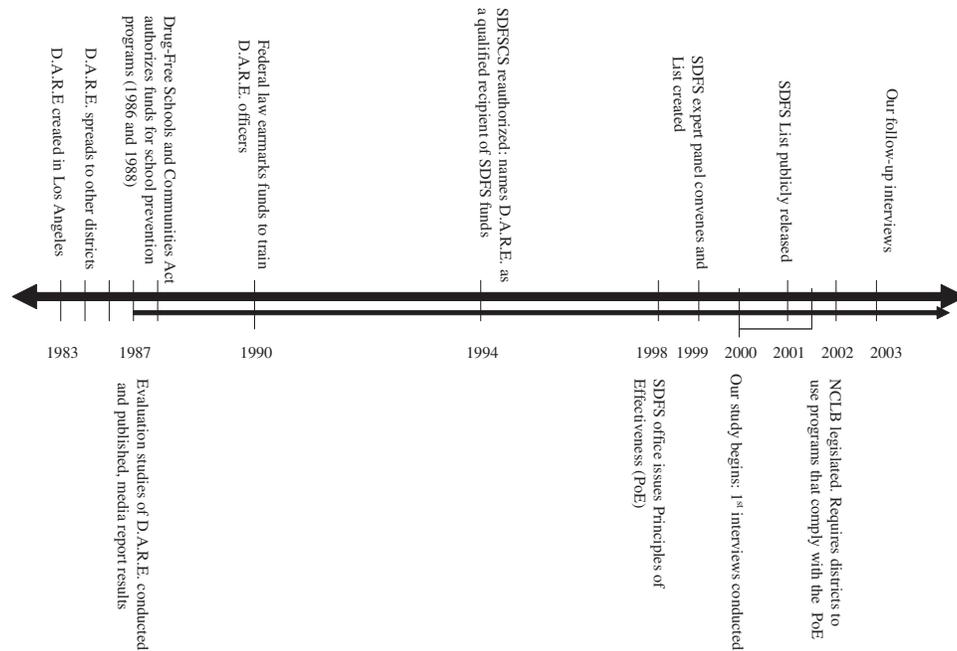
### Media Attention to Evaluation Findings

These findings received a great deal of attention in the media. The big message was “D.A.R.E. doesn’t work.” This account made headlines in the national press and local newspapers; the findings were discussed on national TV news programs and talk shows. For example, on ABC network news, on May 21, 1997, Peter Jennings, the anchor, started the program by saying that D.A.R.E. does not live up to its promises. Jackie Judd, the reporter who did the rest of the segment, concluded with the statement that critics say the program is wasting taxpayers’ money.

About 1 year later, on March 18, 1998, the NBC nightly newscast reported on Dennis Rosenbaum’s study of D.A.R.E. Rosenbaum appeared on camera saying that kids in the suburbs who participated in D.A.R.E. “had significantly higher levels of drug use than suburban kids who did not get the D.A.R.E. program.” A D.A.R.E. staff member, Bill Alden, said that D.A.R.E. does work but its effect erodes over time. There has to be more D.A.R.E., not less. The NBC reporter said that two key federal agencies evaluating drug programs do not recommend D.A.R.E. on their list of acceptable programs.

In addition to television news coverage, the results of these studies appeared in scores of national and local newspapers including the *New York Times* and the *Boston Globe*, and in weekly periodicals such as the *Chronicle of Higher Education* and *U.S. News and World Report*. The majority of those interviewed for this study reported that they had seen articles publicizing the study results in their local newspapers.

**Figure 1**  
**Simplified Time Line of Important Events**



Note: D.A.R.E. = Drug Abuse Resistance Education; SDFS = Safe and Drug Free Schools.

Glenn Levant, D.A.R.E.'s then executive director, told us that he believes the D.A.R.E. studies were so widely publicized because it is an example of "man bites dog." He explained that the media do not believe in "good news," and because D.A.R.E. is a household name, the media were attracted to this story.<sup>3</sup> "The media doesn't believe that it works, they don't believe in good news. If you can take the biggest program that is known . . . and you criticize it, then we get a headline."

The evaluation findings publicized in the media became well known. Few respondents in our study had read the evaluation studies, but they had read *about* them or "seen something" on the news.

