

# The Prevalence of Evidence-based Drug Use Prevention Curricula in U.S. Middle Schools in 2008

Chris Ringwalt · Amy A. Vincus · Sean Hanley ·  
Susan T. Ennett · J. Michael Bowling · Susan Haws

© Society for Prevention Research 2010

**Abstract** The No Child Left Behind Act mandates the implementation of evidence-based drug prevention curricula in the nation's schools. The purpose of this paper is to estimate changes in the prevalence of such curricula from 2005 to 2008. We surveyed school staff in a nationally representative sample of schools with middle school grades. Using a web-based approach to data collection that we supplemented by telephone calls, we secured data from 1892 schools for a response rate of 78.2%. We estimate that the prevalence of evidence-based drug prevention curricula rose from 42.6% in 2005 to 46.9% in 2008, and that the prevalence of schools that used these curricula most frequently increased from 22.7% to 25.9% over this period. In addition, the proportion of schools using locally developed curricula also rose, from 17.6% to 28.1%. This study suggests the success of efforts by the Office of Safe and Drug-Free Schools to increase the prevalence of evidence-based curricula, as well as the need to continue to track the prevalence of these curricula in response to any

reductions in the Office's fiscal support for evidence-based drug prevention curricula in the nation's schools.

**Keywords** Evidence-based practice · Substance use prevention · Curricula · Middle schools

## Introduction

The latest results from the Monitoring the Future survey reveal a steady decline in the 30-day prevalence of alcohol use by 8th, 10th, and 12th graders combined, from a high of 38.8% in 1996 to 28.1% in 2008. A similar trajectory can be noted for the 30-day use of any illicit drug, which has declined from 20.6% to 14.6% over this period (Johnston et al. 2009). It seems reasonable to attribute these very encouraging trends, at least in part, to the substantial progress made in the adoption of evidence-based drug use prevention curricula (EBC) by the nation's middle schools. In that regard, we have previously reported that the proportion of these schools that reported the use of any EBC rose from 34.4% to 42.6% between 1999 and 2005 (Ringwalt et al. 2009b). Of concern, however, was the relatively low proportion of schools (22.7%) that reported in 2005 that they used an EBC more frequently than any non-EBC they also were administering at the time.

The original impetus for the adoption of EBC by the nation's schools came from the Safe and Drug-Free Schools (SDFS) Program of the U.S. Department of Education, which in 1998 promulgated a set of "Principles of Effectiveness." Among these principles was a requirement that schools should spend their SDFS funds on evidence-based programs and activities (U.S. Department of Education, 1998). This requirement was later incorporated into the "No Child Left Behind" Act of 2001 ("No Child Left

---

This research was supported by a grant from the National Institute on Drug Abuse (R01 DA016669). We continue to be quite thankful to MSI for their expert handling of our data collection efforts. We are grateful to the Office of Safe and Drug-Free Schools for their letter of support for our data collection efforts. We also are grateful to Sharon Fowler for her unparalleled bibliographic help.

---

C. Ringwalt · A. A. Vincus (✉) · S. Hanley  
Pacific Institute for Research and Evaluation,  
1516 E. Franklin Street, Suite 200,  
Chapel Hill, NC 27514, USA  
e-mail: avincus@pire.org

S. T. Ennett · J. M. Bowling · S. Haws  
Department of Health Behavior and Health Education,  
The Gillings School of Global Public Health,  
The University of North Carolina at Chapel Hill,  
Campus Box 7440,  
Chapel Hill, NC 27599, USA

Behind Act of 2001," 2002, Sec 4115.a.1.c), which specifies that these programs and activities should be supported by "scientifically based research that provides evidence that the program to be used will reduce violence and drug use." This requirement has recently been reiterated by the Office of National Drug Control and Policy (ONDCP 2008).

