Results on School Policies and Programs

Overview of Key Findings

2007

A Study Supported by the Robert Wood Johnson Foundation
YOUTH, EDUCATION, AND SOCIETY

RESULTS ON SCHOOL POLICIES AND PROGRAMS

Overview of Key Findings, 2007

by

Lloyd D. Johnston
Patrick M. O’Malley
Jorge Delva
Jerald G. Bachman
John E. Schulenberg

The University of Michigan
Institute for Social Research

A Study Supported by the Robert Wood Johnson Foundation

2008
Acknowledgments

Funding for the Youth, Education, and Society (YES) project is provided by the Robert Wood Johnson Foundation. It is part of a larger research initiative of the Foundation, entitled Bridging the Gap.

Several staff members on the YES project provided valuable assistance in the preparation of this report: Jonathon Brenner carried out the analyses, assisted with the writing, and oversaw the production of the report; and Ginny Laetz assisted with the writing of the report.
Acknowledgments

Contents

Executive Summary

Project Description

Alcohol, Tobacco, and Other Drug Use: Challenges in Today’s Schools

Ratings of School Problems

Meeting the Challenge of ATOD Use in Schools

Resources Available to Address ATOD Problems

School Drug Testing Policies and Procedures

ATOD Summary

Student Participation in Physical Education

Promoting Physical Activity and Fitness
Physical Education Summary .............................................................. 12

Food and Nutrition Policies and Programs in Schools ................................................................. 13
  School Meal Planning ..................................................................................... 13
  School Lunch Options .................................................................................. 13
  Vending Machines, Snack Bars/Carts, School Store ........................................ 14
  Efforts to Improve Student Nutrition ............................................................ 14

Food and Nutrition Summary ................................................................. 15

Conclusions ........................................................................................................ 16
Executive Summary

Today’s school administrators face multiple challenges, from raising accountability and achievement standards to creating safe, drug-free learning environments and, more recently, to attending to the growing problem of obesity among youth. This report provides key findings from the Youth, Education, and Society (YES) study of school alcohol, tobacco, and other drug (ATOD) prevention programs and school activities and policies concerning physical education (PE) and nutrition. The following are some of the highlights from the 2007 nationwide survey:

What School Factors Are Associated With Fewer ATOD Problems?

According to School Administrators Surveyed . . .
- Intense monitoring of student behavior, less staff smoking, and parental involvement all are associated with fewer reported ATOD problems. Student bodies in which African-American students are in the majority showed lower than average ATOD use.

How Effective Are Drug Use Prevention Programs?

According to School Administrators Surveyed . . .
- The majority of schools do teach ATOD prevention in the classroom, but respondents are fairly neutral about the judged effectiveness of most ATOD programs.

Physical Education in Schools: What Are Schools Doing?

According to School Administrators Surveyed . . .
- The overall majority of schools (60%) require physical education for the target grade, but the percentage of schools that require PE varied considerably depending on grade level, with PE much less likely to be required in higher grades.
- Less than half of the schools reported that they give physical fitness tests to the students in their sampled grade.

What Are the Most Common Nutritional Policies and Practices in Schools?

According to School Administrators Surveyed . . .
- Most schools (80%) participate in the USDA reimbursable National School Lunch Program, but only about one third (38%) participate in the USDA-sponsored Team Nutrition program.
- High schools are more likely to have vending machines and school stores than middle schools, and middle schools are more likely than high schools to restrict access to vending machines.
Project Description

The Purpose of the Project
The School Policies and Programs Questionnaire was administered in a national sample of schools in order to collect information about how school policies and prevention programs affect young people’s behavior and attitudes regarding alcohol, tobacco, and other drug (ATOD) use. Questions about school activities and policies regarding physical education and nutrition were added in 2003 and 2004, respectively. Ultimately, the goal of this project is to determine which policies and programs are most effective in reducing students’ ATOD use and obesity levels and to inform policymakers and school administrators of the results.