### Federal Regulations and Imposed Use

What was happening during this time at the federal level is an important part of our story (see Figure 1 for a simplified time line of events at the federal level). Under legislation starting in 1986, the federal government funds school-based drug prevention programs through the Safe and Drug Free Schools (SDFS) and Communities Act (SDFSCA). In the late 1990s, SDFSCA called for using federal funding on "research-based" programs. In 1997, the SDFS office issued a draft of "Principles of Effectiveness" for public comment. Programs should be "guided by research or best practices" (U.S. Department of Education, 1998). The principles are four criteria that research-based programs should meet. These are (a) an assessment of the incidence of the problems of drug use and violence and their consequences, (b) an established set of perfor-

mance measures that set standards for the program, (c) analysis of data on conditions in school and community that act as risk or protective factors, and (d) scientific evidence on the success of the program in reducing drug use and violence. Subsequently, they added a “principle” about consultation with parents.

The office also established an expert panel, the Safe, Disciplined and Drug Free Expert Panel, whose purpose was to use the criteria to identify “exemplary” or “promising” school-based drug and violence prevention programs (Petrosino, 2003). Promising programs are those that show early encouraging results but have insufficient evidence for conclusiveness. The list of exemplary and promising programs was published in 2001. The list identified 9 programs as exemplary and 33 as promising. The Principles of Effectiveness and the list of exemplary and promising programs are steps in the Department of Education’s effort to adopt an evidence-based approach (Petrosino, 2003). In 2002, the Principles of Effectiveness were incorporated into the No Child Left Behind education law.

D.A.R.E. did not appear on either the “exemplary” or “promising” list. Most of the evaluations of D.A.R.E. had not shown lasting impact on drug use. Outside observers commented that the members of the expert panel were largely academic scholars of prevention, some of whom had developed their own programs for drug abuse prevention. One respondent, who had been a member of the panel, assured us that developers of drug prevention programs left the room when their program was considered for inclusion. (An article from our project, now under review, finds that the evidence in support of some programs on the list is hardly definitive; Gruner et al., under review).

The SDFS pronouncements influenced the local districts in our study. By our 2003 follow-up interviews, the districts that used federal funding through SDFS had a sense that they must switch to a program on the federal list. There is a proviso in the rules that a district satisfied with another program has 2 years to prove that its program was effective with its students. The director of the SDFS office (now associate deputy undersecretary) told us that the rules did not require a choice of programs from the list; rather, the requirement was to use scientific principles in making program choices. However, no districts in our study sought to do their own evaluations. Respondents believed that they had to select a program from the approved list in order to receive federal funds or find another funding source for the D.A.R.E. program.

## **The Findings: D.A.R.E. Is Dropped or Cut Back**

Let us turn to the stories of how evaluations of D.A.R.E. affected the school districts in our study.

### **Evaluation Was Irrelevant**

One school district dropped D.A.R.E. without any consideration of the evaluations. Their decision to terminate the program was due almost entirely to cuts in the police budget. After 9 years of offering D.A.R.E. in kindergarten through sixth grade in all of the city’s elementary and middle schools, the Westview, Colorado, police department cut funding for the five D.A.R.E. officers’ salaries. The decision, made by police officials without input from the schools, was the result of budget cuts as well as a shift in the department’s approach to policing youths. Since a major shooting episode in 1999 at a Colorado high school, Westview police decided to bolster the police presence in middle and high schools. Despite the objections of former D.A.R.E. officers, police resources were shifted away from D.A.R.E. toward the popular Student Resource Officer (SRO) program.<sup>4</sup> The police chief had heard positive anecdotes about

the D.A.R.E. program but believed that its supporters valued the police presence in schools rather than the curriculum itself. Faced with a reduced budget, he favored the new SRO program to meet the need for police presence in schools.

### **Evaluation Findings Had Some Influence**

Five other districts were swayed by reports of the studies of D.A.R.E. In a few cases, evaluation evidence was used in support of previous preferences; in others, serious review of the evidence was undertaken. Only occasionally did people in the districts read the evaluation reports, but they had heard the gist of the findings.

Gardner, Illinois, dropped D.A.R.E. in 1999 after running the program for more than a decade. The district's health coordinator was one of the key players in this decision. She became aware of the research evidence in 1998 when her husband, who is an avid reader of newspapers and news magazines, read an article about an evaluation of D.A.R.E. that showed the program to be ineffective. This news story prompted her to read the research literature on D.A.R.E., and she quickly found that much of it was negative. She decided that Gardner's schools would be better served using a proven drug prevention program. She began to research other prevention programs and concluded that Life Skills<sup>5</sup> was the most effective program available. She brought her findings to a meeting of the Board of Education, which decided to go along with her recommendations, discontinuing the D.A.R.E. program and implementing Life Skills.