This paper has two purposes, the first of which is to determine whether the nation's middle schools have continued to make progress in the implementation of EBC between 2005 and 2008, and thus have increased their compliance with the mandates of NCLB. The paper's second purpose is to establish a new benchmark against which future trends in the prevalence of EBC use nationwide can be measured, which is of particular importance given the perilous state of federal support for SDFS' State Grant Program. Over time, this Program has constituted the primary means by which federal funds have supported drug and violence prevention activities in the nation's schools. Funding for the State Grants Program decreased from \$346.5 million in FY 2007 to \$294.8 million in FY 2008 and \$100 million in 2009 (ONDCP 2008), and the Program has been eliminated altogether from the administration's proposed FY 2010 budget (U.S. Department of Education 2009). This radical reduction in funding is in part due to the Office of Management and Budget's (OMB) poor rating for the SDFS program in 2006. In accompanying commentary, the OMB criticized the program for distributing its funds too widely to support evidence-based interventions, and for not concentrating support on schools where the need is greatest. SDFS' State Grant Program, therefore, is likely to be restructured as part of the upcoming reauthorization of the Elementary and Secondary Education Act. If the Program is restructured as currently intended, school districts with a high level of need would apply for funds through a competitive grant process, but most schools would no longer receive support from the SDFS Program. Thus, one potential consequence of these proposed changes to the manner in which SDFS funds are allocated to the schools—in particular, the new focus on schools in need—would seem to place at risk the entire foundation of universal prevention on which the Program has been based since its inception.

Also of concern are recent changes to the structure of the Substance Abuse and Mental Health Services Administration's (SAMHSA's) National Registry of Effective Programs and Practices (NREPP), which has been the nation's most prominent registry of prevention programs. From its inception in 1997 until 2007, NREPP presented a list of "model" or "effective" drug prevention curricula from which schools could select those that best met their needs. More recently, it has become a "decision support system" that displays the effects of each program on its targeted outcomes, together with

discrete ratings of six criteria that assess the methodological rigor of its evaluations (NREPP 2009). Because no guidance is provided as to how to differentially weight the strength of the evidence supporting each program listed, the task of selecting suitable EBC is now left to personnel at the school or school district. Given the likely heterogeneity of their judgments in this regard, the potential effects of NCLB's mandate for the adoption of EBC may be diluted.

In this paper, we examine the prevalence as of 2008 of EBC that target a universal population of middle school students, which is particularly timely given Congressional reauthorization of the NCLB Act, which as of this writing is expected in late 2010 or 2011 (Krigman 2010). That is, we expect that study findings may inform the upcoming debate as to the effects of NCLB on the promotion of evidence-based drug prevention practice in the nation's schools. We also examine recent trends both in the adoption of EBC by schools with middle school grades and, given evidence that many of these schools have acquired multiple curricula (Ringwalt et al. 2009b), the prevalence of schools that reported using EBC most frequently. In addition, we provide discrete estimates of the proportion of schools that had adopted specific EBC (e.g., Life Skills Training and Project ALERT) as of 2008, as well as estimates of schools in which each EBC was taught most frequently.

## Methods

### Study Sample

The sample was drawn in three phases. The first of these utilized a sampling frame secured from Quality Education Data, Inc (QED) for the 1997–1998 school year (QED 1998). This frame comprised all regular schools that included middle school grades in the 50 states and the District of Columbia. Sample eligibility was constrained to schools that included Grades 7 or 8, or were limited to Grade 6 or Grades 5 and 6. We excluded alternative schools and those that enrolled fewer than 20 students, or served only special education or vocational students. This sampling frame comprised 2,273 eligible public schools (Ringwalt et al. 2002). Applying these same criteria to sampling frames drawn from the Common Core of Data (CCD) in 2002–2003 and 2005–2006 (National Center for Education Statistics 2004, 2007), we added 210 and 222 schools, respectively, to our sampling frame to account for new schools that had opened in the interim. Given the wide variation in schools nationwide, we stratified our sample, with equal probability within each stratum, to ensure their adequate representation along three key characteristics available at the school level from the CCD: school size,

poverty level, and population density. Population density was derived from eight categories specified by the CCD, which range from large city to rural. We aggregated these eight categories into three, namely urban, suburban, and rural. We stratified our sample to reduce sampling error and thus increase the precision of our estimates.