A Description of the Questionnaire
The School Policies and Programs Questionnaire was mailed in the spring and summer of 2007. The project has collected information on ATOD since 1998, physical education since 2003, and nutrition since 2004. The information presented in this report reflects responses to the 2007 survey. On some occasions, comparisons over the 10-year period are drawn for the ATOD data. The questionnaire asked about the following:

- General characteristics of the school, teaching staff, and students
- Resources available to students in the school and local community
- School policies regarding alcohol, tobacco, and other drug use
- Types of ATOD prevention programs taught in the school (and/or its feeder schools)
- School nutrition policies and programs and physical education programs

A Description of Participating Schools
A total of 176 secondary schools across the nation participated in the YES study in 2007, reflecting a response rate of 83%. The schools selected to be surveyed came from a national sample of schools cycling out of the Monitoring the Future (MTF) student survey after two years of participation (i.e., in 2006 and 2007). At each grade (8, 10, and 12), an independent sample of schools was invited to participate in the MTF study. They were drawn with probability proportionate to estimated school size. The 2007 YES survey of school administrators contained:

- 142 public and 34 private schools
- 63 junior high/middle schools and 113 high schools
- 37 schools from the Northeast region, 47 schools from the Midwest region, 61 schools from the South, and 31 schools from the West

The primary respondents to the questionnaire were school principals (78%), followed by teachers, counselors, and other school administrators. In most cases, however, the primary respondents at schools relied on other school staff to help gather information to complete the questionnaire.
Alcohol, Tobacco, and Other Drug Use: Challenges in Today’s Schools

Ratings of School Problems

We asked respondents to rate the severity of various problems in their school on a scale of 1 (“not a problem”) to 5 (“a serious problem”).

The Percentage and Average Ratings on School Problems

<table>
<thead>
<tr>
<th>Type of Problem</th>
<th>Not a Problem</th>
<th>Somewhat of a Problem</th>
<th>A Serious Problem</th>
<th>Average Rating (1–5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic underachievement</td>
<td>7%</td>
<td>24%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>Student disrespect of teachers</td>
<td>22%</td>
<td>40%</td>
<td>28%</td>
<td>7%</td>
</tr>
<tr>
<td>Use of alcohol/tobacco/other drugs</td>
<td>31%</td>
<td>34%</td>
<td>26%</td>
<td>8%</td>
</tr>
<tr>
<td>School violence</td>
<td>50%</td>
<td>38%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Racial tension among students</td>
<td>48%</td>
<td>43%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>Gang activity</td>
<td>64%</td>
<td>22%</td>
<td>9%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Of the six types of problems, respondents reported that academic underachievement, student disrespect of teachers, and the use of alcohol, tobacco, and other drugs by students were the most serious problems in their schools. In eight of the ten years of the survey, the ATOD problem ranked second only to academic underachievement.

In 2007, respondents were asked to rate separately the severity of the alcohol, tobacco, and illicit drug use problems that their school faced:

- Percent of schools that reported alcohol use was at least somewhat of a problem: 38%
- Percent of schools that reported tobacco use was at least somewhat of a problem: 37%
- Percent of schools that reported illicit drug use was at least somewhat of a problem: 31%

According to administrators’ ratings, in private schools student alcohol use was the most serious ATOD problem, while in public schools tobacco use was the most serious ATOD problem. Gang activity among students was not considered a serious problem in most schools.
Comparison of Public and Private Schools

In the figure below, we compare the average rating of each problem for public and private schools. Administrators in public schools reported significantly more challenges than administrators in private schools for most problems listed (student alcohol use was the only exception).