We were told a different version of the story when we spoke with police officials, who reported that they were already planning to stop offering D.A.R.E. The Gardner police had a difficult time recruiting D.A.R.E. officers. As one police official explained, the job of a D.A.R.E. officer is unattractive for several reasons. "Nobody wanted it . . . the burnout was real because they did have 36 schools in Gardner . . . so it was hard to do." In 1998 to 1999, there was no D.A.R.E. officer in Gardner because the department could not find anyone willing to teach D.A.R.E. that year. As far as this officer was concerned, the police took the initiative to end D.A.R.E. However, he explained that they would not have made this decision without the support of the superintendent and the school board. In addition to the manpower issues that plagued the police department, this officer also mentioned that the negative evaluations were also partly responsible for the police department's skepticism about D.A.R.E.

In Marlboro, Kentucky, it was a police and a (nonschool) government official who claimed responsibility for the discontinuation of D.A.R.E. The city manager and a police lieutenant came to an agreement to stop using the D.A.R.E. program in Marlboro's schools in 2001. Neither of them believed that it was very effective in reducing drug and alcohol use among teens. Their personal beliefs were bolstered by the evaluation evidence that they had heard about in news stories. Both officials said that they were well aware of news reports stating that research evidence showed that D.A.R.E. did not work. Their decision was eventually approved by the Board of Commissioners, where several members were also aware of the evaluation evidence. The city manager explained that several Board of Commissioner members also came to the conclusion to end D.A.R.E. after they

had talked to a professor at the University of Kentucky that had done a lot of research on the D.A.R.E. program and talked to other cities around the country that had discontinued the D.A.R.E. program. They read some things on the Internet from other cities and it just seemed like it was not that effective of a program.

At the time of our first interview in North Fork, Kentucky, the D.A.R.E. program was popular and received widespread support. However, by the time of our follow-up interview in 2003,

the district had dropped the program. The evaluation evidence was at least partly responsible for the district's decision to end the program (in late 2001). The district health coordinator explained, "We'd known for a long time that D.A.R.E. is ineffective, but we kept it for political reasons." He went on to explain that there is now a greater awareness that the program doesn't work among parents and school officials, due to the national publicity that the evaluations received: "It was all over the media." At the time of our follow-up interview, North Fork did not have a program replacing D.A.R.E. Prevention has been given a greater part in the K through 8 health curriculum, which is taught by teachers. In this case, it appears that media attention was influential in making individuals aware of the negative evaluations of D.A.R.E.

In Orchard Grove, Massachusetts, a succession of D.A.R.E. officers had implemented the drug abuse prevention curriculum in every sixth-grade classroom from 1989 until 2000. It was, by all accounts, a popular program. The superintendent was aware of the negative evaluation evidence on D.A.R.E., but he remained a strong advocate of the program.

In the spring of 2000, however, members of the town's governing body voted to cut the police budget by the amount allocated to support the D.A.R.E. officer. The school committee, in turn, voted to pull D.A.R.E. from the schools. The change was precipitated largely by the efforts of one man, an Orchard Grove citizen with grown children, who favors the legalization of marijuana and objects to the presence of police officers in schools. In our interview, this individual explained why he became interested in seeing Orchard Grove discontinue its use of D.A.R.E.

There seems to be a generalized fear in our society about speaking, in any sensible way, about the drug war. . . . And in a small way, I'm hoping that I can open up space for discussion about prohibition and the drug war, which I see as more of genocide and fascism than I do as a health problem.

He believes that drug use should be decriminalized and young people taught responsibility rather than abstinence.

Fascism, the drug war, and legalizing marijuana did not figure in his public argument against D.A.R.E. He proposed to the town meeting that D.A.R.E. was ineffective at accomplishing its program goal of preventing drug use. Citing information from studies that he had culled from the Internet and popular magazines, he proposed discontinuing D.A.R.E. and finding another prevention curriculum to take its place. The motion passed with little opposition from parents, teachers, and students.

