EXPERIENCES IN EFFECTIVE PREVENTION

THE U.S. DEPARTMENT OF EDUCATION'S

ALCOHOL AND OTHER DRUG PREVENTION MODELS ON COLLEGE CAMPUSES GRANTS

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This publication and other resources are available on the Web site for the U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention: http://www.higheredcenter.org.

On request, this publication is available in alternate formats, such as Braille, large print, audiotape, or computer diskette. For more information, please contact the Department's Alternate Format Center at 202-260-9895 or 202-205-8113.

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CHAPTER 1: INTRODUCTION

The U.S. Department of Education's Office of Safe and Drug-Free Schools (OSDFS) has worked for many years to improve the scientific basis and quality of work in campus-based alcohol and other drug (AOD) abuse prevention programs. Historically, program and policy development was guided largely by conventional wisdom, tradition, or rote imitation, and very little evaluation research was done to learn what worked best. In contrast, it is now standard practice to use strategies and tactics that are supported by theory, prior research, and informed program experience.1

LESSONS FROM THE MODEL PROGRAM GRANTS

In response to ongoing concern about unacceptable levels of AOD use on campuses, in 1998 Congress authorized the Department to identify and promote effective prevention through a model grants program. In 1999, OSDFS launched an important component of the Department's efforts to advance best practices, the Alcohol and Other Drug Prevention Models on College Campuses Grants.3

The program's goal is to move the field toward more effective practice. Applying institutions are required to describe an innovative program or policy that was integrated into a comprehensive AOD abuse prevention effort, to provide evidence that the initiative was effective in reducing AOD-related problems, and to propose a work plan for encouraging replication of their efforts. Each grantee institution receives funding to maintain, improve, and further evaluate its efforts and to disseminate information to other campuses where the program might be replicated.

A total of 22 institutions received awards under this initiative in 1999, 2000, 2001, and 2004. Congress did not fund the program in 2002 or 2003. Additional institutions received awards in 2005 and 2006; findings from those two cohorts are not yet fully known. One grant was awarded in fiscal year 2007. Each campus has publicized its work in the usual ways—presenting at conferences, sponsoring workshops, and distributing brochures and other materials. The agenda for OSDFS's annual National Meeting on Alcohol and Other Drug Abuse and Violence Prevention in

For underage youths, the prevention goal is to sustain abstinence from alcohol and other drugs. The prevention goal for adults can be moderate use, as with alcohol; restricted medical use, as with prescription drugs; or abstinence, as with illicit drugs. Prevention work that targets an entire population is called universal prevention. Selected prevention, or intervention, focuses on early detection and reduction of alcohol and other drug

(AOD) problems among individual substance users, with the goal of preventing further misuse. *Indicated* prevention focuses on preventing the progression of AOD problems associated with established patterns of substance use or addiction.

According to the 2005 Dietary Guidelines for Americans issued by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services, moderate alcohol use means no more than one drink per day for women and two drinks per day for men.² Alcohol consumption should be avoided by individuals who cannot restrict their alcohol intake; women who may become pregnant, are pregnant, or are lactating; children and adolescents; individuals taking medications that can interact with alcohol; and those with specific medical conditions.

In a similar effort, the Center for Substance Abuse Prevention (CSAP), located in the Substance Abuse and Mental Health Services Administration (SAMHSA), has assembled a National Registry of Evidencebased Programs and Practices (NREPP).4 Designated model programs include the Brief Alcohol Screening and Intervention for College Students (BASICS) and the University of Arizona's Challenging College Alcohol Abuse (CCAA).

Higher Education includes a session for the newest grantees to present on their activities.

The primary purpose of this publication is to examine these model programs in order to discover broader lessons for AOD prevention practitioners and thereby move the field toward more effective prevention.

Although more is known than ever before about what works in campus AOD prevention, how administrators can translate this knowledge into practice most effectively is less clear.

Our aim is not merely to describe the model programs but also to explore the general principles and processes by which the grantees successfully implemented their programs, policies, and interventions.

Under the direction of OSDFS, the U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention conducted site visits in March and April 2005 for 20 of the 1999-2004 model programs. Center staff conducted

a telephone interview with one campus where the model program is no longer in operation. One campus declined to participate. A Center staff member and an outside expert knowledgeable in campus AOD abuse prevention conducted each site visit, which featured structured interviews with the project director and key campus and community stakeholders.

The interview questions focused on how campuses implemented their programs, policies, and interventions. For example: What problems did they address, and how were they identified? How were stakeholders engaged to address the problem? How did the project directors exercise leadership and what roles did specific stakeholders play during each project phase? How were goals set? How were the program elements chosen, and how did they complement other efforts already in place to create a comprehensive and well-integrated effort? What challenges did they face and how did they address them? What did it take to implement, evaluate, and sustain a successful program? Appendix 1 (see p. 78) presents the full set of questions asked of the campus-based project directors.

CHALLENGES OF PROGRAM REPLICATION

A common misunderstanding about model program initiatives concerns the issue of replication. Policymakers, administrators, and funding agencies are sometimes disappointed to learn that prevention programs designated as models are not more quickly duplicated by other practitioners. Actually, this

The decision to replicate a model program is best made in the context of a thoughtful strategic planning process.

gap should not be surprising, and it should perhaps be welcomed.

The reason is simple: each campus faces a unique set of circumstances with distinctive problems, challenges, and opportunities. To be successful, a prevention program must be tailored to meet both the needs and available resources of a particular campus. Accordingly, the deci-

sion to replicate a model program is best made in the context of a thoughtful strategic planning process. Having chosen a model program, practitioners will want to replicate its core elements, but they will also

want to modify it, sometimes dramatically, to meet the unique needs or requirements of their own campus. In the end, the way in which a successful strategy is implemented will differ from one site to another.

This reality underscores the importance of examining the process by which successful prevention advocates approach the strategic planning process to develop, implement, and evaluate a comprehensive and well-integrated AOD abuse prevention program. During the interviews, staff also asked the project directors how they selected among evidence-based programs and how they adapted them to fit their campus.

This publication is the product of that investigation.

OVERVIEW OF THE REPORT

There are several audiences that may find this publication useful as they develop, implement, and evaluate their own campus-based prevention programs, policies, and interventions: (1) senior administrators who initiate, supervise, and support prevention program development efforts; (2) prevention program coordinators who have day-to-day responsibility for organizing and improving a comprehensive initiative; (3) campus task force and campus and community coalition members who contribute to the development process; and (4) management and staff in key campus departments and community agencies who will contribute their time and skills to the overall prevention effort.

The remaining chapters are organized as follows:

Chapter 2, "Recent Advances in Campus-Based Prevention," describes the scope of the campus AOD abuse problem based on recent survey data, outlines the U.S. Department of Education's environmental management approach to prevention, and reviews the implications of recent research on effective prevention practice.

When readers learn about a model program and think they should try it on their campus, this publication can serve as an introduction to the key principles of effective program development that should guide their efforts.

Chapter 3, "An Overview of the 1999-2004 Model

Program Grants," provides a brief description of each model program, introduces a typology for AOD programs and policies, and then categorizes the program activities according to that typology.