Given the potential for error on the CCD sampling frame and the amount of time that had elapsed since we drew our original sample, we recontacted all schools in our sample in the fall and winter of 2007 to confirm their eligibility for the study. This process yielded 2,419 eligible schools; the residual 309 were removed from the sample because of their ineligible grade span, school type or size, or because the school had closed. During data collection, we identified 132 schools (5.5% of the sample) that did not teach any drug prevention whatsoever. While these schools were asked no further questions, they were included in the total that constituted the denominator of our estimates. The demographic characteristics of our resulting analysis sample are displayed in Table 1.

**Data Collection**

In the fall of 2007 we called all schools both to establish their eligibility and to identify the person in each school

who was most qualified to answer our survey questions. In most cases, only one individual taught drug prevention lessons. In schools with multiple drug prevention teachers, we asked for the individual who was most knowledgeable about the school’s drug prevention efforts. We made no effort to return to those teachers who responded to our previous surveys in 1999 and 2005. Formal data collection began in January 2008 and concluded in June of that year. We utilized two sequential data collection modes to maximize the survey’s response rate. All respondents were initially invited to complete a 20–25 minute survey via a secure Website, in a mailing that included a pre-paid \$10 cash incentive. One of our subsequent mailings to those who had not responded included a letter of support from ED’s Office of Safe and Drug-Free Schools. Respondents who did not complete the Web survey were contacted by telephone for a brief interview. Altogether 80.3% of the respondents who completed the survey did so by Web and 19.7% by telephone, which yielded a total response rate of 78.2% ( $N=1,892$ ).

**Instrument**

We asked respondents who completed the survey via the Web to report whether they used each of a total of 26 specified curricula in their school’s middle school grades

**Table 1** School sample characteristics in 2008 ( $N=1891$ )

| Characteristic   | Percentage | 95% Confidence Interval |
|--|------------|-------------------------|
| Region <sup>1</sup>  |            |                         |
| Northeast  | 17.5       | 15.8, 19.1              |
| Midwest  | 30.7       | 28.7, 32.7              |
| South  | 34.8       | 32.8, 36.9              |
| West   | 17.0       | 15.3, 18.7              |
| Population density of geographic area served                         |            |                         |
| Urban  | 21.4       | 20.6, 22.2              |
| Suburban   | 36.8       | 36.1, 37.5              |
| Rural  | 41.8       | 40.9, 42.6              |
| School poverty (% students eligible for free or reduced-price lunch) |            |                         |
| Low (0–14%)  | 13.6       | 12.8, 14.4              |
| Medium (15–39%)  | 31.2       | 30.3, 32.0              |
| Large (40%+)   | 55.3       | 54.9, 55.6              |
| School size (number of students in grades 5–8) <sup>2</sup>          |            |                         |
| Small (20–199)   | 31.5       | 29.2, 33.8              |
| Medium (200–599)   | 37.9       | 35.6, 40.1              |
| Large (600+)   | 30.7       | 28.6, 32.7              |
| Race/ethnicity composition   |            |                         |
| Majority white   | 71.0       | 69.3, 72.7              |
| Majority African-American  | 10.9       | 9.6, 12.2               |
| Majority Hispanic  | 9.7        | 8.4, 11.0               |
| Other majority   | 1.9        | 1.3, 2.5                |
| No majority  | 6.5        | 5.4, 7.6                |

N is unweighted; proportions are calculated using weighted data

<sup>1</sup> Defined by U.S. Census regions

<sup>2</sup> Based on school Data available from the 2006–2007 Common Core of data school file

during the 2007–2008 school year, and to provide in an open-ended field the names of any curricula that we did not include on the list. We also asked respondents to report whether or not they used “a curriculum or set of materials developed locally by your school, school district, or county.” Respondents then indicated which curriculum they used the most because previous iterations of the survey had revealed that many schools used multiple curricula. Respondents who completed the survey by telephone were asked to state the names of all the drug prevention curricula they used and to identify the one they used the most. These responses were then coded by the telephone interviewer into the list we specified in the Web survey; respondents who provided ambiguous names were prompted with the names of similar curricula on our list. The list included all curricula we identified as evidence-based by the procedure described below, as well as other curricula that were taught in 2005 by at least 5% of the nation’s schools. A copy of the instrument, which is in the public domain, is available from the first author.