In Riverton, Colorado, a new sheriff was elected in 1998. We were told that he was largely responsible for the end of D.A.R.E. in that locality. He believed the D.A.R.E. program to be ineffective, and soon after taking office, he created a task force to review the status of the D.A.R.E. program in county schools. The task force weighed a range of evidence and testimony from advocates and critics and ultimately decided that there was not sufficient evidence to prove D.A.R.E.'s effectiveness as a drug abuse prevention program. The sheriff charged the Riverton County School District to find another curriculum to address substance abuse prevention. District officials decided to phase D.A.R.E. out of the city schools as well as the county schools, and to choose one new curriculum to offer. District officials chose *Here's Looking at You* and began offering the curriculum in the spring semester of 2001.

The story seems clear at first. However, when we spoke to officials outside the sheriff's office, we learned that the sheriff's ideas about D.A.R.E. were possibly influenced by a small number of vocal critics of D.A.R.E. These individuals had formed an organization and mounted a campaign to remove D.A.R.E. from district schools. They wrote letters to the school board, attended city council meetings, and occasionally appeared at parent information sessions conducted by D.A.R.E. officers or at D.A.R.E. graduations. They gathered negative program evaluations from around the country and presented them as evidence that the program was ineffec-

tive. They publicly advocated the legalization of marijuana. They objected to D.A.R.E. because of its message of total abstinence. The organization was highly visible in the community. Although school and law enforcement officials questioned the founders' credibility, as neither had children in public schools and one had been arrested several times for possession of marijuana, they believed that the evaluation evidence presented was credible.

It is unclear whether the organization had any influence on the sheriff's decision to create a task force to reconsider D.A.R.E. However, we do know that the group made the evaluation evidence well known in the community. According to members of the sheriff's task force, it was the evaluation evidence that convinced them to discontinue D.A.R.E.

### **Evaluation Plus SDFS Requirements**

In two districts, evaluation was also influential, but the SDFS regulations played a key role. In Princeton, Kentucky, D.A.R.E. was a popular program from the late 1980s through the mid-1990s. Yet D.A.R.E. was dropped in 1997 in Princeton because a new school superintendent came into office, determined to use research-based programs where possible.<sup>6</sup> The superintendent knew that there was evidence showing D.A.R.E. to be ineffective. He hired a new coordinator and made her first important task finding and implementing a research-based drug education program in D.A.R.E.'s place. She explained,

When I was hired as a coordinator, it was with the understanding that I would spend my summer on researching and choosing a prevention program to replace D.A.R.E. That was directed from the superintendent. The reason that he gave me was that the research indicated that it was not an effective program.

However, she went on to say that at this time, they were also aware of an upcoming change in the federal regulations. "And we were also aware that the federal government, even though it wasn't in place yet, was preparing to mandate the Principles of Effectiveness for prevention programs." In short, although the superintendent was aware of the research, he was also aware of the coming regulations on funding for the program.

Another school official pointed to both the superintendent's reliance on research and the new federal rules. "There were two reasons really, our former superintendent was very much research-based oriented and he felt that the research that he was reading was that D.A.R.E. did not work . . . and he wanted to put a research-based program in at as many levels as we could get funding with our students. The other reason was primarily that . . . it was inhibiting our chances at that time of getting some grants." The police department was unhappy with the change, but they had no real say in the matter. The superintendent was unwilling to reconsider his position.

Hawkins, Illinois began using D.A.R.E. in 1986, the first year D.A.R.E. was in any of the state's schools. In 1999, after running the D.A.R.E. program for 13 years, the Hawkins public schools made the decision to end the program and replace it with All Stars.<sup>7</sup> An aide to the superintendent of schools explained that the research evidence was responsible for the school's decision to change to All Stars, "We wanted to make the change because we knew what the research was saying." School officials explained that pressure from the state to use a "proven" program also influenced their decision. This decision met little opposition from police. As one officer explained, "We had heard some of the negative studies, or negative conclusions from some of the studies."

Hawkins's health coordinator was one of the central figures in the decision to shift away from D.A.R.E. Her description of why the district ended the program had more to do with pressure coming from the state than the evaluations directly. "We're given a state grant<sup>8</sup> to help fund

this program, and the bottom line was . . . the state is now asking us, if this program is not effective, then why are you using those dollars still for that program?" This was a new approach on the part of government, according to this school official, which had "never asked for us to be accountable before."