Both chapter 4 and chapter 5 highlight the key elements of strategic planning that contributed to the effectiveness of the 22 model programs. Chapter 4, "Lessons on Program Development," describes key lessons learned from the model program grants on exercising leadership, building collaborations, and choosing evidence-based programs. Chapter 5, "Lessons on Program Implementation," describes key lessons learned on implementing strategic planning, conducting an evaluation, and working toward sustainability. This section concludes with a reflection on a final lesson, the need to take the long view.

It should be noted that all 22 model programs are based at four-year institutions. Even so, administrators and staff based at two-year institutions will find that the review of strategic planning elements will provide helpful guidance as they think about how to improve their own alcohol and other drug prevention efforts.

The "Resources" section offers readers wishing to consult additional resource materials a list of key organizations, Web sites, and publications. Other supplemental resources are available on the Web site of the U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention (http://www.higheredcenter.org), which frequently posts new materials.

This publication presents program and policy ideas for effective prevention, and readers will want to consider them carefully as they develop and refine their own prevention plans. Throughout, readers should also keep in mind that no model program can be brought into a new campus without careful consideration of how it should be adapted to fit the needs of the campus, in conjunction with other aspects of the institution's prevention efforts.

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CHAPTER 2: RECENT ADVANCES IN CAMPUS-BASED PREVENTION

The model programs selected by the U.S. Department of Education were designated during a time of great innovation in campusbased prevention. Public awareness of the problem was heightened by the publication of several national surveys, which for the first time defined the scope of the problem quantitatively and created news headlines. Inspired by the drunken driving prevention movement, with its focus on policy and enforcement approaches, college officials began to experiment with a broad set of environmental management strategies (see p. 7) to prevent underage and excessive alcohol consumption. And with guidance from the U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention, several campus officials also began to build their campus and community infrastructure for effective strategic planning.

SCOPE OF THE PROBLEM

Substance Use on Campus

Underage and excessive drinking by college students has long been recognized as a major problem in American higher education. Every responsibility held by academic leaders—protecting student health and safety, creating a vibrant learning environment with strong academic standards, maintaining good working relationships with the community, preserving the institution's fiscal integrity, and building its reputation for excellence—is made more challenging by the culture of drinking that exists on many college and university campuses.4

How much do today's students drink? National surveys typically have found that about two in five U.S. undergraduates engage in heavy episodic drinking, which is usually defined as "having five or more drinks in a row at least once in a two-week period."9 About half of these heavy drinkers, or about one in five students overall, reported drinking at this level three or more times within the previous two weeks.10

About 6 percent of undergraduates are alcohol-dependent.¹¹ Alarmingly, one national survey found that the percentage of students at four-year institutions who said they drink "to get In 1989, the Carnegie Foundation for the Advancement of Teaching² reported that two-thirds of college and university presidents surveyed rated alcohol abuse a "moderate" or "major" problem on their campus. A Call to Action, a report issued in 2002 by the NIAAA's Task Force on College Drinking, described abusive drinking by college students as "widespread, dangerous, and disruptive."3

The best-known national survey, the Harvard School of Public Health College Alcohol Study (CAS), defines heavy drinking as "five or

more drinks in a row for men and four or more drinks in a row for women."5 The most recent CAS found that 49 percent of men and 41 percent of women attending four-year colleges and universities reported drinking at these levels during the previous two weeks.6

The CAS researchers refer to this level of drinking as "binge drinking." Critics have noted that this definition does not specify a time during which the alcohol is consumed "in a row," nor does it take into account the drinker's body weight.7 For this reason, NIAAA now defines "binge drinking" as a "pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08 percent or above. For the typical adult, this pattern corresponds to consuming 5 or more drinks (male), or 4 or more drinks (female), in about 2 hours."8

CAS assessed over 14,000 students against diagnostic criteria for alcohol dependence, as defined by the Diagnostic and Statistical Manual of Mental Disorders-IV.¹² Frequencies of dependence based in the criteria were as follows: symptoms of tolerance: 17 percent; drinking more or longer than initially planned: 15 percent; drinking despite physical or psychological problems: 8 percent; spending a lot of time on drinking-related activities: 7 percent; and symptoms of withdrawal: less than 2 percent.13

"The relative scarcity of headlines about college drinking belies an important fact: the consequences of excessive college drinking are more widespread and destructive than most people realize."

—A Call to Action: Changing the Culture of Drinking at U.S. Colleges, p.1.16

drunk" climbed from 40 percent in 1993 to 48 percent in 2001.14

Underage drinking is a big part of the problem. Students under age 21 tend to drink on fewer occasions than their older peers, but they drink more per occasion and have more alcoholrelated problems than students of legal drinking age. Underage students also report that alcohol is easy to obtain, usually at little or no cost.15

Other drug use on campus is less frequent than abusive drinking but remains a significant concern for administrators. In the year 2004, one-third of full-time college students used marijuana on at least one occasion; 19 percent used other illicit drugs.¹⁷ The most frequently used illicit drugs were narcotics other than heroin (8 percent); amphetamines, cocaine, and tranquilizers (7 percent each); hallucinogens (6 percent); Ritalin (5 percent); and barbiturates (4 percent). Several drugs featured in news accounts at the time were actually used by relatively few college students: methamphetamine, 3 percent; MDMA/ecstasy, 2 percent; crystal methamphetamine, 1 percent; LSD, 1 percent; and heroin, less than 1 percent.18

The Toll of Student Drinking

Students' use of alcohol causes significant negative consequences, both on campus and in the surrounding community.

More than 1,700 college students aged 18 to 24 died in 2001 from alcohol-related unintentional injuries. Nearly 80 percent of those deaths were associated with driving after drinking. That same year, over 31 percent of college students in this age group reported that they had driven under the influence of alcohol in the past year, up from 26 percent in 1998. Just over 10 percent of college students said they were injured because of drinking, and 8 percent had engaged in unprotected sexual intercourse because of their drinking.19

Students who drink heavily are less likely to succeed academically. Having a lower grade-point average is strongly associated with higher levels of alcohol consumption.²¹ Overall, about one-fourth of college students report academic problems caused by alcohol use, such as earning lower grades, doing poorly on exams or papers,

One national survey reported that students with an A average consumed an average of 3.4 drinks per week, while B-average students consumed 4.5 drinks, C-average students 6.1 drinks, and D or F students 9.8 drinks.20

missing class, and falling behind in their studies.²² College administrators state that large numbers of students drop out each year because drinking interfered with their studies.²³

Alcohol abuse has profound consequences for the entire student body, not just for the drinkers themselves. In one national survey, students at four-year institutions reported several negative consequences caused by their peers' alcohol consumption: 60 percent of the survey respondents had their study or sleep interrupted; 48 percent had to take care of an alcohol-impaired student; 29 percent were insulted or humiliated; 19 percent had a serious argument or quarrel; 15 percent had property damaged; and 9 percent were pushed, hit, or assaulted.24 By current estimates, more than 600,000 students aged 18 to 24 are hit or assaulted by another drinking student each year, while 97,000 are victims of alcohol-related sexual assault or date rape.25

Residents living near college and university campuses also experience negative consequences. People living within one mile of a campus are much more likely to report alcohol-related noise and disturbances, vandalism, public drunkenness, litter, and vomit or urination on their property than are those living farther away from the institution.²⁶ These problems put an enormous strain on campus-community relations.