The estimates reported in this paper are limited to the EBC we specified in our 2005 estimates. These met all of the following criteria at that time: they were designed to prevent drug use, targeted a universal population of middle school students, were commercially available, and were identified as evidence-based as of 2004 on any of three national registries. These included curricula identified as “model” or “effective” by NREPP (2009), “model” or “promising” by Blueprints for Violence Prevention (Center for the Study and Prevention of Violence 2006), or “exemplary” by the Office of Safe and Drug-Free Schools (Safe, Disciplined, and Drug-Free Schools Expert Panel 2001). Further discussion of the rationale for including these curricula and not others may be found elsewhere (Ringwalt et al. 2009b).

We secured from the CCD information on school size, the population density of the area in which the school was located, and the percentage of students at each school who were eligible for a free or reduced-price lunch. This latter measure served as a proxy for the level of poverty of the students served by the school. For descriptive purposes, we also secured information from the CCD concerning the region of the country in which each school was located and the racial and ethnic composition of each school’s students.

## Analysis

We provide prevalence estimates and 95% confidence intervals (CIs) using weighted data. Sample weights were originally constructed to account for selection probabilities in the original sample; they were then adjusted once to take into account new schools added for the 2005 and again for the 2008 samples. A comparison of the latter sample, which

was drawn in the 2006–2007 school year, with that of CCD sampling frame for that year, suggested that the sample required no post-stratification adjustments. Study findings may thus be generalized to all public schools in the United States that met the criteria specified above. We conducted all analyses using SAS 9.3.1 and procedures that accounted for the complex sampling design.

## Results

We found that the proportion of schools with middle school grades that reported using *any* evidence-based drug prevention curriculum increased from 42.6% (CI=39.7, 45.5) in 2005 to 46.9% (CI=44.6, 49.2) in 2008. As expected, substantially fewer schools reported that they used an EBC *most frequently*; the proportion rose from 22.7% (CI=20.5, 24.9) to 25.9% (CI=23.5, 28.4) over this period. Note that neither of these changes was statistically significant. Paradoxically, we also found that the proportion of schools using a locally-developed curriculum most frequently in 2008 was 28.1% (CI=25.6, 30.7), which represented a significant and (indeed) very large increase from 17.6% (CI=15.5, 19.8) in 2005. The increases in the use of both EBC and locally-developed curricula stand in sharp contrast to a trend in the proportion of schools reporting most frequent use of manualized curricula that were not on our list of evidence-based curricula: the prevalence of these decreased markedly over the 3-year period from 59.7% (CI=57.0, 62.5) to 45.9% (CI=43.1, 48.7).

Table 2 displays prevalence estimates and associated 95% CIs of the proportion of schools using each of the EBC we specified in our 2005 and 2008 surveys, as well as the proportion of schools in each year that reported using each curriculum most frequently. As of 2005, about 19% of the nation’s schools with middle school grades reported using Life Skills Training and Project ALERT, and about 8% reported using either curriculum most frequently; as of 2008, these estimates had not changed. Note that our estimates include schools that informed us that they did not teach any drug prevention whatsoever, and that these schools were included in the denominator.

## Discussion

In this study we found that the proportion of the nation’s schools with middle school grades that reported *any* use of an evidence-based drug use prevention curriculum increased from 2005 to 2008, from 43% to 47%. We also found that the proportion of middle schools that used an EBC “the most”—which we believe that respondents understood to mean “most frequently”—rose from 23% to