### **SDFS Requirements and List of Approved Programs**

Finally, two districts appeared to be influenced primarily by the need to use a program on the federal SDFS agency's approved list. D.A.R.E. in Cedar Point, Massachusetts, was highly popular and managed by dedicated police officers. Those involved in the program still believe strongly in it, although they vary in how much they actually think it will reduce drug or alcohol use. They value it more for the relationships it creates between police, schools, students, and parents than for its antidrug message. At the time of our first interview, they knew very little about the evaluation evidence on D.A.R.E. At the time of our follow-up interview in 2003, Cedar Point still offered the D.A.R.E. program; however, its funding from SDFS had been reduced, and the program was in jeopardy. As one school official explained, Cedar Point still technically ran the D.A.R.E. program, although it was not funded by the school district because of the changes in federal funding. At first, they tried to get around this legislation. As the health coordinator explained,

The federal grant that came through, especially with the No Child Left Behind and prior to that the Safe and Drug Free Schools, they did not want your monies attached to D.A.R.E. Their goals were to have . . . research-based programs, and that's especially with the No Child Left Behind. Presently, they will not fund any of the money unless anything that you're using now is on the basis of one of the designated research-based programs that they give you a list of. And, currently, that's how we really have to operate. But, we used to be very creative. To be very honest, we didn't refer to it by the name of D.A.R.E. We used to refer to it as After School Violence Prevention Clubs and so forth. That in a roundabout way used to allow us to utilize the funding because they were programs that we were actually initiating, but the D.A.R.E. people, and the D.A.R.E. officers especially, were really a big part of what we were doing with our kids.

Cedar Point was indirectly influenced by the evaluation evidence, despite the fact that decision makers in the district do not agree with its conclusions. They assumed that they were obliged to use a program on the SDFS list. The health coordinator concluded his remarks with, "I just think it's [D.A.R.E.] been extremely successful in Cedar Point."

In the city of Cartersville, Colorado, the D.A.R.E. program was widely popular for more than 10 years. Parents, students, and school officials supported the program, and the D.A.R.E. officers were "minor local celebrities." Although many people knew about the negative program evaluations, most questioned the validity of the research, citing anecdotal evidence to demonstrate the program's effectiveness. As the regulations for allocating SDFS money changed, however, school officials ran into a problem: They believed that they were no longer allowed to spend SDFS money on D.A.R.E. The school health coordinator collaborated with the sergeant in charge of D.A.R.E. to explore ways to modify the program, altering its curriculum so that it meets the SDFS requirements.

In our 2001 interview, the SDFS coordinator explained that she had no choice but to move her schools away from D.A.R.E., either by revamping the curriculum or choosing an "effective program" based on the Principles of Effectiveness. She was not allowed to spend SDFS money on the D.A.R.E. program in its form at the time. She was skeptical that the other programs on the list were any more effective than D.A.R.E., and she noted that most would cost the district a

lot more than D.A.R.E. does. "What do you do when you're a district that doesn't have the money to change?" She explained that if she could alter the curriculum so that it did not look like D.A.R.E. and then find a way to prove that Cartersville's new approach is working, the district might be allowed to continue to contribute funding.

As of our follow-up interview in 2003, Cartersville was still running the D.A.R.E. program in fifth grade, and the schools supplemented the program with other programs taught by teachers. The SDFS coordinator explained that the police department has gone through budget cuts and a reduction in force, so they have had to cut back on D.A.R.E.

## Discussion

These cases illustrate that evaluation played a key role in the shift away from D.A.R.E. Often it was not only evaluation at work but evaluation in conjunction with other elements on the scene. Disentangling the relative influence of different factors was not an easy task. The "story" often depended on whom we interviewed. Nevertheless, evaluation was obviously a major factor.

### Political Use

There are several instances of the use of evaluation to try to persuade others of the rightness of a cause. Interestingly, in two districts, vocal advocates of a drug-reform agenda paraded evaluation findings before town authorities in an attempt to undermine D.A.R.E. They objected to its abstinence message. Orchard Grove and Riverton were the sites of vigorous lobbying based in part on the ineffectiveness of D.A.R.E., even though the advocates actually objected to D.A.R.E.'s goal more than to the ineffectiveness in meeting it. Other sites, such as Gardner, Illinois, and Marlboro, Kentucky, also saw attempts by individuals with prefixed points of view to use evaluation to legitimize their positions.