Comparison of Middle and High Schools

We also compared how administrators in middle schools and high schools rated each of these problems. One problem that differed significantly between middle and high schools was reported ATOD use—respondents from high schools rated this as a more serious problem than did respondents from middle schools.
Meeting the Challenge of ATOD Use in Schools

Barriers to Implementing Substance Abuse Prevention Programs

In the 2007 questionnaire, we asked respondents about potential barriers to implementing ATOD prevention programs in their schools. The table below shows the percentages of respondents that identified the following as important barriers to implementing prevention curricula:

<table>
<thead>
<tr>
<th>Important Barrier</th>
<th>Percent of Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competing demands for teaching other subject areas</td>
<td>70%</td>
</tr>
<tr>
<td>Lack of time for teacher training</td>
<td>54%</td>
</tr>
<tr>
<td>Lack of money/resources for purchasing instructional materials</td>
<td>45%</td>
</tr>
<tr>
<td>Lack of money/resources for teacher training</td>
<td>42%</td>
</tr>
<tr>
<td>Substance use prevention not a high priority for teachers</td>
<td>21%</td>
</tr>
<tr>
<td>Lack of adequate instructional materials</td>
<td>21%</td>
</tr>
<tr>
<td>Inability to identify an effective program</td>
<td>19%</td>
</tr>
<tr>
<td>Substance use prevention not a high priority for school or district administrators</td>
<td>18%</td>
</tr>
<tr>
<td>Resistance from parents for teaching substance use prevention</td>
<td>10%</td>
</tr>
</tbody>
</table>

Respondents reported that competing demands and lack of time and resources are the most important barriers to teaching drug use prevention in schools today. These results hold true across public, private, middle, and high schools.

School Factors Related to ATOD Problems

We asked respondents about many school resources and practices, and we examined whether any of these resources and practices are related to the school ATOD problems. Note that the relationships are associations, which do not prove causation. When looking at all 10 years of survey data, we found the following associations:

1. School Services

We found a positive relationship between reported ATOD problems and the total number of counseling and prevention services available. (The full list of school services is illustrated in the figure on page 6.) Schools that reported more ATOD problems offered more counseling and prevention services. The services in some schools may have exposed existing problems or may have been established in reaction to drug use or other student problems. However, in a recent paper we found little consistent evidence (after controlling for various school and student-body characteristics) that these services contributed to lowering substance abuse among students.

2. Professional Care Providers

Respondents were asked to indicate which professional care providers were employed in their school. (The full list of care providers is illustrated in the figure on page 6.) The ratio of professional, full-time
care providers to students is related to the severity of the ATOD problem in schools, although it is a very weak relationship. The more care providers, the higher the reported ATOD problem in schools, suggesting that more care providers are made available in schools with the most pressing need.

3. Racial Composition
There is a strong relationship between racial composition and reported ATOD problems in all types of schools. Schools that had more African-American students were much less likely to report problems with student ATOD use than schools with primarily Caucasian students. This relationship is consistent with findings from the Monitoring the Future study that African-American students have far lower rates of smoking, drinking, and drug use on average than White students.1

We also found that poorer race relations are strongly correlated with higher reported ATOD problems in all types of schools.

4. Monitoring Student Compliance
Each year we ask detailed questions about how closely school staff members monitor students while they are inside the school, on school grounds, on school buses, and even at school-related events such as sports games and social activities. A weak but significant relationship was found between levels of student monitoring and reported ATOD problems. The more strictly students were monitored, the fewer ATOD problems school administrators reported, particularly in public schools.

5. Staff Smoking
We asked respondents if there was a location in their school or on school grounds where staff members are permitted to smoke, and what percentage of staff smoke regularly. When all 10 years of data were combined, we found that private schools are more likely than public schools to allow staff smoking at school. In private schools where staff members were permitted to smoke on school property, respondents were more likely to report student ATOD problems than in private schools where staff members were not permitted to smoke. There were no differences in public schools.

When asked what percent of staff smoked regularly, public schools that had a higher percentage of staff smokers also reported greater tobacco use problems among students. So, it appears that smoking by faculty and staff may have a modeling effect on students with regard to smoking.