COMPREHENSIVE APPROACH TO PREVENTION

Historically, campus officials have focused much of their prevention effort on three areas of strategic intervention: (1) changing people's knowledge, attitudes, and behavioral intentions regarding substance use (e.g., awareness programs, peer education); (2) protecting students from short-term consequences ("health protection" strategies, such as safe ride or designated driver programs); and (3) intervening with and treating students with substance use problems.²⁷ This work, while vitally important, does little to change the campus and community environment in which students make decisions about substance use, thus leaving intact the conditions that drive the problem and virtually ensuring that it continues.

Spurred by concerns about student drinking, campus administrators have begun to embrace environmental management, a broader approach to prevention that focuses on environmental change, to reduce both the appeal and availability of alcohol and other drugs.²⁸ The environmental management approach was endorsed by a recent National Academies report on underage drinking, which urged residential colleges and universities to "adopt comprehensive prevention approaches including environmental changes that limit underage access to alcohol."29

Environmental Management

There are five environmental management strategies, each of which focuses on a specific problem in typical college environments. Each strategy involves multiple program and policy options for administrators to consider.30

1. Offer and promote social, recreational, extracurricular, and public service options that do not include alcohol and other drugs.

Substance use should not be the easiest and most readily available social and recreational option. Many campus administrators are now investing additional resources to create and promote substance-free

events and activities; provide greater financial support to substance-free student clubs and organizations; open or expand a student center, gym, or other substance-free settings; and develop student service learning or volunteer activities.

2. Create a social, academic, and residential environment that supports health-promoting norms.

At every opportunity, campus officials must state clearly their firm expectations that students will not engage in illegal alcohol and other drug (AOD) use. Additional options for conveying health-promoting norms include modifying the academic schedule to increase the number of early morning and Friday classes, increasing academic standards so that students will need to spend additional time studying out of class, increasing faculty-student contact, and improving faculty-student mentoring.

Social norms marketing campaigns are designed to convey accurate information about student alcohol use in order to counter widespread misperceptions of campus drinking norms and thereby drive down consumption. 31 Several colleges and universities have reported success using campuswide media campaigns, with student surveys revealing both more accurate perceptions of actual drinking behavior on campus and decreases in reported heavy episodic drinking.³² Randomized control trials to examine the effect of social norms marketing are currently under way.

3. Limit the availability of alcohol and other drugs both on and off campus.

Campus officials can enforce policies that limit the times and places that alcohol is available to students on campus. Key strategies include prohibiting delivery or use of kegs or other common containers for alcohol, controlling or eliminating alcohol sales at sporting events, and disseminating and enforcing guidelines for all registered student parties.

Community-based strategies include limiting both the number of alcohol outlets near campus and the days or hours of alcohol sales, eliminating low-cost promotions, requiring alcohol outlets to register keg rentals, prohibiting home delivery of alcohol purchases, and implementing responsible beverage service (RBS) training programs.

RBS entails (1) checking age identification of customers who appear under age 30, (2) identifying fake IDs and turning them over to police, (3) discouraging adults of legal age from attempting to buy alcohol for underage individuals, (4) identifying customers who are or may become intoxicated, and (5) refusing alcohol service to underage or intoxicated customers.33

Vigorous federal, state, and local enforcement efforts are already in place to reduce the supply of illicit drugs. Campus officials can work with law enforcement agencies to identify where students are getting illicit drugs and then take action by arresting and prosecuting dealers.

4. Restrict marketing and promotion of alcohol and other drugs.

Campus officials have wide latitude to restrict or ban alcohol advertising on campus and to limit the content of party or event announcements. Likewise, they can prohibit on-campus advertising of rave clubs and related events where club drug use may be encouraged or tolerated. Student party announcements that allude to illicit drug use can similarly be forbidden. Off-campus, campus and community officials can work together to eliminate alcohol promotions that offer low-priced drink specials or otherwise promote high-risk drinking.

5. Develop and enforce campus policies and enforce local, state, and federal laws.

Campus administrators should authorize and encourage campus police to work in partnership with local law enforcement agencies to uphold campus policies and applicable local, state, and federal laws. The campus should never be viewed as an enclave that protects students from the consequences of their illegal behavior.

Statutes of particular concern to college students include laws that prohibit the distribution or possession of illegal drugs, alcohol possession by minors, providing alcohol to minors, alcoholimpaired driving, and neighborhood disturbances.

After reviewing the scientific literature, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) Task Force on College Drinking also recommended that campus and other local officials focus on restricting the density of alcohol retail outlets and increasing prices and excise taxes on alcoholic beverages.36

Research supports this environmental management approach. A recent evaluation of 10 campus and community coalitions found small but significant decreases in student alcohol use and related problems at the five campuses that implemented the greatest number of environmental change strategies, compared with control group campuses.37

Another recent study found that students attending college in

By 1988, all 50 states had enacted a law mandating 21 as the minimum drinking age. While some college administrators have argued in favor of lowering the legal drinking age, the preponderance of evidence consistently shows that these laws have significantly reduced alcohol consumption and the resultant deaths and injuries due to motor vehicle crashes involving young people under 21.34

> All 50 states have also passed "zero tolerance" laws that specify a lower per se limit for drivers under age 21, typically .02 percent BAC. The law's deterrent effect is undermined, however, by the fact that most undergraduate students are unaware that a lower BAC limit applies to minors.³⁵

A per se law specifies that anyone driving with a BAC of a certain limit or higher is by definition alcohol-impaired. Per se means of, in, or by itself.

seven states each with four or more laws designed to reduce high-volume alcohol consumption reported a lower rate of heavy drinking (33 percent) than for students in other states (48 percent). Relevant state statutes included a .08 percent per se law; mandated keg registration; and restrictions on "happy hours," beer sold in pitchers, open containers, and billboards and other types of alcohol advertising.38

Targeting Individual Students

While strongly reinforcing the view that college administrators should take an active role in monitoring and reshaping the environmental factors that affect student drinking, the NIAAA Task Force also noted the importance of targeting individual students who are identified as problem, at-risk, or alcohol-dependent drinkers.³⁹ Required here are strategies to engage these students in appropriate screening and intervention services. 40

A program called BASICS (Brief Alcohol Screening and Intervention for College Students), for example, uses two brief motivational interview sessions to give students feedback about their drinking and provide them with an opportunity to craft a plan for reducing their alcohol consumption. 41 Researchers are investigating Web site-based screening tools with computerized feedback as a means of implementing this type of brief intervention program on a larger scale.42

PREVENTION INFRASTRUCTURE

Moving forward with a comprehensive prevention agenda

Basic to the success of any program to prevent alcohol and other drug abuse among college students is the need to ensure the widespread involvement of key stakeholders including students, faculty members, alumni, and community members—in the program's design and implementation.

requires a layered infrastructure. On campus, there needs to be a permanent task force that represents several important constituencies, including key administrative staff, faculty, and students, and that reports directly to the president.