**Table 2** Universal evidence-based drug use prevention curricula (EBC) used by schools with middle school grades

| EBC  | Any EBC used               |                            | Any EBC used <i>most frequently</i> |                            |
|--|----------------------------|----------------------------|-------------------------------------|----------------------------|
|  | 2005 % (95% CI)<br>N=1,710 | 2008 % (95% CI)<br>N=1,891 | 2005 % (95% CI)<br>N=1,710          | 2008 % (95% CI)<br>N=1,891 |
| Life Skills Training   | 19.7 (17.22, 21.1)         | 19.3 (17.5, 21.2)          | 8.2 (6.7, 9.7)                      | 8.3 (6.9, 9.8)             |
| Project ALERT  | 19.1 (17.1, 21.1)          | 18.1 (16.4, 19.9)          | 8.9 (7.5, 10.3)                     | 8.2 (6.7, 9.7)             |
| Too Good for Drugs   | 5.0 (3.7, 6.4)             | 6.3 (5.2, 7.5)             | 2.2 (1.3, 3.1)                      | 2.1 (1.2, 3.0)             |
| Lion's Quest: Skills for Adolescence                         | 5.7 (4.5, 6.8)             | 5.6 (4.5, 6.7)             | 1.6 (1.0, 2.2)                      | 1.8 (1.1, 2.5)             |
| Project TNT  | 4.2 (3.1, 5.3)             | 4.8 (3.8, 5.8)             | 0.3 (0.1, 0.6)                      | 1.2 (0.6, 1.9)             |
| Positive Action  | 1.8 (1.1, 2.5)             | 4.5 (3.5, 5.5)             | 0.4 (0.1, 0.7)                      | 1.4 (0.7, 2.0)             |
| Keepin' it REAL  | 1.8 (1.2, 2.5)             | 4.2 (3.2, 5.2)             | 0                                   | 0.7 (0.2, 1.2)             |
| All Stars  | 1.9 (1.2, 2.7)             | 3.8 (2.9, 4.8)             | 0.6 (0.4, 0.9)                      | 1.3 (0.6, 2.0)             |
| Project Northland  | 1.1 (0.6, 1.6)             | 2.4 (1.7, 3.1)             | 0.5 (0.2, 0.9)                      | 0.8 (0.3, 1.3)             |
| Social Competence Promotion Program<br>for Young Adolescents | 0.2 (0.2, 0.4)             | 0.7 (0.3, 1.0)             | 0                                   | 0                          |

26% over this period. That said, we are aware that the magnitude of the difference between the curriculum that respondents reported using “most frequently” and any others they have administered may have been modest.

While the positive changes noted in this study were not statistically significant, we believe they constitute good news for the Office of Safe and Drug-Free Schools and for the field of drug prevention generally, especially as they occurred over a relatively brief 3-year period. Further good news can be seen in the decrease, from 60% to 46%, in the proportion of schools administering manualized drug prevention curricula most frequently that were not on any of the lists of evidence-based curricula we consulted. In an effort to learn more about this finding, we conducted an *ex post facto* analysis to determine the potential contribution to this trend of any changes in the prevalence of D.A.R.E. While we found a decrease (from 12% to 9%) in schools with middle school grades that were using D.A.R.E. most frequently, this reduction only partially explained the overall trend we observed.

Much to our surprise, we found a dramatic increase, from 18% to 27%, in the proportion of the nation's middle schools reporting that they were most likely to use a curriculum that they had developed locally. Why schools chose to use locally developed programs, how the programs were developed, and whether they are effective are unknown. We speculate that some schools districts, faced with both diminishing resources with which to purchase packaged curricula and diminishing time in which to implement them, may be increasingly turning to programs they have created themselves. Lack of resources may similarly explain the decreased use of non-evidence-based, manualized curricula. Although some of these programs may have been developed by curriculum or prevention

specialists, others may comprise a patchwork of lessons extracted from other programs that we specified. If so, the resulting hybrids may lack the carefully conceptualized content and progression of the originals, and thus have little or no basis on which to claim effectiveness. Even in the case of local curricula that were carefully and systematically developed, we are unaware of any that have yielded published evidence of effectiveness based on rigorous evaluations.

This trend deserves monitoring over time. It also suggests the need for further research to determine how and why schools are developing their own curricula, and whether these are considerably shorter than any packaged curricula. We suspect that locally-developed curricula may comprise more general health education lessons that include limited content related specifically to drug prevention which may attenuate their potential effects on drug use. That said, the content or methods of some of these curricula may be quite novel and creative, and some may also fill a perceived need for prevention programs that address a broad spectrum of risk behaviors in addition to drug use. Regardless, some are likely to be worthy of at least a preliminary evaluation to determine if they demonstrate sufficient promise to warrant an efficacy study.