6. School Uniforms
Respondents were asked if students in the school were required to wear specific school uniforms. On average, over the past 10 years, only 22% of all schools required school uniforms (11% of public schools and 68% of private schools). We found that these schools reported a significantly lower ATOD problem than schools that did not require students to wear uniforms. However, this finding was no longer significant after controlling for whether they were middle schools and/or private schools. Hence, the effect of school uniforms on ATOD problems is most likely due to the characteristics of the schools that require uniforms rather than the use of uniforms itself.

7. Parental Involvement
We found that greater parental involvement in schools was significantly related to lower reported tobacco and illicit drug use problems among students across all 10 years of our study. This relationship was particularly significant for middle schools and public schools.

---

Resources Available to Address ATOD Problems

Counseling Staff and Services

The questionnaire included an item asking which health care providers and other professionals were available to students. While only 15% of schools said they had a drug abuse counselor, 52% of schools reported offering counseling to students who are substance abusers. Where there was no drug abuse counselor, this type of counseling was carried out by the school guidance counselor, other staff members, or outside counseling services.

We also asked whether specific counseling and prevention services were offered to students. The majority of schools offered each of the services listed, with the exceptions of suicide prevention, pregnancy prevention, and counseling for the children of substance abusers.
School Programs and Services
We found that schools in our sample have a variety of ways to deal with their ATOD problems. Responses include the following:

- Personalized ATOD intervention counseling services offered in the school and referrals to services outside the school
- School-sponsored extracurricular activities and groups to divert students from drug use
- Community-sponsored groups and activities
- Commercially and locally developed prevention programs taught in the classroom on a regular basis to all or most of the students

These measures and their relation to other school issues are described next.

1. ATOD Intervention Services In and Outside of Schools
We asked respondents about special substance abuse counseling services and cessation programs available to students who had been identified as abusing alcohol, tobacco, or illicit drugs. The following are the percentages of schools that offered each type of service:

- **In-school** alcohol and illicit drug counseling is offered in 20% of secondary schools.
- Referral to outside services for alcohol and illicit drug use problems occurs in 65% of schools.
- **Tobacco cessation services** or referrals are offered in 42% of schools.
- Schools with a **greater number of professional care providers** on staff were significantly more likely to offer tobacco cessation services and in-school counseling for alcohol and illicit drugs.

We asked respondents about the specific types of **tobacco cessation services** available to students. Although the majority of schools surveyed in 2007 offered no services, public schools were more likely to offer some kind of tobacco cessation service to their students than private schools. The graph below illustrates the percentage of schools that offered each service.

**Tobacco Cessation Services: Public and Private Schools**

![Bar chart showing the percentage of schools offering various cessation services, with public schools offering more services than private schools.](chart.png)
2. School-Sponsored Extracurricular Groups and Activities
Schools in our sample averaged about four nonclassroom student activities with the specific goal of diverting young people from potential drug use. The majority of schools in our sample had at least some of these types of activities. The following table shows the percentage of schools that had each of the activities we surveyed.

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Percent of Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assemblies or other events about substance use prevention</td>
<td>78%</td>
</tr>
<tr>
<td>Red Ribbon Week</td>
<td>70%</td>
</tr>
<tr>
<td>Social activities such as alcohol-free prom</td>
<td>61%</td>
</tr>
<tr>
<td>Public commitments or pledges from students</td>
<td>50%</td>
</tr>
<tr>
<td>Student anti-drug use clubs (e.g., SADD)</td>
<td>47%</td>
</tr>
<tr>
<td>Special days such as “Great American Smoke-Out”</td>
<td>46%</td>
</tr>
<tr>
<td>Contests about substance use prevention</td>
<td>39%</td>
</tr>
<tr>
<td>Activities that involve parents, such as signing a contract to monitor youth parties at their home</td>
<td>18%</td>
</tr>
</tbody>
</table>

The total number of nonclassroom student activities that schools offered correlates positively with their reported level of ATOD problems. In other words, schools reporting more ATOD problems offered more nonclassroom student activities, no doubt in an effort to try to control those problems.