### Instrumental Use

In some sense, evaluation evidence was used instrumentally to make go/no-go decisions. For example, the health coordinator in Gardner, Illinois, read the research literature on D.A.R.E., and she reported that it was instrumental in her decision to recommend that D.A.R.E. be replaced by a more effective program. In Princeton, Kentucky, the superintendent of schools was determined to use a scientifically proven program. In Hawkins, Illinois, the decision to end D.A.R.E. was made in large part because they "knew what the research was saying."

Thus, we have evidence of the influence of evaluation in ways that look like instrumental use. However, the influence was not direct but long-delayed and diluted. It was many years before evaluation findings were heeded, and the message was usually filtered through the media. Nobody in our interviews cited a particular study or a specific finding, and only one evaluator ("a professor at the University of Kentucky who had done a lot of research on the D.A.R.E. program") was mentioned as having been consulted. This was true despite the fact that we chose the states in our sample specifically because a major evaluation had been done in that state.

We assumed that the federal SDFS program made instrumental use of the evaluations. Our interviews of federal officials show that such an assumption may well be warranted. However, we were also told that a few key officials had made up their minds about D.A.R.E.'s ineffective-

ness long ago and that their years of experience in the drug field had more to do with their stand than did evaluation. One observer explained the anti-D.A.R.E. position of a key official as deriving in part from the political clout of the D.A.R.E. program in Washington and the aggressive hostility of the head of D.A.R.E. to any criticism of the program's effectiveness, which constrained the official's work. Nevertheless, SDFS was seeking to establish accountability for the expenditure of federal funds, and they saw scientific research as the best way to ensure that the monies were being spent wisely.

### **Conceptual Use**

In all districts except one (Westview, Colorado), respondents spoke in terms of classic conceptual use. The influence of evaluations about D.A.R.E. came about through a gradual percolation of findings into the consciousness of local people. This kind of delayed and indirect influence has the earmarks of what is generally called conceptual use or enlightenment. Most of what most people knew about the evaluations was a consequence of the heavy attention they had received from television. Newspapers were mentioned less often.

The message that came through, as one study after another was reported, was that "D.A.R.E. doesn't work." People could tell us little about details nor could they cite sources. It just became common knowledge. But little action was taken until the U.S. Department of Education began to make regulatory noises.

### **Imposed Use**

The climate of opinion about D.A.R.E. changed in many districts (although not in others—see Birkeland et al., in press). But it was when the SFDS office of the Department of Education began to demand greater accountability for the spending of federal money that the consequences of evaluation became visible. Intermingled with knowledge about evaluation was knowledge of the Principles of Effectiveness and the requirement that districts adopt scientifically proven programs. Sometimes knowledge of evaluation findings seemed to come first; sometimes the need to meet federal requirements spurred local attention to evaluation. Districts, even if they knew very little about the evidence, believed that they had to pick an approved program from the official list. As an alternative, districts could provide their own evidence, but nobody we interviewed felt equipped to do so. Thus, they turned to the lists to select a program to replace D.A.R.E.

In several districts, such as Cartersville, Colorado, and Cedar Point, Massachusetts, people in the district were highly satisfied with D.A.R.E. They questioned the validity of the research or its applicability to their situation. Nevertheless, they felt obligated to alter their drug abuse programming. At the least, they had to supplement D.A.R.E. with other programs.

Imposed use is not a brand-new concept but one that may occur in any field where a higher level of government with funds to disburse demands specific action on lower operating levels, based on evidence. An example is the federal requirement of lower highway speed limits for states that seek highway funds.<sup>9</sup> Scientific analysis of the relationship between speeding and highway accidents no doubt underlies the requirement. Many other federal grants-in-aid to states come ringed around with requirements, and some of the provisions may derive from what we might consider evaluation. Our argument is not that imposed use is something new under the sun. What we claim is that it is a concept that has not surfaced before in the evaluation literature.

We believe that imposed use may become more widespread. For one thing, many recent evaluations are being undertaken on a "best practices" model. The evaluator is asked to study

the most successful sites running a given program, with the aim of identifying effective practices that other sites can adopt. Such a purpose for evaluation almost invites pressures to adopt the best practices identified. Another feature of the current scene is the widespread emphasis on accountability. As the No Child Left Behind legislation requires, states are holding school districts responsible for effectiveness, and districts hold schools responsible, as measured by students' test scores. This climate of accountability calls for systematic evidence as the basis for judgments. Evaluation, therefore, will have enhanced clout.