Our decision to utilize the same list of EBC for our 2005 and 2008 estimates ensured a metric that facilitated a direct comparison of prevalence estimates over this period. However, we do not assume that curricula that were evidence-based in 2005 have remained so. As mentioned earlier, NREPP has evolved into a decision-making system that, in effect, has surrendered judgments of what constitutes evidence-based practice to the informed practitioner. In doing so, NREPP has provided no guidance to assist the practitioner in differentially assessing the importance of reviewers' ratings of the six criteria of methodological rigor



that are presented for each behavioral outcome reported by the program's evaluator. Nor, even were such guidance provided, is there an established threshold that could be used to determine which curricula should be classified as evidence-based.

Further complicating efforts to compare our studies' estimates across years are the results of new evaluations of drug prevention curricula that are continually being published. Not surprisingly, findings from large scale effectiveness studies sometimes fail to yield the same results as original evaluations of curricula that are implemented under more controlled conditions. This is certainly the case with Project ALERT, which has undergone two recent evaluations that have failed to yield any effects (Ringwalt et al. 2009a, 2010, St. Pierre et al. 2005). Future prevalence estimates of EBC based on our existing list, therefore, will not reflect curricula that have been added to or removed from these registries.

A number of investigators are now suggesting that the boundary between what is and is not considered evidence-based practice is weak, porous, and may even be spurious (Gorman and Huber 2009). Weiss and her colleagues have called the evidence "shaky" (Weiss 2008, p. 38), citing the paucity of evidence that support many curricula, the reporting of effects on subgroups as opposed to entire samples, reliance on the results of efficacy as opposed to effectiveness trials, the use of multiple outcomes assessed for multiple referent periods, and the lack of long-term follow-up. She also mentions the potential for conflict of interest generated by the involvement of developers in the evaluations of their curricula, a concern that has been expressed by several other observers (Gandhi et al. 2007; Petrosino and Soydan 2005). We are sensitive to these issues, all of which should inform judgments of what constitutes evidence-based practice.

It is thus reasonable to ask whether the Office of SDFS, with a mandate from the NCLB Act, should continue its policy of the promotion of EBC by what Weiss has called "imposed use" (Weiss et al. 2005, p. 12). For all their manifest flaws and challenges, we continue to believe that registries of such curricula are greatly preferable to a return to the *laissez-faire* selection process at the district and school level that characterized past practice. That said, we are concerned about the limited systematic guidance that is available to school districts as to which prevention curricula may be most suitable to their needs, and the extent to which these curricula may be adapted and even truncated to respond to local circumstances.

In conclusion, the positive trends in EBCs that we have noted between 2005 and 2008 are noteworthy and constitute a testimonial to the efforts of the Office of SDFS to promote such practice. Given that both the funding and the function of the Office may undergo a sea change within

the next year or so, we believe it essential to continue periodically to measure the prevalence of EBC and the means by which such curricula are identified. In addition, the increasing prevalence of home-grown prevention curricula warrants close attention because it may represent a bellweather of schools' evolving substance use prevention practice to which the field of prevention science should be prepared to respond.

