



NIH PUBLIC ACCESS

Author Manuscript

J Prim Prev. Author manuscript; available in PMC 2010 January 12.

Published in final edited form as:

J Prim Prev. 2008 November ; 29(6): 479–488. doi:10.1007/s10935-008-0158-4.

The Prevalence of Effective Substance Use Prevention Curricula in the Nation's High Schools

Chris Ringwalt¹, Sean Hanley¹, Amy A. Vincus¹, Susan T. Ennett², Louise A. Rohrbach³, and J. Michael Bowling²

¹ Pacific Institute for Research & Evaluation, Chapel Hill, NC, USA

² University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

³ University of Southern California, Alhambra, CA, USA

Abstract

Despite a substantial proportion of high school students who initiate substance use following middle school, the implementation of universal evidence-based prevention curricula appears to be scant. We report data collected in 2005 from 1392 school-district based drug prevention coordinators, from a national, representative study of school-based substance use prevention practices. Altogether, 10.3% of districts that included high school grades reported administering one of six such curricula that were then rated as effective by the Substance Abuse and Mental Health Services Administration's National Registry of Effective Programs and Practices or Blueprints for Violence Prevention, and 5.7% reported that they used one of these curricula the most. Only 56.5% of the nation's districts with high school grades administered any substance use prevention programming in at least one of their constituent high schools.

Estimates released annually by *Monitoring the Future's* school-based surveys of adolescent substance use reveal that initiation of substance use by the nation's adolescents increases rapidly across the middle and high school grades. In 2007, students' self-reported lifetime prevalence of alcohol use rose 23% from the 8th to the 10th grade and another 11% from the 10th to the 12th; analogous figures for increases in the use of any illicit drugs are 16% and 11% (Monitoring the Future, 2007). Despite continued initiation of substance use through the high school years, most school-based substance use prevention curricula target students in the late elementary school grades and in middle school, with less attention paid to preventing the initiation of substance use by high school students. *Healthy People 2010* objectives (United States Department of Health and Human Services [USDHHS], 2000) call for an increase in school-based substance use prevention efforts directed towards this population.

No Child Left Behind requires schools to administer prevention programs that have demonstrated evidence of effectiveness (United States Department of Education [ED], 2002). According to the National Registry of Effective Programs and Practices (NREPP; 2004) maintained by the Substance Abuse and Mental Health Services Administration, far fewer programs are designed for high than middle school students. Although the number of evidence-based prevention programs for high school students are few, it does not necessarily follow that high schools are ignoring their students' continuing need for substance use prevention. Indeed, a study conducted in 2000 reported that at least 80% of the nation's high schools included, in at least one required class or course, any of a variety of topics and skills related to substance

use prevention (Kann, Brener, & Allensworth, 2001). In contrast, another study conducted in 1998 (Gottfredson & Gottfredson, 2001) found that only 18% of the nation's high schools were administering a packaged program to their students, and *none* of the programs was recognized as evidence-based for students at this level. These two studies suggest that although substance use prevention education may be delivered to high school students in a variety of ways, only a relatively modest proportion of which may be via an evidence-based curriculum.

The primary purpose of this study is to estimate the proportion of the nation's school districts that included at least one high school that implemented a universal evidence-based substance use prevention curriculum for high school students during the 2004–2005 school year. Our secondary purpose is to report the proportion of school districts that administer *any* type of substance use prevention programming to students in high school grades. We also describe the characteristics of school districts with any substance use prevention programming, as well as those using a universal evidence-based curricula.

Methods

Sample

The sample comprised school districts associated with a national random sample of middle schools that we drew in two phases, five years apart, for a study of school-based substance use prevention practices. The first phase used a 1997–1998 sampling frame from Quality Education Data, Inc. (1998) of all regular public schools in the 50 states and the District of Columbia that included middle school grades. We excluded schools that enrolled fewer than 20 students in middle school grades, were non-regular (such as alternative, charter, vocational/technical, or special education schools, or those administered by the US Department of Defense or Bureau of Indian Affairs), or reported having no substance use prevention programs. This sampling frame yielded 2,273 eligible public schools. The second phase applied the same inclusion and exclusion criteria to a 2002–2003 sampling frame from the Common Core of Data (CCD; National Center for Education Statistics, 2002–03) to refresh the sample by accounting for newly-opened or reorganized schools; this phase yielded 210 additional schools. We stratified both sampling frames by population density, school size, and school district poverty level, with equal probability within each stratum. We contacted sampled schools between October 2004 and January 2005 to confirm their eligibility status; this process yielded 2,204 verified eligible schools that were nested within 1,922 school districts.