To facilitate prevention work in the surrounding community, campus officials need to participate in a campus and community coalition. The coalition's membership must be broad and include

such groups as neighborhood residents, the business community,

public health agencies, health care providers, faith-based institutions, law enforcement, and substance abuse treatment agencies. Both the NIAAA Task Force⁴³ and the National Academies⁴⁴ endorsed campus and community coalitions as the primary vehicle for pursuing this prevention agenda.

Action at the state level, including the development and operation of multiple campus and community coalitions and the development of state-level policy, can be fostered through campus membership in a statewide association of academic prevention leaders. 45 A study conducted in Illinois, Ohio, and Maine found that campuses working with their statewide initiative were more likely than other campuses to implement a campus task force, a campus and community coalition, and a strategic plan to address AOD abuse prevention. In turn, such campuses were significantly more likely than campuses unaffiliated with a statewide initiative to implement or plan several environmental prevention programs and policies.47

The key to implementing successful programs and policies is a strategic planning process that builds on the collaborative foundation created by this layered infrastructure. 48 A good planning process will result in a well-designed needs assessment that can provide baseline data for the evaluation; the selection of policies and programs with demonstrated effectiveness or a solid foundation in behavior change theory; precisely stated goals and objectives, which allow measurable outcomes to be specified; a summary of the prevention initiative that links each program and policy to specific objectives; and the marshalling of adequate resources to ensure full implementation of the program plan.

MOVING FORWARD

The foregoing summarized research about the most effective approaches to reducing student alcohol and other drug problems coupled with a growing understanding of coalition development and strategic planning principles—should give college and university officials great hope for the future. The U.S. Department of Education's model programs provide many valuable lessons on the conditions that facilitate evidence-based prevention work. Following their lead, campus officials, working with their community counterparts, can make great strides in the quest to prevent AOD abuse on college campuses.

A strategic plan is a necessary early step in building an effective prevention program.46

Campuses working with their statewide initiative were significantly more likely than other campuses to implement the following programs and policies, which are consistent with the environmental management approach:

- Increasing the number of alcohol-free residential units
- · Expanding and promoting volunteer opportunities for students
- Requiring on-campus functions to be registered
- Educating sellers and servers about potential legal liability
- Instituting RBS training programs
- Requiring use of registered and trained alcohol servers
- · Increasing disciplinary sanctions for alcohol- and other drug-related offenses
- Increasing police monitoring and patrols near on-campus parties
- Increasing police monitoring and patrols near off-campus parties

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CHAPTER 3: AN OVERVIEW OF THE 1999-2004 MODEL PROGRAM GRANTS

Prompted by growing public concern about AOD use on American college and university campuses, in 1998 Congress authorized the OSDFS to identify and promote effective campus-based prevention programs. The Alcohol and Other Drug Prevention Models on College Campuses Grants initiative designated its first group of model programs in 1999. By 2004, OSDFS had selected 22 institutions of higher education (IHEs) for this honor. Additional IHEs received awards in 2005, 2006, and 2007.

OSDFS designates model programs on the basis of a grant competition where all applications are peer-reviewed. Eligible applicants are IHEs that offer an associate or baccalaureate degree. The selected applicants describe a program or policy that has been in place for at least two academic years, plays a significant role in developing and-or maintaining a safe and healthy campus environment, and can feasibly be replicated or adapted in other college communities. Applicants also provide evidence of their program or policy's effectiveness in reducing AOD-related problems on campus using outcome-based performance indicators. The selected institutions receive grants to maintain, improve, and continue to evaluate their model program and to disseminate information to other colleges and universities to encourage replication. The project period is for up to 15 months.

A model program cannot be a stand-alone effort but rather must be integrated fully into a multifaceted and comprehensive prevention program. OSDFS emphasizes that while educational and individually focused prevention programs are necessary, they are insufficient by themselves to create significant or long-lasting change.2 Interventions are needed at multiple levels to target individual student drinkers, the student population as a whole, the college, and the surrounding community.3

OSDFS asks its peer reviewers to evaluate each application rigorously using several selection criteria, notably the following:

- 1. The quality of the needs assessment and how well it relates to the program's goals and objectives.
- 2. The effectiveness with which the program is integrated into a comprehensive AOD abuse prevention effort.

The 2005 designees were Gonzaga University, Hobart and William Smith Colleges, Loyola Marymount University, The Ohio State University, University of Arizona, University of Nebraska-Lincoln, and Virginia Commonwealth University. The 2006 designees were George Mason University; Montclair State University; University at Albany, State University of New York; and University of Missouri-Columbia. The 2007 designee was Michigan State University. Brief descriptions of all the model programs are posted on the Web site of the Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention (http://www.higheredcenter.org/grants/) and are included in the 2007 edition of the Center's publication Alcohol and Other Drug Prevention on College Campuses: Model Programs.1

OSDFS assembles a panel of independent experts from the field to review and score the applications. Information about grant competitions, applications, and guidelines for the Alcohol and Other Drug Prevention Models on College Campuses Grants initiative can be found on the OSDFS Web site at http://www. ed.gov/programs/dvpcollege/index. html

> Although the model programs must show evidence of program effectiveness, the U.S. Department of Education does not intend to imply that the selected institutions have AOD-related problems that are more or less pervasive than at other campuses.

PRINCIPLES OF EFFECTIVENESS FOR PREVENTION PROGRAMS

The U.S. Department of Education's Office of Safe and Drug-Free Schools promotes principles of effectiveness for prevention programs, as codified in the No Child Left Behind Act of 2001. These principles can be summed up as follows:

- · Conduct a needs assessment.
- · Set measurable goals and objectives and design programs to meet those goals and objectives.
- · Use programs with demonstrated or proven effectiveness.
- · Evaluate the program to assess progress toward achieving the stated goals and objectives.
- · Use the evaluation results to refine, improve, and strengthen the program and to refine the goals and objectives as appropriate.

A typology is a classification scheme for organizing objects or concepts into categories ("types") that have characteristics or traits in common.

- 3. The level of institutional commitment, leadership, and support for AOD abuse prevention efforts.
- 4. The clarity and strength of the institution's AOD policies and the extent to which those policies are broadly disseminated and consistently enforced.
- 5. The extent to which students and employees are involved in the program design and implementation process.
- 6. The extent to which the institution has joined with community leaders to address AOD issues.
- 7. If applicable, the steps the institution is taking to limit alcoholic beverage sponsorship, advertising, and marketing on campus, as well as to establish or expand upon alcohol-free living arrangements for students.
- 8. If applicable, the scope of the institution's efforts to change the culture of college drinking on its campus.

Additional criteria are related to the quality of the evaluation methodology and the usefulness of the evaluation in assisting other campuses interested in implementing the program.

The IHEs selected under the Alcohol and Other Drug Prevention Models on College Campuses Grants initiative reflect the state of the art in campus-based AOD abuse prevention programming. This chapter introduces a typology for categorizing AOD programs and policies, presents a brief description of each model program designated between 1999 and 2004, and then applies the typology to provide an overview of the 22 model programs' prevention activities.