3. Community-Sponsored Drug Prevention Groups and Activities
The questionnaire included several items about community-sponsored groups and activities available to students. We compared the total number of community-sponsored groups and activities with the total number of school-sponsored activities for schools located in rural, suburban, and urban areas.

<table>
<thead>
<tr>
<th>Type of Area in Which School Is Located</th>
<th>Average Number of School Activities</th>
<th>Average Number of Community Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>4.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Suburban</td>
<td>4.2</td>
<td>2.6</td>
</tr>
<tr>
<td>Urban</td>
<td>3.8</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Schools in rural areas relied primarily on school-sponsored, nonclassroom drug prevention activities for students. On the other hand, schools in urban and suburban areas were more likely to have community-sponsored drug prevention activities available to students in addition to school-sponsored, nonclassroom drug prevention activities.
4. Required and Multiyear ATOD Prevention Programs Taught in the Classroom
When data from all 10 years were combined, classroom ATOD prevention programs that were required for all or most students were rated by the school administrators as significantly more effective than nonrequired programs. Similarly, ATOD programs that students participated in for more than one year were rated as significantly more effective than single-year ATOD programs.

5. Types of Classes
The type of class in which ATOD programs were taught does not seem to have an impact on the perceived effectiveness of the ATOD programs. The following figure illustrates—from all 10 years—how ratings differed only slightly according to each type of class or category of classes. The order of classes in the figure reflects where ATOD programs were most commonly taught, with Health Education as the most common and Home/Family Economics as the least common.

![Reported ATOD Effectiveness Score for Type of Class]

6. Most Frequently Used ATOD Prevention Programs
Many schools used locally or state-developed curriculum materials in teaching ATOD prevention to their students rather than packaged, commercially sold programs. In some cases, elements of various commercial programs were combined with locally developed programs. Usually the locally developed programs were used in health education classes. Below is a list of the three most frequently used types of programs, along with the percentage of schools using them. (“Health Education” refers to the location of the prevention effort, not to a particular program package.)

<table>
<thead>
<tr>
<th>Program/Class</th>
<th>Percent of Schools</th>
<th>Grades Usually Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Education</td>
<td>73%</td>
<td>Grades 7–10</td>
</tr>
<tr>
<td>D.A.R.E.</td>
<td>52%</td>
<td>Grades 5–12</td>
</tr>
<tr>
<td>ALERT (BEST Foundation)</td>
<td>4%</td>
<td>Grades 6–8</td>
</tr>
</tbody>
</table>

Perceived Effectiveness of the Top Three ATOD Prevention Programs Used
Health and prevention educators may find it helpful to note how school administrators rated the effectiveness of each of the most popular programs for reducing substance use among students in their schools. The following table shows how respondents in 2007 rated the effectiveness of the three most
commonly utilized programs—ALERT (BEST Foundation), Health Education, and D.A.R.E.—on a five-point scale from “very ineffective” to “very effective.” The average rating is listed for each program. Most respondents seemed fairly neutral about the effectiveness of the prevention programs taught in their school.

<table>
<thead>
<tr>
<th>Type of Program</th>
<th>Very Ineffective</th>
<th>Neutral</th>
<th>Very Effective</th>
<th>Average Rating (1–5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALERT (BEST Foundation)</td>
<td>0%</td>
<td>14%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>Health Education</td>
<td>1%</td>
<td>12%</td>
<td>52%</td>
<td>32%</td>
</tr>
<tr>
<td>D.A.R.E.</td>
<td>5%</td>
<td>18%</td>
<td>45%</td>
<td>20%</td>
</tr>
</tbody>
</table>

**School Drug Testing Policies and Procedures**

Drug testing of students is still not a common practice in schools across the country. In 2007, only 28% (49 schools) of the surveyed secondary schools said that they did any type of student drug testing. The table below shows the percentage of schools that tested particular student groups. (Some schools tested more than one group of students.) Testing students based on suspicion or cause was the most common reason for drug testing, followed by testing students on an athletic team.