Because the focus of the present study is substance use prevention curricula in high schools, we restricted our sample to those school districts that included schools with high school grades, as reported by the CCD (N=1437 of 1612 responding school districts). After deleting 45 cases with inconsistent responses to questions concerning curricula use, the final analysis sample included 1,392 school districts, which constituted 86.4% of responding school districts.

Data Collection

Using sequential data collection modes to maximize the response rate, we collected data from January through July of 2005 from each school district's Safe and Drug-Free Schools Coordinator or drug prevention coordinator. All respondents initially were invited by letter to complete a 40–45 minute questionnaire via a secure Website and were provided a prepaid \$10 cash incentive. Respondents who did not complete the Web-based survey after repeated contacts were mailed a paper copy of the questionnaire and a postage-paid return envelope, along with a letter of support from the U.S. Department of Education's (ED) Office of Safe and Drug-Free Schools. Those who did not complete the mailed questionnaire were contacted for a brief telephone interview. These data collection strategies yielded a response rate of 83.9%

(n=1612). Of those, 66.8% responded by Web, 16.3% responded by paper, and 16.9% responded by phone.

Measures

We define universal, evidence-based curricula to be those that target substance use, are intended for all students regardless of their level of risk, are designed for use in high school grades, and were classified at the time of data collection (2005) as “model” or “effective” on NREPP (2004) or “model” or “promising” on Blueprints for Violence Prevention, supported by the Office of Juvenile Justice and Delinquency Prevention (Center for the Study and Prevention of Violence, 2004). Using these criteria, we identified the following six curricula: Athletes Training and Learning to Avoid Steroids (ATLAS); keepin’ it REAL; Positive Action; Project Toward No Drug Abuse (TND); Project Toward No Tobacco Use (TNT); and Too Good for Drugs (TGFD). We note that although ATLAS is classified by NREPP as universal, it could arguably be considered selective due to its focus on high school athletes.

We asked respondents whether any high schools in their district used a substance use prevention curriculum with students at that level. Those who answered in the affirmative were asked the following question: “During the current school year, which of the following substance use prevention curricula are your district’s schools using with students in high school grades?” Respondents were provided with the list of the curricula specified above and were given the opportunity to write in other curricula that we did not list. We also provided a response option to indicate whether they currently used a locally-developed curriculum.

We then asked respondents which curricula they used the most: “During the current school year, which one curriculum are your district’s schools using the most with students in high school grades? If your district’s schools use two or more curricula equally, please select the one that your schools rely on the most with students in high school grades.” Again, respondents were provided with the list of curricula as well as an option to indicate a locally-developed curriculum or a curriculum we did not list.

To measure the proportion of districts providing any substance use prevention programming, we included those districts that reported using a substance use prevention curriculum with high school students, including those that administered one of the evidence-based curricula, other substance use prevention curricula, and locally-developed programs. In addition, we included respondents who, in the open-ended responses concerning other curricula used, described using an amalgam of various curricula, as well as textbooks, videos, pamphlets, and online resources. We excluded programming or curricula that did not primarily target substance use prevention (e.g., violence prevention or character education).

We utilized the CCD to characterize the school districts in our sample by district size, proportion of students eligible for free or reduce-priced lunch (as an indicator of poverty), and racial/ethnic composition. Our data collection instrument, which is in the public domain, is available on request from the first author.

Analysis Strategy

All analyses were conducted in SAS 9.1 using PROC SURVEYFREQ. We report prevalence estimates and 95% confidence intervals using weighted data for the proportion of districts with high school grades that were implementing any one of the six universal evidence-based curricula, those that administered any of these curricula the most, and those that administered any substance use prevention programming. We also report the prevalence estimates for use of any evidence-based curricula and any substance use prevention programming by district demographic characteristics.

Sample weights for school districts were constructed from original selection probabilities computed on the 1997–1998 sample and probabilities of selecting new districts in the 2002–2003 sample (Jones, Sutton, & Boyle, 2002). Poststratification weights then were applied to the data to adjust proportions for district poverty, number of schools, and population density to those of the 2004–2005 sampling frame (National Center for Education Statistics, 2004–05).