A TYPOLOGY OF CAMPUS-BASED PREVENTION PROGRAMS

The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention has long urged academic administrators to expand their prevention work beyond traditional education and treatment programs by incorporating the environmental management strategies described above, that is, a restructuring of both the campus and community environment that can lead students to make safer, healthier, and legal choices about AOD use.4 To promote this shift, the Higher Education Center introduced a typology of campus-based prevention and treatment

options that can be used to categorize existing efforts, identify missing program elements, and guide new strategic planning.5

The typology categories are characterized by two dimensions. The first is a social ecological framework, with programs and policies classified into one of five levels: individual, group, institution, community, and state and federal public policy.6

The typology's second dimension concerns four key areas of strategic intervention: (1) changing people's knowledge, attitudes, skills, self-efficacy, and behavioral intentions regarding alcohol consumption; (2) eliminating or modifying environmental factors that contribute to alcohol-related problems; (3) protecting students from the short-term consequences of alcohol use ("health protection" strategies); and (4) intervening with and treating students who show evidence of problem drinking or are diagnosed as alcoholics. These two dimensions can be represented as a matrix, as shown in figure 1 (see p. 18).

Note that the typology gives particular emphasis to the following five strategic areas of environmental management:

- 1. Offer and promote social, recreational, extracurricular, and public service options that do not include alcohol.
- 2. Create a social, academic, and residential environment that supports health-promoting norms.
- 3. Limit alcohol availability both on and off campus.
- 4. Restrict marketing and promotion of alcoholic beverages both on and off campus.
- 5. Develop and enforce campus policies and enforce local, state, and federal laws.

This representation captures the idea that many areas of strategic intervention can be pursued at one or several levels of the social ecological model, and thus reminds planners to consider how programs or policies operating at one level can be strengthened by the addition of complementary efforts at other levels.

> Because there are several program and policy options for addressing each strategic area, program developers have the flexibility they need to tailor a program that best meets the needs of their campus. An extensive list of options, organized by the five strategic areas of environmental management, is presented in Safe Lanes on Campus: A Guide for Preventing Impaired Driving and Underage Drinking.7

FIGURE 1. Typology Matrix of Program and Policy Options for CAMPUS-BASED ALCOHOL AND OTHER DRUG ABUSE PREVENTION AND TREATMENT

	SOCIAL ECOLOGICAL FRAMEWORK (Program and Policy Levels)					
AREAS OF STRATEGIC INTERVENTION	Individual	Group	Institution	Community	Social Influences: Policy*	
Prevention						
Knowledge, Attitudes, Skills, Self-Efficacy, Behavioral Intentions						
Environmental Change 1. Alcohol-Free Options 2. Normative Environment 3. Alcohol Availability 4. Alcohol Marketing and Promotion 5. Policy Development and Enforcement						
Health Protection						
Intervention and Treatment						

^{*} In this context, the "public policy" component of the social ecological framework refers to state and federal policy.

The following sections include descriptions of all 22 model programs designated by the U.S. Department of Education's Alcohol and Other Drug Prevention Models on College Campuses Grants between 1999 and 2004. Each model program is described as it was at the time of its award. Several of the model programs were given recognition for using a comprehensive approach that integrated both individually and environmentally focused strategies. When an institution received a model program grant for a specific activity, that activity was embedded within a more comprehensive effort; in such cases, only the model programs themselves are described here. To describe the institutional context for each model program, Appendix 2 (see p. 80) provides a chart with key characteristics of each designated IHE (e.g., Carnegie classification, public vs. private governance, size of undergraduate population). The final section of this chapter summarizes the model programs' prevention activities using the Higher Education Center's typology.

THE 1999 MODEL PROGRAMS

Bowling Green State University (BGSU), Bowling Green, Ohio

The BGSU Peer-Based Misperception Program is a social norms marketing program designed to reduce student drinking by correcting misperceptions of campus drinking norms. Program staff asked student focus groups to discuss the meaning of survey data showing that BGSU students overestimated how much their peers drank and to review potential educational messages. The resulting campaign ("I Don't Drink as Much as You Think") was launched using campus-based mass media. A companion program focused on small groups of high-risk students, including freshmen, athletes, and fraternity and sorority members. Each group's members completed a survey about their own and other students' drinking habits. At a second meeting, the group reflected on the implications of the normative misperceptions revealed by the surveys.

Hobart and William Smith Colleges (HWS), Geneva, N.Y.

The HWS Alcohol Education Project features a wide-ranging social norms campaign designed to reduce students' alcohol use by correcting their exaggerated misperceptions about how much their peers drink. 10 Major activities include a campus poster and print advertising campaign, which features the use of HWSrelated "factoids" as screen savers on campus computer screens; an interdisciplinary course on the causes and consequences of alcohol abuse; and a faculty and student-teacher initiative for infusing AOD information into the academic curricula (see p. 24 for the definition of "curriculum infusion") and for community coalition building. The project also developed a Web site (http:// www.alcohol.hws.edu) that allows students to access campaign materials, supplemental research data, student-produced videos, and other prevention-related information.

University of Arizona, Tucson, Ariz.

The University of Arizona's Social Norms and Environmental Management Model Alcohol Prevention Program incorporates two broad strategies to reduce student alcohol abuse: (1) a social norms campaign designed to expose the difference between

Research has shown that college students greatly overestimate the percentage of their peers who drink heavily.8 Prevention experts have expressed concern that these misperceptions, by creating a distorted view of subjective drinking norms, may drive up student alcohol consumption. Social norms programs use a variety of communication channels to convey accurate information about student drinking patterns, with the expectation that correcting misperceptions of subjective drinking norms will drive down alcohol consumption.9

actual and perceived drinking norms, which relies primarily on newspaper advertising and posters; and (2) an environmental management approach to address alcohol-related problems by changing university policies and boosting enforcement.11 Key elements include consistent and visible enforcement of underage drinking policies at the start of each semester and rule changes to prohibit open parties, restrictions on alcohol service at parties and large events (e.g., homecoming), reduced alcohol access at athletic events, and the elimination of alcohol sponsorships on campus.12

The Pennsylvania State University, University Park, Pa.

The goal of the LateNight—Penn State program is to curb high-risk drinking by providing a variety of free, alcohol-free, high-quality entertainment programs that meet the interests of the university's diverse student body. Programs are held at the student union during prime social times—specifically, 9:00 p.m. to midnight on Thursdays and 9:00 p.m. to 2:00 a.m. on Friday and Saturday nights. Programming includes free movies, ballroom and swing dancing, live music, comedy, board games, video games, magic shows, and other live entertainment. LateNight encourages students to design and implement their own programs, both to broaden the range of student organizations involved in alcohol-free activities and to promote leadership development.

University of Northern Colorado (UNC), Greeley, Colo.