Is imposed use just another kind of instrumental use? In one sense, it is. It pushes a decision from "on" to "off." However eager or reluctant a school district may be to conform to federal mandates, it seems to be "using" the evidence. Carrots and sticks are there, but the district is turning off D.A.R.E. because of the evaluations.

On the other hand, several of our districts were responding not so much to the evidence as to the federal mandate. They were not at all interested in the evidence; they were concerned with the list that showed which programs were acceptable. This is not instrumental use of evaluations. It is straightforward imposition.

### Pathways to Influence<sup>10</sup>

Our data seem well suited to exploring the ideas presented by Henry and Mark (2003; Mark & Henry, 2004) about the pathways through which evaluation evidence moves to application. They propose a limited number of mechanisms to characterize the channels by which evidence affects thoughts or actions. For example, at the individual level, evaluation can lead to attitude change, salience, elaboration, priming, skill acquisition, and/or behavioral change. (For definitions of these concepts, refer to Henry & Mark, 2003.) They posit other processes operating at interpersonal and collective levels. They point to possible interactions across levels. For example, individual changes may influence interpersonal processes, which may then influence collective processes and cycle back to further influence individual thoughts and actions.

We tried to apply the taxonomy to our district data. Because we are dealing with influence processes at the individual, interpersonal, and collective (organizational) levels, and at the collective level, with district, state, and federal collectivities, we were following tangles of interaction. The exercise was a challenge. As suggested by an anonymous reviewer of an earlier version of the article, we traced strings of pathways. The pathway in one district seemed to be individual priming, elaboration, and salience, leading to interpersonal change agent, persuasion, justification, leading to individual elaboration, to interpersonal persuasion (again), to collective agenda setting, to collective policy change.<sup>11</sup>

The pathway to influence in each district we looked at was different. We became bogged down in unique tangles of strings. What we realized is that Mark and Henry's (2004) work concentrates on the processes that intervene between an evaluation study and the audience that uses it to change its thoughts and actions. Our work concentrates on the collective end result, notably the school district's decision to continue with D.A.R.E. or end it. Because our information is necessarily aggregated to describe a community response to evaluation, we focus on the behavioral outcome. We are on less sure ground trying to reconstruct individual and interpersonal processes that were reported to us some 2 to 8 years after the events. The Mark and Henry framework may be more valuable when a study begins with the framework in mind.

Furthermore, we are sensitive to the fact that a great deal of our understanding depends on which respondents we interviewed. People in the districts often had quite different interpretations about what had gone on. If we had missed one old-timer in a district, we would never have known about key elements in the story. We received strong hints here and there of subterranean

influences that nobody discussed openly. Despite our extensive fieldwork, we know that we have not reconstructed a complete and unvarnished account of a long, complex process.

Nevertheless, we have tried to use the Mark and Henry (2004) framework to make some composite judgments about the pathways that evaluation evidence traveled to influence decisions about D.A.R.E. In Mark and Henry's terms, "motivational" factors played a part. The exercise of looking at pathways heightened our awareness of two components of the influence process: the importance of *incentives* pushing districts to attend to evaluation results on one hand (especially the looming imposition of restriction to programs on the list) and the urge to act *rationally*. In a number of cases, school officials and police officials seemed to embrace rationality; they wanted to do what science suggested worked for kids and not use programs that evaluation showed yielded little or no benefit.

## Conclusions

Our study has identified a route to evaluation influence beyond those commonly found, namely, imposition by a superordinate body. The SDFS program required that school districts use a drug prevention program that evaluations had found effective or promising. By drawing up a list of programs that qualified for federal funds, SDFS made its priorities explicit.<sup>12</sup>

Oversight agencies, such as state or federal departments or foundations, can mandate that their funds go only to programs for which there is sound evidence of success. Grantee agencies, whether or not they believe that the program has improved the lot of their own students, are almost forced to meet the terms of the grantor. The SDFS program gave its grantees 2 years to show that a program that was not on the approved list had achieved desired results in its own jurisdiction, but no district in our study has taken advantage of this option.