Results

Table 1 displays the proportion of school districts that used each of the six evidence-based universal curricula, as well as the proportion that used the particular curriculum the most with students in high school grades. Altogether, 10.3% of the nation's school districts with high school grades reported in 2005 that they used any one of these six curricula with students in at least one constituent high school, and 5.7% reported using such a curriculum the most. The most prevalent evidence-based curriculum was Project Toward No Tobacco Use (4.7%), followed by Too Good for Drugs (4.0%). Note that Table 1 presents weighted estimates and an unweighted sample size.

Of the total number of school districts with high school grades, 56.5% (CI = 52.8–60.2, n = 798) reported that they administered some kind of substance use prevention programming. The majority of these districts (n=489) administered a locally-developed substance use prevention curriculum (64.2% [CI=59.7–68.7] of those administering any programming, or 36.3% [CI=32.6–40.0] of all districts).

As shown in Table 2, larger districts were more likely to administer some level of substance use prevention programming and were more likely to administer an evidence-based curriculum. Districts with a majority African American student population (76.0%, CI=64.2%–87.9%) were more likely to use any programming than districts that were majority White (53.7%, CI=49.5%–57.8%) and were more likely to use an evidence-based curriculum (26.4%, CI=13.0%–39.8%) than districts that were majority White (8.1%, CI=6.2%–10.0%). Note that Table 2 presents weighted estimates and unweighted sample sizes.

Discussion

Only 10.3% of the nation's school districts with high school grades administered a universal curriculum recognized as evidence-based in 2005 by either one of two actively-maintained federally-sponsored registries. This figure represents a considerable improvement over the estimate reported seven years earlier that next to no high schools were administering evidence-based curricula (Gottfredson & Gottfredson, 2001). Even so, it appears that the nation's high schools are making scant progress towards the implementation of universal evidence-based substance use prevention curricula. Considerable work remains to be done to meet the recommendations of *Healthy People 2010* and the requirements of the *No Child Left Behind* legislation. Indeed, ED's own *Principles of Effectiveness* (2002) require that prevention programs be "grounded in scientifically based research that provides evidence that the program will reduce...illegal drug use" (p. 322). Furthermore, using a generous definition of prevention programming, only 56.5% of the districts administered *any* substance use prevention programming in at least one of their high schools.

School districts have traditionally, and appropriately, focused substance use prevention efforts on the ages at which youth begin to use substances—in the upper elementary and middle school grades. Perhaps by the time students have reached high school, administrators believe that students have been subjected to so many drug prevention messages—both within and outside of school—that further exposure to formal prevention curricula may be unnecessary. If so,

administrators may be unaware of the growing body of evidence that speaks to the need for periodic and continuing reinforcement of fundamental anti-drug messages (e.g., National Institute on Drug Abuse, 2003). Alternatively, school districts may believe that the anti-drug policies and practices they have in place—such as “no tolerance” policies or drug testing—obviate the need for further drug prevention programming. It is also possible that district-level administrators believe that relatively few students initiate drug use after middle school, so that high schools should focus their limited resources on indicated strategies, such as individual counseling or Student Assistance Programs, for students who manifest symptoms of substance use. However, the statistics reported earlier concerning the rise in lifetime substance use throughout high school make it clear that universal prevention curricula targeting the initiation of substance use continue to be needed. Indeed, the increases noted from the 10th to the 12th grades would probably be even greater were substance-using adolescents not at elevated risk of dropping out of school (Fergusson, Horwood, & Beautrais, 2003; Mensch & Kandel, 1988; Roebuck, French, & Dennis, 2004).

The low prevalence of substance use prevention curricula may also be attributed to any of a number of structural reasons. High school teachers may simply be devoting their limited class time to more traditional subject content areas, particularly in light of the increasing focus on student performance induced by *No Child Left Behind* (Hallfors, Pankratz, & Hartman, 2007). Students’ heterogeneous class schedules may present substantial challenges to school districts’ efforts to implement substance use prevention curricula in their high schools. This may be particularly likely for the universal curricula in which we were most interested. In this regard, an inspection of the key characteristics of the six universal evidence-based curricula specified by NREPP (2004) reveals that the demands they place on schools are substantial and on par with middle school programs. Most of the high school curricula comprise between 10 and 14 lessons, three also recommend between two and 21 boosters, all require one to two days of training, and most cost between one and five thousand dollars.