The UNC Underage Drinking Enforcement Program uses strict enforcement to discourage underage drinking. With the support of UNC's Drug Prevention/Education Program, student violators are charged by campus and local police under a municipal ordinance and brought before a judge, who is known to take these violations seriously. Violators can expect to pay fines, attend education classes, and perform community service. Incoming students learn about the program during summer orientation. At the start of the school year, students living in residence halls receive door hangers that list local and state alcohol laws, UNC's policies, and alcohol-free campus events. Police teams conduct saturation patrols early in the school year to stop private parties where alcohol is being served to minors.

Saturation patrols are intensive law enforcement efforts that target particular types of crime (e.g., impaired driving, underage drinking), usually with a focus on certain times and locations. Such patrols are usually intended as a "show of force" to deterfuture criminal activity.

Utah State University, Logan, Utah

The goal of the Judicial System Model is to reduce recidivism among students who violate the university's AOD policies. Student violators can be referred to the program by campus administrators, faculty, staff, university police, and the city courts. The cornerstone of the program is a six-week peer education program that features AOD education, information about student drinking to counter misperceptions of campus drinking norms, self-assessment and self-monitoring exercises, and behavioral skills training. The peer facilitators receive ongoing training and supervision and sign an "ethics contract" limiting their alcohol intake to no more than three drinks per occasion, or zero if they are under age. Many of the facilitators are graduates of the program.

University of Missouri-Columbia, Columbia, Mo.

The Alcohol Summit is a campus and community task force appointed by the university's chancellor to address student AOD-related problems. Task force members include representatives of key campus departments, faculty, and student organizations in addition to the mayor, city police, deans of two local colleges, high school counselors, and local bar owners. The task force uses environmental management strategies to address conditions that facilitate AOD abuse. Key initiatives include revising and increasing enforcement of the university's AOD policies; limiting access to alcohol; revising the campus judicial process; creating alcohol-free social events; implementing a social norms campaign; providing early intervention services; and training faculty, staff, and student leaders in conducting prevention programs.

THE 2000 MODEL PROGRAMS

Rutgers, The State University of New Jersey, Piscataway, N.J.

A collaborative partnership of students, health care professionals, and communication researchers at Rutgers, RU Sure? is a multifaceted social norms campaign targeted at first-year students.13 The campaign is designed to decrease heavy alcohol use by correcting students' misperception of "dangerous drinking" as the campus drinking norm. Key elements include a campus-based media campaign ("The Top 10 Misperceptions at Rutgers"), a curriculum infusion program, an informational Web site, and a set of experiential peer education programs offered in first-year residence halls (e.g., "RU Sure? Bingo"). Rutgers officials also participate in a community coalition focused on policy and enforcement initiatives to reduce illegal alcohol sales to minors.

Syracuse University, Syracuse, N.Y.

The Twelve-Point Plan for Substance Abuse Prevention and Health Enhancement is a multifaceted prevention effort involving work with state and local officials, a campus and community coalition (with representatives from other local colleges, health professionals, tavern owners, and neighborhood residents), and various university constituencies (faculty, staff, students, and parents). Achievements include revision of the university's AOD policies; increasingly severe sanctions for AOD-related policy violations; restructuring of the university's judicial system, with swifter adjudication and resource referral;

a parental notification policy; a neighborhood patrol initiative to address underage drinking and other quality-of-life issues; and reports to local and state authorities about illegal sales of alcohol to minors and intoxicated patrons by licensed establishments.

University at Albany, State University of New York, Albany, N.Y.

Based at the university's counseling center, the Middle Earth Peer Assistance Program trains student volunteers to help other students by offering support, information about alcohol, and referral services for counseling and treatment. Trained in communication, problem-solving, and prevention skills, student volunteers are supervised by a professional director and a team of graduate student program coordinators. Middle Earth volunteers operate an anonymous hotline that receives over 1,600 calls per year. The program also fields an improvisational theater group to present an educational program to all new students during orientation. During the performance, audience members learn about the difference between actual and perceived drinking norms on campus and are prompted to generate solutions to conflicts involving alcohol and other drugs.

University of Pennsylvania, Philadelphia, Pa.

The Comprehensive Alcohol and Other Drug Model Program is a multifaceted prevention program coordinated by the university's Working Group on Alcohol Abuse (WGAA). A group of 15 students and seven administrators and faculty members developed extensive recommendations for addressing alcohol abuse at Penn and now oversees their implementation. Key program areas include improved alcohol health education; expanded opportunities for students to socialize without alcohol; a student-driven social norms marketing campaign; more consistent enforcement of university policies and local, state, and federal regulations; revised policies to restrict underage students' access to alcohol; and an amnesty policy exempting students from university discipline if they seek medical attention for themselves or others due to alcohol-related causes.

Washington State University, Pullman, Wash.

Project Culture Change is a small-group intervention designed to drive down high-risk alcohol consumption by correcting misperceptions of campus drinking norms among the university's fraternity and sorority members. ¹⁴ Trained chapter presidents lead a 45-minute session, during which they compare estimates of campus and group drinking norms with actual consumption levels, based on previously collected survey data; explain the effect of normative misperceptions on the decisions students make about drinking; present student data on protective behaviors and what students do to have fun without alcohol; and guide a discussion about the data's relevance to their own alcohol use.

Western Washington University, Bellingham, Wash.

WE CAN Works uses three strategies to change perceptions of student drinking norms. ¹⁵ The first is a mass media campaign that communicates accurate data on student drinking levels using campus news-

paper advertisements, posters, bulletin board displays, and radio advertisements. The second is an education program for heavy alcohol users who have violated campus policy, which compares their level of alcohol use with campus norms, encourages reflection, and helps them consider options for moderating their drinking. The third is direct communication with campus and community opinion leaders with the goal of fostering positive perceptions of student behavior, so that students will be seen as part of the solution, not just as a source of community problems.

THE 2001 MODEL PROGRAMS

Auburn University, Auburn University, Ala.

The Alcohol Problem Prevention Initiative, a program of Auburn's Health Behavior Assessment Center, uses BASICS (Brief Alcohol Screening and Intervention for College Students) to help students exhibiting alcohol-related problems. 16 Students complete a questionnaire about their alcohol use. Meeting individually with a counselor, they receive informational feedback about how their drinking compares to the student body as a whole. This session then leads to a discussion about how they might benefit by making changes in their drinking behavior. The university promotes BASICS through outreach efforts directed at residence hall assistants, fraternity and sorority members, and university health clinic staff. Students also learn about the program through radio and newspaper advertising and class presentations.

Boston College (BC), Chestnut Hill, Mass.

BC's Alcohol and Drug Education Program is a multifaceted effort to change campus culture and reduce alcohol abuse. Key program elements include ongoing training for faculty, staff, and student leaders; a needs-based referral program for students who violate the college's AOD policy; and environmental management strategies to reduce alcohol-related incidents in an on-campus housing area popular with BC seniors. The college's alcohol policy includes guidelines for serving alcohol, a ban on the use of student fees to purchase alcohol for university-sponsored events both on and off campus, and a ban on the marketing and promotion of alcohol on campus.

Lehigh University, Bethlehem, Pa.