It seems very probable that imposed use will become more common. Government agencies want to see that their funds are used wisely. The fact that they are exercising oversight based on scientific research is a powerful message to send to superiors, legislators, and the public. They are rational. They are holding programs to account. Their judgments are not arbitrary. They are using scientific research, just as scientists have been urging them to do for at least 40 years (see, e.g., National Academy of Sciences/Social Science Research Council, 1969; National Research Council, 1982).

Why has the SDFS office of the Department of Education gone this route? Rationality talk has always been popular. Talk about getting the data and basing decisions on those data is endemic in our culture and particularly prevalent in bureaucracies. In fact, Max Weber (1947) in his classic work on bureaucracy pointed to "files" and data as characteristic accouterments of bureaucracies. Big organizations, private as well as public, engage in rationality talk as justification for their behavior. It is obviously rational to examine evidence about the effectiveness of programs before giving funds for their implementation.

However, although rationality talk is in good currency in bureaucracies, only in the past few years has a federal education agency translated that talk into working procedures. The impetus may have been particularly strong in education because of the press for accountability in the processes of educational reform. Much of the language, and action, of current educational reform demands that students, classrooms, and schools be held accountable for their performance. States have introduced standardized testing to judge the achievement of students and their eligibility for promotion and graduation. Under the federal No Child Left Behind Act of 2002, test results are also being used to judge whether schools are making adequate yearly progress in student achievement. If not, states are instituting further review, assistance, and penalties. Accountability is the name of the game. In such a results-oriented climate, the subjection of programs to review and approval seems like an equivalently responsible action.

Although we advocate the use of evidence, we also realize that evaluation rarely settles an issue once and for all. In a forthcoming article, we examine the evidence for five programs (Life Skills Training, Project Alert, Midwestern Prevention Project, Project Northland, and CASASTART) that were among the most frequently named school-based drug prevention programs on seven lists of best practice, including the SDFS list (Gruner et al., under review). Our systematic and detailed review of the evaluation evidence for these programs raised serious questions. Most of the approved programs do not have firm scientific support. Evidence about their effectiveness is problematic.

Nevertheless, the current climate of opinion in education, as in other social service and welfare fields, favors accountability for the expenditure of government funds. There is increasing pressure to “listen to the evidence.” Evaluators will have more opportunity to exercise influence, perhaps decisive influence, on the future of social and educational programs. The consequences of evaluation may increase in an age of imposed use, and one might ask how often the quality of evaluative evidence will justify such use.

### Notes

1. This statement is labeled, “Modified from Richard Pearson 1999.” We were unable to trace the source.
2. In collecting the data for this article, we interacted with officials from two domains: schools and police departments. In some cases, the police departments’ jurisdictions were the same as the school districts’. For example, both might serve the population within the city limits of a small town. However, in other cases, the police served the town, whereas the school district covered the entire county. Sometimes the implementation of Drug Abuse Resistance Education (D.A.R.E.) was citywide, sometimes districtwide, sometimes countywide (and sometimes, of course, not at all). Therefore, in this article, we refer to the communities studied as “towns or districts”—there are some of each.
3. Levant also remarked that the D.A.R.E. brand “is second to the Red Cross in terms of nonprofit identity.”
4. Under the federally funded COPS in Schools program of 2000, a school resource officer (SRO) is a career law enforcement officer “deployed in community-oriented policing” and assigned to a school. The SROs serve an enforcement function rather than the strictly educational function as D.A.R.E. officers do.
5. Life Skills Training (LST) is a school-based drug prevention program developed by Gilbert Botvin. It is listed as “exemplary” on the Safe and Drug Free Schools (SDFS) list.
6. We were unable to interview this superintendent because he had retired and was unavailable.
7. All Stars is a school-based drug prevention program developed by William Hansen. It is listed as “promising” on the SDFS list.
8. Federal money is distributed by states.
9. We thank Melvin Mark for pointing to precedents and to this example.
10. We thank anonymous reviewers and Melvin Mark for suggesting we discuss pathways to influence.
11. We have other districts, not discussed here, where no influence of evaluation was visible (see Birkeland, Murphy-Graham, & Weiss, in press). These districts also seem relevant to further exercises in theory building.
12. SDFS chose not to try to keep its lists up-to-date, so in later years, it gave the listing of approved programs to the Center for Substance Abuse Prevention, which was already keeping an inventory of effective abuse prevention programs.

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