It is noteworthy that 36.3% of the nation’s school districts with high school grades were using a locally-developed curriculum or set of materials. Given the paucity of available programs specified in 2004 as evidence-based, it is perhaps surprising that even more districts did not develop their own curricula. A concern with locally-developed programs is that they typically have not been subjected to rigorous evaluation to determine their effectiveness.

Our exploration of the demographic characteristics of school districts revealed that those that were large and predominantly African American were more likely to use evidence-based curricula and, indeed, *any* substance use prevention programming. Predominantly Hispanic districts were also more likely to implement at least some programming pertaining to substance use prevention. Relatively large, inner-city districts are likely to receive disproportionate Safe and Drug-Free Schools funding. As a result, they are more likely to afford a district-based staff person who is dedicated to the position and thus may understand both the importance of implementing evidence-based curricula and how they may be identified, assessed relative to local need and capability, and successfully implemented.

Our study has limitations, one of which pertains to its sampling frame of school districts associated with a nationally representative sample of schools with middle school grades. Even though the majority of the districts in the sample also contained high school grades, the confidence intervals for our estimates are commensurately wider, and thus the precision of our estimates is lower, than if our sampling frame had been initially designed to assess high schools. This concern, however, is partially offset by the magnitude of our response rate (83.9%), which for a survey of this nature is very high. Second, our respondents comprised school district-level staff who may have been less knowledgeable about the prevention curricula taught in the district’s high schools than the school-level personnel themselves. Third, we developed three

questions to tap the use of substance use prevention curricula, the first of which served as a screening question, and the last two related to *any* use and *most frequent* use. Because these were single item questions, tests of homogeneity are not appropriate, and as they were administered within the context of a cross-sectional survey, we cannot comment on their test-retest stability. However, we found that only 45 out of 1437 (3%) respondents provided inconsistent responses across these three questions, and for this reason we eliminated them from our sample.

Finally, we recognize that our estimates may be biased due to the criteria we used to develop our sampling frame. Of greatest concern are the middle schools (and their associated districts) that we considered ineligible because they were not conducting any substance use prevention activities. Our records indicate that only about 2% of these schools were deemed ineligible for this reason. However, we suspect that this may constitute a low estimate because of the possibility that some schools that did not administer any substance use prevention curricula may have declined to respond without so indicating. We also recognize that because we identified our respondents as the Safe and Drug-Free Schools Coordinator or district-level drug prevention coordinator, some responding districts may have declined our survey because they had no staff with that title. However, insofar as 98% of schools receive Safe and Drug-Free Schools funds (U.S. Department of Education, 2001), it seems likely that the great majority of our districts would have had someone in place who served in that capacity.

Collectively, study findings suggest that schools and school districts, with assistance from ED's Office of Safe and Drug-Free Schools, should reexamine what appears to be a policy of benign neglect towards the continuing *universal* substance use prevention needs of the nation's high school students. At the very least, this task will require an initiative to inform school districts of the availability and demonstrated effectiveness of substance use prevention curricula targeting high school students, such as those specified in Table 1. We expect, however, that greater efforts will be needed to generate support among school district and school administrators for an initiative to identify and train local champions in the school or community to promote the adoption of evidence-based curricula (St. Pierre & Kaltreider, 2004). The greatest challenge, however, may be to find a place for these curricula in an already crowded school day without taking time away from "core" academic subjects (Fagan & Mihalic, 2003; Petrosino, 2003; Wagner, 2004). Given that substance use prevention resources available to districts are likely to diminish (Office of National Drug Control Policy, 2007), attempts to increase use of evidence-based curricula in high schools may prove even more challenging.

Acknowledgments

We are deeply appreciative of the contributions made by Duston Pope (now of Gongos Research), and the Market Strategies, Inc. team, to ensuring a successful data collection effort. We thank Dr. Lloyd Johnston for his support in the development of our instrument, and for sharing with us questions from the YES (Youth, Education, and Society) study, funded by the Robert Wood Johnson Foundation. We also are grateful to Sharon Fowler for bibliographic help. This study was supported by NIDA grant #R01 DA016669.