Lehigh's Project IMPACT (Involving Multiple Partners in Achieving a Cultural Transformation) is a campus and community coalition formed to address problems resulting from high-risk student drinking.¹⁷ Grounded in an environmental management approach, the project's key initiatives include increasing the availability of substance-free housing; expanding the number and improving the quality of social, recreational, and residential options not involving alcohol consumption; revising the university's alcohol policies to promote responsible beverage service (RBS) and reduce alcohol consumption; employing an alcohol server training program for local bar and tavern owners; using parental notification when students violate the university's alcohol policies; and implementing education and coordinated enforcement programs to reduce neighborhood disturbances caused by students living off campus.

San Diego State University (SDSU), San Diego, Calif.

The Community-Collegiate Alcohol Prevention Partnership (C-CAPP) is a coalition of community leaders, state and local law enforcement officials, business representatives (including bar owners), prevention service providers, community group representatives, SDSU-based researchers, and students.18 The coalition's focus is to change environmental conditions, both on campus and in the community, that affect student abuse of alcohol. Key program elements include a social norms marketing campaign; RBS training; reduced alcohol promotions and advertising on campus; policy development; and increased enforcement of driving under the influence (DUI) and underage drinking laws, especially at private parties. A significant policy change was the elimination of low-priced drink specials at several high-risk bars and nightclubs frequented by SDSU students.

Southwestern Indian Polytechnic Institute (SIPI), Albuquerque, N.M.

SIPI is a two-year institution whose students are tribal members from more than 100 Native American communities across the country. The Twelve Feathers Program is an experiential group counseling program for high-risk students aimed at reducing the number of students who withdraw from college due to AOD violations. The program features life skills training, adventurebased activities (e.g., rope climbing, river rafting), Native American arts and crafts, and ceremonies to increase awareness of tribal traditions and culture. All activities are designed to help students become more responsible for the choices they make and to seek help when necessary. SIPI has a "zero tolerance" policy for alcohol and other drugs on campus.

State University of New York at New Paltz, New Paltz, N.Y.

This program, A Comprehensive Model Utilizing Social Norms and Community Collaboration for Alcohol Prevention, uses a combination of strategies to reduce high-risk alcohol use and ensure student safety: programming for first-year students, including educational theatrical skits, curriculum infusion, and a parent involvement program; alcohol-free campus activities

Curriculum infusion is the integration of prevention-related content into other academic subject areas. Instructors can develop lesson plans to meet their primary course objectives while also supporting the institution's prevention goals. A very broad range of courses can support prevention curricula, including anthropology, biology, chemistry, communications, criminology, economics, marketing, political science, psychology, and sociology.19

(e.g., coffee house, late movies, expanded gym hours); events to promote student interaction with faculty; a multimedia social norms marketing campaign; a community tavern owners' agreement to reduce low-priced drink specials and deglamorize high-risk drinking; a risk management policy for fraternities and sororities; and stricter enforcement of campus policies, followed by parental notification, education programming, and counseling referrals.

THE 2004 MODEL PROGRAMS

Grand Valley State University, Allendale, Mich.

ALERT Labs (Alcohol Education Research and Training Laboratories) uses an environmental management approach targeted at first-year students. Primary strategies include an outreach theater troupe and an alcohol education video for student orientation; peer mentors to help students with their transition into college; a parent involvement program; alcohol-free social options (e.g., museum visits, outdoor excursions, large parties); a social norms marketing campaign to correct misperceptions of campus drinking norms; substance-free residential housing; and a 12step program and recovery housing. Incoming students receive a newsletter about the program prior to enrollment. Project ALERT also sponsors an alcohol summit with a community coalition.

Massachusetts Institute of Technology (MIT), Cambridge, Mass.

The MIT Screening and Brief Intervention Model offers first-year students an opportunity to complete an online alcohol screening tool based on the screening questionnaire used in BASICS.²⁰ Participation is voluntary. Students who complete the questionnaire receive an incentive in "Tech Cash," which is usable in campus stores. Students who express concern about their alcohol use or whose answers indicate possible engagement in high-risk or problem drinking are offered two confidential one-on-one sessions with a trained counselor from MIT Medical. Participation in these sessions is also voluntary. Students who attend both sessions receive an additional incentive in "Tech Cash." MIT students are also identified for participation in the program through disciplinary and medical referrals.

Recovery housing provides a chemical-free residence hall for students in recovery from alcohol or other drug abuse, in addition to a range of academic and counseling services.

University of Chicago, Chicago, Ill.

UChicago's Noctis Sero (Late Night) Program offers orientation and residence hall trainings on AOD abuse prevention and risk reduction strategies; a peer health education program; alcohol-free programming to "promote a healthy nightlife," especially on weekends (e.g., open skate nights, game nights); a social norms marketing campaign to communicate accurate information about campus AOD norms; alcohol server training; and open discussions about campus alcohol policies and their enforcement to increase student awareness of university rules and local and state laws. Many of the program's activities are targeted at the university's large population of graduate students. Program coordinators encourage active student participation in planning, staffing, and marketing Noctis Sero activities.

OVERVIEW OF MODEL PROGRAM ACTIVITIES

From 1999 to 2004, a total of 22 model programs were selected under the U.S. Department of Education's Alcohol and Other Drug Prevention Models on College Campuses Grants program. Collectively the 22 programs cover all of the main areas of strategic intervention listed in the Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention's typology. 21

Listed here are the key program elements for each of the model programs, organized by areas of strategic intervention (see fig. 1, p. 18). Every designated program must be integrated fully into a comprehensive approach, but only the model programs themselves are reflected in this list.

In 2002, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) published A Call to Action: Changing the Culture of Drinking at U.S. Colleges, 22 a summary of the scientific literature on programs, policies, and interventions designed to address college alcohol problems. The report organized programs and policies into four tiers according to the quality of research evidence that is presently available (pp. 16-24):

- Tier 1 strategies have two or more research studies that demonstrate their effectiveness with college students.
- Tier 2 strategies "have been successful with similar populations" but have "not yet been comprehensively evaluated with college students" (p. 17).
- Tier 3 strategies "make sense intuitively, or have strong theoretical support" but "require more comprehensive evaluation" (p. 21).
- Tier 4 strategies have been shown to be ineffective when used in isolation.

Most of the tier 4 strategies are informational, knowledge-based, or values clarification interventions. The NIAAA report notes that while these types of interventions may be ineffective when used in isolation, they "might make an important contribution as part of a multicomponent integrated set of programs and activities" (p. 24), in other words, as part of a comprehensive approach.

While organized according to the typology, each of the model program elements listed below is also classified according to the NIAAA report's tier system. Many of the model programs incorporated several program and policy elements and are therefore listed multiple times. It should be noted that the tier classification for each program element is based on published studies that evaluate that particular element alone and excludes studies of multicomponent programs.