<table>
<thead>
<tr>
<th>Groups Tested</th>
<th>Percent of Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students based on suspicion or cause</td>
<td>17%</td>
</tr>
<tr>
<td>Students on an athletic team</td>
<td>10%</td>
</tr>
<tr>
<td>Students in other extracurricular activities</td>
<td>7%</td>
</tr>
<tr>
<td>Students who volunteered for testing</td>
<td>5%</td>
</tr>
<tr>
<td>Students on school probation</td>
<td>5%</td>
</tr>
<tr>
<td>Students randomly selected from among all students</td>
<td>3%</td>
</tr>
<tr>
<td>All students</td>
<td>1%</td>
</tr>
</tbody>
</table>

In 2007, twenty-three schools (13%) reported using at least one method for carrying out random drug tests on student athletes, students in extracurricular activities, student drivers, or a sample of all students. Most of the schools used urine tests (18 schools), two used a hair test, and three used an oral swab.

**ATOD Summary**

While academic underachievement is the most highly rated problem facing schools, administrators in our study still identified alcohol, tobacco, and other drug (ATOD) prevention as an important issue.
Respondents also indicated that there are critical barriers to implementing effective ATOD prevention programs in schools, most importantly competing demands and lack of time and resources. These results hold true across public, private, middle, and high schools.

School factors correlated with more ATOD problems include more school services and professional care providers, staff smoking, and poorer race relations. Factors correlated with fewer ATOD problems include greater parental involvement, more close monitoring of students by school staff, and greater percentages of African-American students. Obviously, these relationships may not all reflect a causal association.

Most schools use locally or state-developed curriculum materials in teaching ATOD prevention to their students rather than packaged, commercially sold programs. In some cases, elements of various commercial programs are combined with locally developed programs. Usually the locally developed programs are used in health education classes. Most respondents seem fairly neutral about the effectiveness of the prevention programs taught in their school.

In this year’s survey, 28% of the schools conducted some type of drug testing. While some schools test more than one group of students, school administrators reported that suspicion or cause was the most common reason for drug testing, followed by athletic team membership.
Student Participation in Physical Education

In 2007, school administrators were asked about student participation in physical education (PE) classes at the targeted grade level in their school—8th, 10th, or 12th grade. School administrators were asked whether their school required physical education in the target grade, what percentage of students in the grade took physical education, how many days per week the students had PE class, the normal length of PE classes, and what percentage of boys and girls in the target grade were involved in interscholastic/varsity sports or intramural sports/physical activity clubs. Below are the average responses for each of the questions on physical education for the total sample of schools:

- Percent of schools that required PE: 60%
- Average percent of students who took PE: 70%
- Average number of days of PE class per week: 4 days
- Normal length of PE class: 57 minutes
- Average percent of boys in interscholastic/varsity sports: 43%
- Average percent of girls in interscholastic/varsity sports: 39%
- Average percent of boys in intramural sports or physical activity clubs: 25%
- Average percent of girls in intramural sports or physical activity clubs: 21%

Overall, 60% of the schools required physical education for the target grade, but the percentage of schools that required PE decreased sharply at higher grade levels.

Promoting Physical Activity and Fitness

In 2007, thirty-nine percent of schools reported that significant activities were underway to promote physical activity among students. These efforts were often part of a comprehensive school wellness policy that was being implemented to promote a lifetime of good health.

Nearly half (41%) of sample schools reported that they gave physical fitness tests to students in their sample grade. One in four schools (28%) currently measures students’ body mass index (BMI). About half of schools that gave fitness tests and measured BMI provided the results to parents or guardians.