References

- Center for the Study and Prevention of Violence. Blueprints for Violence Prevention overview. 2004. Retrieved June 4, 2004, from <http://www.colorado.edu/cspv/blueprints/model/criteria.html>
- Fagan A, Mihalic S. Enhancing the adoption of school-based prevention programs. *Journal of Community Psychology* 2003;31:235–253.
- Fergusson D, Horwood L, Beautrais A. Cannabis and educational achievement. *Addiction* 2003;98:1681–1692. [PubMed: 14651500]
- Gottfredson G, Gottfredson D. What schools do to prevent problem behavior and promote safe environments. *Journal of Educational and Psychological Consultation* 2001;12:313–344.

- Hallfors D, Pankratz M, Hartman S. Does federal policy support the use of scientific evidence in school-based prevention programs? *Prevention Science* 2007;8:75–81. [PubMed: 17165146]
- Jones, SM.; Sutton, BC.; Boyle, KE. Survey methodology for studying substance use prevention programs in schools. In: Chaubey, YP., editor. *Recent advances in statistical methods; Proceedings of Statistics 2001 Canada. The 4th Conference in Applied Statistics*; London: Imperial College Press; 2002. p. 157-168.
- Kann L, Brener N, Allensworth D. Health education: Results from the school health policies and programs study 2000. *Journal of School Health* 2001;71:266–278. [PubMed: 11586870]
- Mensch BS, Kandel DB. Dropping out of high school and drug involvement. *Sociology of Education* 1988;61:95–113.
- Monitoring the Future. Trends in lifetime prevalence of use of various drugs for eighth, tenth, and twelfth graders. 2007. Retrieved December 17, 2007, from <http://www.monitoringthefuture.org/data/07data/pr07t1.pdf>
- National Center for Education Statistics. Common Core of Data: Local education agency (school district) universe survey data, 2004–05. 2006. [Data file]. Retrieved February 21, 2007, from <http://nces.ed.gov/ccd/pubagency.asp>
- National Center for Education Statistics. Common Core of Data: Public elementary/secondary school universe survey data, 2002–03. 2004. [Data file]. Retrieved August 15, 2004, from <http://nces.ed.gov/ccd/pubschuniv.asp>
- National Center for Education Statistics. Common Core of Data: Public elementary/secondary school universe survey data, 2004–05. 2006. [Data file]. Retrieved February 21, 2007, from <http://nces.ed.gov/ccd/pubschuniv.asp>
- National Institute on Drug Abuse. Preventing drug use among children and adolescents: A research-based guide . Vol. 2. Rockville, MD: National Institute on Drug Abuse; 2003. (No. 04-4212(B))
- National Registry of Evidence-based Programs and Practices. SAMHSA model programs. 2004. Retrieved June 4, 2004, from <http://modelprograms.samhsa.gov>
- Office of National Drug Control Policy. Drug control funding by agency, FY 2006-FY 2008. 2007. Retrieved January 25, 2008, from http://www.whitehousedrugpolicy.gov/publications/policy/08budget/tbl_2.pdf
- Petrosino A. Standards for evidence and evidence for standards: The case of school-based drug prevention. *The Annals of the American Academy of Political and Social Science* 2003;587:180–207.
- Quality Education Data Inc. QED National Education Database. 1998 [database].
- Roebuck M, French M, Dennis M. Adolescent marijuana use and school attendance. *Economics of Education Review* 2004;23(2):133–141.
- St Pierre TL, Kaltreider DL. Tales of refusal, adoption, and maintenance: Evidence-based substance abuse prevention via school-extension collaborations. *American Journal of Evaluation* 2004;25:479–491.
- United States Department of Education. No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat 1425. 2002. Retrieved December 13, 2007, from <http://www.ed.gov/policy/elsec/leg/esea02/107-110.pdf>
- United States Department of Education. Wide scope, questionable quality: Drug and violence prevention efforts in American schools. 2001. Retrieved April 29, 2008 from <http://www.ed.gov/offices/OUS/PES/studies-school-violence/wide-scope.pdf>
- United States Department of Health and Human Services. Healthy People 2010: Educational and community-based programs. 2000. Retrieved August 15, 2007, from <http://www.healthypeople.gov/document/html/objectives/07-02.htm>
- Wagner E, Tubman J, Gil A. Implementing school-based substance abuse interventions: Methodological dilemmas and recommended solutions. *Addiction* 2004;99(Suppl 2):106–119. [PubMed: 15488109]