## References

- Center for the Study and Prevention of Violence. (2006). *Blueprints for violence prevention overview*, 2007, from University of Colorado, Boulder (CO) Web site <http://www.colorado.edu/cspv/blueprints/>
- Gandhi, A. G., Murphy-Graham, E., Petrosino, A., Chrismer, S. S., & Weiss, C. H. (2007). The devil is in the details: Examining the evidence for "proven" school-based drug abuse prevention programs. *Evaluation Review*, 31, 43–74.
- Gorman, D. M., & Huber, J. C., Jr. (2009). The social construction of 'evidence-based' drug prevention programs: A reanalysis of data from the Drug Abuse Resistance Education (DARE) program. *Evaluation Review*, 33, 396–414.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2009). *Monitoring the Future: National results on adolescent drug use: Overview of key findings, 2008*. (NIH Publication No. 09-7401). Bethesda, MD: National Institute on Drug Abuse.
- Krigman, E. (2010). *Duncan: NCLB on Congress' agenda this year*. Retrieved January 27, 2010, from NationalJournal.com [http://www.nationaljournal.com/njonline/no\\_20100122\\_1573.php](http://www.nationaljournal.com/njonline/no_20100122_1573.php)
- National Center for Education Statistics. (2004). *Public elementary/secondary school universe survey data, 2002–03*. [Data file]. Retrieved February 21, 2007, from Common Core of Data Web site, <http://nces.ed.gov/ccd/pubagency.asp>
- National Center for Education Statistics. (2007). *Public elementary/secondary school universe survey data, 2005–06*. [Data file]. Retrieved February 21, 2007, from Common Core of Data Web site, <http://nces.ed.gov/ccd/pubagency.asp>
- National Registry of Evidence-based Programs and Practices (NREPP). (2009). *SAMHSA model programs*. Retrieved December 30, 2009, from <http://nrepp.samhsa.gov/>
- No Child Left Behind Act of 2001, Public L. No. 107-110, 115 Stat 1425, Sec 4115.a.1.c. (2002).
- Office of National Drug Control Policy (ONDCP). (2008). *National drug control strategy - FY 2009 budget summary*. Retrieved December 30, 2009, from <http://www.whitehousedrugpolicy.gov/publications/policy/09budget/fy09budget.pdf>
- Petrosino, A., & Soydan, H. (2005). The impact of program developers as evaluators on criminal recidivism: Results from meta-analyses of experimental and quasi-experimental research. *Journal of Experimental Criminology*, 1, 435–450.
- Quality Education Data Inc. (1998). *QED national education database: Data users guide, (Version 4.6)*. Denver, CO.
- Ringwalt, C. L., Ennett, S., Vincus, A., Thorne, J., Rohrbach, L. A., & Simons-Rudolph, A. (2002). The prevalence of effective substance use prevention curricula in U.S. middle schools. *Prevention Science*, 3, 257–265.
- Ringwalt, C. L., Clark, H. K., Hanley, S., Shamblen, S. R., & Flewelling, R. L. (2009a). Project ALERT: A cluster randomized trial. *Archives of Pediatrics & Adolescent Medicine*, 163, 625–632.
- Ringwalt, C. L., Vincus, A., Hanley, S., Ennett, S., Bowling, J., & Rohrbach, L. (2009b). The prevalence of evidence-based drug

- use prevention curricula in U.S. middle schools in 2005. *Prevention Science*, *10*, 33–40.
- Ringwalt, C. L., Clark, H. K., Hanley, S., Shamblen, S. R., & Flewelling, R. L. (2010). The effects of Project ALERT one year past curriculum completion. *Prevention Science*, *11*, 172–184.
- Safe, Disciplined, and Drug-Free Schools Expert Panel. (2001). *Exemplary programs*. Retrieved 2007, from <http://www.ed.gov/admins/lead/safety/exemplary01/sddsguid.pdf> and [http://www.ed.gov/offices/OERI/ORAD/KAD/expert\\_panel/2001exemplary\\_sdfs.html](http://www.ed.gov/offices/OERI/ORAD/KAD/expert_panel/2001exemplary_sdfs.html)
- St. Pierre, T. L., Osgood, D. W., Mincemoyer, C. C., Kaltreider, D. L., & Kauh, T. J. (2005). Results of an independent evaluation of Project ALERT delivered in schools by Cooperative Extension. *Prevention Science*, *6*, 305–317.
- U.S. Department of Education. (1998). Safe and Drug-Free Schools Program: Notice of final principles of effectiveness. *Federal Register*, *63*, 29902–29906.
- U.S. Department of Education. (2009). *Fiscal year 2010 budget summary - May 7, 2009: Section IV. Programs proposed for elimination*. Retrieved December 30, 2009, from <http://www.ed.gov/about/overview/budget/budget10/summary/edlite-section4.html>
- Weiss, C. H. (2008). The fairy godmother—and her warts: Making the dream of evidence-based policy come true. *American Journal of Evaluation*, *29*, 29–47.
- Weiss, C. H., Murphy-Graham, E., & Birkeland, S. (2005). An alternate route to policy influence: How evaluations affect D.A. R.E. *American Journal of Evaluation*, *26*, 12–30.