Middle schools were more likely to report significant activities underway in their schools to promote physical activity, to give physical fitness tests, and to measure students’ BMI than were high schools in the study. Middle schools were also more likely to provide the results of the BMI tests to parents or guardians.

Physical Education Summary

A large percent of schools (60%) require physical education for the target grade; the percentage of schools requiring PE decreases sharply at higher grade levels. Less than half of the sample schools reported that they gave physical fitness tests, and one in four reported that they measured students’ body mass index (BMI). But, about one third (39%) of sample schools reported that significant activities were underway to promote physical activity among students.
Food and Nutrition Policies and Programs in Schools

In 2007, school administrators were asked a number of questions about school food and nutrition programs at the target grade level—8th, 10th, or 12th grade—in their school. Food service managers were the primary respondents for this section of the questionnaire. The following are some of the interesting findings to emerge:

School Meal Planning

The vast majority of schools (99%) reported offering lunch to students, while somewhat fewer (78%) offered breakfast. At lunch time, à la carte items were available in eight of ten schools (84%); middle schools were only slightly less likely to offer à la carte items than high schools.

Most schools (80%) participated in the USDA reimbursable National School Lunch Program, but only one third (38%) participated in the USDA-sponsored Team Nutrition program. Most schools reported that food service and menu decisions were made at the district level, while 42% reported that their school was involved in the decision making, and 13% reported that external contractors were involved.

School Lunch Options

School administrators were asked what percentage of students in their target grade—8th, 10th, or 12th—ate lunch offered by the school, brought their lunch, went off campus to buy lunch, did not eat, or ate food from vending machines. Here are the average responses for all schools in the sample:

- Percent of students who ate the school lunch (including à la carte): 64%
- Percent of students who brought their own lunch: 19%
- Percent of students who do not eat lunch: 8%
- Percent of students who went off campus to buy lunch: 5%
- Percent of students who buy lunch from vending machines: 2%

When school responses were compared by their target grades, we found that high school students were more likely to go off campus to buy lunch, or to choose some other option such as not eating, or eating only from vending machines.
A few schools in the survey reported that as many as 10–25% of their students ate only items from vending machines at lunch, and that as many as 20–55% of students did not eat lunch.

**Vending Machines, Snack Bars/Carts, School Store**

Vending machines selling beverages were available in eight of ten schools, and vending machines selling food or snacks were available in the majority of schools. Sixty-three percent of schools reported selling soft drinks\(^\ast\) at some time during the **school day**, either from vending machines, a school store, or as an à la carte lunch option.

When school responses were compared by their target grade, we found that high schools were more likely to have vending machines, school stores, and snack bars/carts than were middle schools.

[Graph: Vending Machines, Snack Bars/Carts, School Store by Grade]

During the school day, middle schools were more likely to restrict access to their soft drink vending machines than were high schools. Middle schools were also more likely to restrict access to snack foods (in vending machines, school stores, and snack bars/carts) during times other than lunch.

**Efforts to Improve Student Nutrition**

With rising concerns about student nutrition and obesity, many schools in recent years have attempted to make changes in their school lunch program and policies regarding food sales. School administrators were asked if any significant activities were currently underway at their school or district to promote healthier eating and drinking practices among students. Fifty percent of schools reported efforts currently underway to improve student nutrition and health on campus.

- Most (76%) reported the establishment of a school wellness policy or program in their school or district to promote a lifetime of good health.
- Schools also reported that changes were being made to their nutrition guidelines. As a result more nutritious foods such as fruits and vegetables were being offered to students at lunch and in vending machines, while less nutritious foods such as soft drinks, candy, and fried foods were being eliminated, or restrictions were being placed on their availability.

\[\text{\* Includes regular (not diet) pop, sports drinks, and fruit drinks that are not 100\% fruit juice}\]
Schools also reported added nutrition and wellness education through PE, Health, or after-school classes.