Table 1

Universal, Evidence-based Substance Use Prevention Curricula Used by School Districts in at Least One School with High School Grades (unweighted N=1301).

| Curriculum | Used with <i>any</i> students in high school grades Weighted % (95% CI) | Used <i>the most</i> with students in high school grades Weighted % (95% CI) |
|---|--|---|
| Athletes Training and Learning to Avoid Steroids (ATLAS) ^a | 1.2 (0.6, 1.8) | 0.1 (0.0, 0.3) |
| keepin' it REAL ^a | 0.9 (0.0, 1.8) | 0.1 (0.0, 0.3) |
| Positive Action ^a | 1.5 (0.8, 2.3) | 0.5 (0.1, 0.8) |
| Project Toward No Drug Abuse (TND) ^{a, b} | 2.2 (1.4, 3.0) | 1.0 (0.5, 1.5) |
| Project Toward No Tobacco Use (TNT) ^a | 4.7 (3.3, 6.0) | 1.3 (0.4, 2.1) |
| Too Good for Drugs (TGFD) ^a | 4.0 (2.6, 5.3) | 2.8 (1.6, 4.0) |
| <i>Any</i> evidence-based universal curriculum | 10.3 (8.3, 12.3) | 5.7 (4.1, 7.3) |

Note. N is unweighted; proportions calculated using weighted data. Sample is restricted to those districts that include high school grades. Analyses in Table 1 do not include 91 cases that have missing data on the questions of interest.

^a Identified as model or effective program on NREPP.

^b Identified as model or promising program on Blueprints for Prevention.

Table 2

Characteristics of Districts with High Schools Administering Any Substance Use Prevention Programming, and Evidence-based Curricula.

| School district characteristic | Total analysis sample (unweighted N=1392) Weighted % (95% CI) | Any substance use prevention programming (unweighted N=798) Weighted % (95% CI) | Any evidence-based curricula (unweighted N=202) Weighted % (95% CI) |
|-------------------------------------|---|---|---|
| District size^a | | | |
| Small (≤842 students) | 33.3 (29.7, 36.9) | 37.5 (29.2, 45.8) | 6.5 (1.5, 11.5) |
| Medium (843–2422) | 33.3 (29.7, 36.9) | 62.3 (55.1, 69.6) | 6.6 (3.6, 9.6) |
| Large (≥2423) | 33.4 (30.4, 36.3) | 62.9 (58.4, 67.5) | 14.5 (11.6, 17.4) |
| District poverty^b | | | |
| Low (0–14%) | 14.6 (11.6, 17.6) | 70.3 (58.8, 81.9) | 5.7 (2.3, 9.2) |
| Middle (15–39%) | 38.3 (34.9, 41.6) | 52.1 (46.7, 57.6) | 8.2 (5.5, 10.9) |
| High (>39%) | 47.2 (43.5, 50.8) | 44.2 (38.8, 49.7) | 13.5 (10.0, 17.0) |
| Race/ethnicity composition | | | |
| Majority white (%) | 85.3 (82.9, 87.6) | 53.7 (49.5, 57.8) | 8.1 (6.2, 10.0) |
| Majority African American (%) | 3.1 (2.2, 4.1) | 76.0 (64.2, 87.9) | 26.4 (13.0, 39.8) |
| Majority Hispanic (%) | 4.3 (2.7, 5.8) | 75.5 (59.9, 91.0) | 9.9 (3.0, 16.7) |
| Other majority (%) | 1.4 (0.6, 2.2) | 62.7 (35.6, 89.8) | 14.5 (0.5, 28.6) |
| No majority (%) | 5.9 (4.5, 7.4) | 70.2 (59.1, 81.4) | 31.8 (17.9, 45.7) |

Note. N is unweighted; proportions calculated using weighted data. Sample is restricted to those districts that include high school grades. Data secured from 2004–05 Common Core of Data district file (National Center for Education Statistics, 2004–05). Each column constitutes a subsample of the column to its immediate left.

^a Categorical cutpoints for district size only are based on tertile splits.

^b As measured by student eligibility for free or reduced-price lunch; aggregated by school district from the 2004–2005 Common Core of Data school file (National Center for Education Statistics, 2004–05).