A few schools mentioned that healthy eating promotions and nutrition teams or clubs were being started on campus.

Based on responses to other questions in the survey, these efforts appear to be making important changes to the foods offered in schools nationwide. Compared to data from 2004–2006, fewer schools in 2007 reported selling items like candy, ice cream, and other higher fat snack items in vending machines, school stores, and snack bars or carts. Also, fewer schools reported selling these items as à la carte lunch items. Compared to previous years, fewer schools reported selling regular soft drinks in vending machines or as à la carte lunch items in 2007.

**Food and Nutrition Summary**

Most schools participate in the USDA reimbursable National School Lunch Program, but only about one third participate in the USDA-sponsored Team Nutrition program. Almost two thirds of students in 8th, 10th, and 12th grades eat a school lunch, while about a fifth bring their own lunch. Although many schools report that they are attempting to improve the nutritional quality of foods offered to students, soft drinks and snack foods with a higher fat or calorie content are still widely available in vending machines and school stores, particularly in high schools. Fifty percent of schools reported significant efforts currently underway to improve student nutrition and health on campus.
Conclusions

As part of the No Child Left Behind Act of 2001, schools are required to meet the challenge of creating a safe, drug-free learning environment for all students. School administrators in our study identified alcohol, tobacco, and other drug (ATOD) use as an important issue, behind student disrespect of teachers and academic underachievement—the most highly rated problem facing schools. Respondents also indicated that there are substantial barriers to implementing effective ATOD prevention programs in schools, with competing demands and lack of time and resources identified as the most important obstacles. These results hold true across public, private, middle, and high schools. School factors that are correlated with more ATOD problems include having more school services and professional care providers, staff smoking, and poorer race relations. Factors associated with fewer ATOD problems include greater parental involvement, more close monitoring of students by school staff, and greater percentages of African-American students. It is important to keep in mind that these relationships may not all reflect a causal association.

Given that providing a safe, drug-free environment is a priority in today’s schools, administrators have multiple ways to deal with ATOD problems. Most schools use locally or state-developed curriculum materials in teaching ATOD prevention to their students rather than packaged, commercially sold programs. In some cases, elements of various commercial programs are combined with locally developed programs. Usually the locally developed programs are used in health education classes. Most respondents seem fairly neutral about the effectiveness of the prevention programs taught in their school. In this year’s survey, 28% of the schools conducted some type of drug testing. While some schools test more than one group of students, most testing of students is based on suspicion or cause, followed by athletic team membership. How effective drug testing is in curtailing student drug use remains an unanswered question.

In addition to concerns about students’ academic achievement and ATOD use, school administrators and other school personnel are also examining school policies and practices that may contribute to reducing obesity among youth. With rising concerns about student nutrition and obesity, many schools in recent years have attempted to make changes in their school lunch program and in policies regarding food sales in their schools. PE is required more often by middle schools than high schools.

Many school administrators reported that their schools are making efforts to improve student nutrition and health on campus, often as part of a school or district wellness policy. The most common activity is making changes to the types of foods available to students at lunch and in vending machines by offering more nutritious foods, such as fruits and vegetables. Other activities include removing or restricting access to soft drinks and candy. Also, many schools reported that changes are being made to their health programs to emphasize healthier eating, the risks of obesity, and the need for more physical activity. Schools also reported changes to physical education programs and added physical fitness activities before, during, and after school. Finally, some schools mentioned that healthy eating promotions and clubs are being started on campus.

The YES study intends to continue to track many of these policies and practices in American secondary schools, and to conduct analyses aimed at determining their effects. We hope to provide school leaders with better information and guidance that will allow them to serve their students more effectively in preventing substance abuse, reducing overweight, and improving their health generally. Tobacco use and obesity are the two leading causes of preventable death and disease in this country, and schools have an important role to play in combating these problems.