Knowledge, Attitudes, and Behavioral Intentions

Alcohol education (tier 4)

- Grand Valley State University (2004)
- University of Chicago (2004)
- University of Pennsylvania (2000)

Theater group (tier 4)

- Grand Valley State University (2004)
- · State University of New York at New Paltz (2001)
- University at Albany, State University of New York (2000)

Peer mentors (tier 3)

Grand Valley State University (2004)

Curriculum infusion (tier 4)

State University of New York at New Paltz (2001)

Parent involvement program (tier 3)

- Grand Valley State University (2004)
- · State University of New York at New Paltz (2001)

ENVIRONMENTAL CHANGE

Alcohol-Free Options

Entertainment and recreational programs (tier 3)

- Grand Valley State University (2004)
- Lehigh University (2001)
- The Pennsylvania State University (1999)
- State University of New York at New Paltz (2001)
- University of Chicago (2004)
- · University of Missouri-Columbia (1999)
- University of Pennsylvania (2000)

Normative Environment

Social norms marketing campaigns (tier 3)

Mass media (tier 3)

- · Bowling Green State University (1999)
- Grand Valley State University (2004)
- · Hobart and William Smith Colleges (1999)
- Rutgers University, The State University of New Jersey (2000)
- · San Diego State University (2001)

ENVIRONMENTAL CHANGE (CONTINUED)

- State University of New York at New Paltz (2001)
- University of Arizona (1999)
- University of Chicago (2004)
- University of Missouri-Columbia (1999)
- University of Pennsylvania (2000)
- Western Washington University (2000)

Small-group workshops (tier 3)

- Bowling Green State University (1999)
- Washington State University (2000)

Curriculum infusion (tier 3)

- · Hobart and William Smith Colleges (1999)
- Rutgers University, The State University of New Jersey (2000)

Peer education (tier 3)

Rutgers University, The State University of New Jersey (2000)

Community-focused campaign (tier 3)

Western Washington University (2000)

Substance-free housing (tier 3)

- Grand Valley State University (2004)
- · Lehigh University (2001)
- San Diego State University (2001)

Increased faculty-student contact (tier 3)

State University of New York at New Paltz (2001)

Alcohol Availability

Revised campus AOD policies/general (tier 3)

- Lehigh University (2001)
- · San Diego State University (2001)
- Syracuse University (2000)

Campus policies restricting alcohol access by minors (tier 2)

- Boston College (2001)
 - Alcohol service guidelines
- Rutgers University, The State University of New Jersey (2000)
- University of Arizona (1999)
 - Ban on open parties
 - Alcohol service guidelines
 - Restricted alcohol access at athletics events
- University of Missouri-Columbia (1999)

ENVIRONMENTAL CHANGE (CONTINUED)

· University of Pennsylvania (2000)

Ban on use of student fees to purchase alcohol (tier 3)

· Boston College (2001)

Alcohol server training (tier 2)

- Lehigh University (2001)
- · San Diego State University (2001)
- University of Chicago (2004)

Ban on low-priced drink specials (tier 2)

- · San Diego State University (2001)
- State University of New York at New Paltz (2001)

Alcohol Promotion

Ban on campus alcohol sponsorships (tier 3)

University of Arizona (1999)

Banned or restricted alcohol promotions and advertising on campus (tier 3)

- Boston College (2001)
- · San Diego State University (2001)

Policy/Law Enforcement

Enforcement

Stricter enforcement (tier 2)

- San Diego State University (2001)
- State University of New York at New Paltz (2001)
- · University of Missouri-Columbia (1999)
- University of Pennsylvania (2000)

Targeted enforcement (tier 2)

- Boston College (2001)
- Lehigh University (2001)
- Syracuse University (2000)
- University of Northern Colorado (1999)

DUI enforcement (tier 2)

San Diego State University (2001)

Visible enforcement at the start of each semester (tier 3)

University of Arizona (1999)

Reports to authorities about illegal alcohol sales (tier 3)

Syracuse University (2000)

ENVIRONMENTAL CHANGE (CONTINUED)

Judicial process

Revised campus judicial process (tier 3)

- Syracuse University (2000)
- University of Missouri-Columbia (1999)

Prosecution of underage drinkers under a municipal ordinance (tier 3)

• University of Northern Colorado (1999)

Sanctions

Parental notification (tier 3)

- Lehigh University (2001)
- State University of New York at New Paltz (2001)
- Syracuse University (2000)

Progressive sanctions (tier 3)

Syracuse University (2000)

HEALTH PROTECTION

Risk management program for fraternities and sororities (tier 3)

State University of New York at New Paltz (2001)

Amnesty policy to promote seeking of medical care (tier 3)

University of Pennsylvania (2000)

INTERVENTION AND TREATMENT

Emergency hotline (tier 3)

University at Albany, State University of New York (2000)

Early intervention services (tier 3)

University of Missouri-Columbia (1999)

Brief motivational interviews (tier 1)

- Auburn University (2001)
- Massachusetts Institute of Technology (2004)

INTERVENTION AND TREATMENT (CONTINUED)

Disciplinary referrals

Brief motivational interviews (tier 1)

- Massachusetts Institute of Technology (2004)
- Western Washington University (2000)

Counseling referral (tier 3)

- Boston College (2001)
- State University of New York at New Paltz (2001)

Education program (tier 4)

State University of New York at New Paltz (2001)

Peer education program (tier 4)

Utah State University (1999)

Experiential group counseling program (tier 4)

· Southwestern Indian Polytechnic Institute

Twelve-step program (tier 3)

Grand Valley State University (2004)

Recovery housing (tier 3)

• Grand Valley State University (2004)

The model programs incorporated a wide range of programs and policies, with many of the campuses applying tactics focused on several different strategic areas. The area of strategic intervention receiving the greatest emphasis was environmental change. The three most common environmental management strategies focused on the normative environment, alcohol availability, and policy and law enforcement, which includes stricter enforcement, revised judicial processes, and new sanctioning options. The most frequently applied tactic was a social norms marketing campaign. It should be noted, however, that the vast majority of the designated institutions used this tactic in conjunction with several other approaches and not in isolation. Another common area of strategic intervention was intervention and treatment. Within this area, the largest number of campuses increased their options for disciplinary referrals. The area receiving the least emphasis was health protection.

The model programs used program elements from all four tiers of the NIAAA report's classification system. Tier 1 strategies have two or more research studies that demonstrate their effectiveness with college students. Three model programs used a tier 1 strategy: brief motivational interviews. Tier 2 strategies are known to be successful with similar populations, but their effect on college students has not been evaluated. Several of the model programs employed tier 2 strategies, including campus policies to restrict alcohol access by minors, alcohol server training, a ban on low-priced drink specials, and stricter policy and law enforcement.

Most of the model programs used a variety of tier 3 strategies, which can be considered promising, but require more evaluation. Several programs also included tier 4 strategies (informational, knowledgebased, or values clarification interventions), which have been shown to be ineffective when used in isolation. As noted, however, the NIAAA report notes that such interventions might still be an important aspect of a comprehensive approach. In fact, most of the model programs that used tier 4 strategies included many additional prevention strategies.

All 22 model programs showed evidence that their initiative was effective in reducing AOD-related problems, but most of the programs included multiple components, making it impossible to determine which of the individual program elements were most responsible for those reductions. This is typical of college and university prevention programs and contributes to so many prevention strategies being classified in tier 3.

As noted, the NIAAA tier classification for each program element is based on published studies that evaluate that particular element alone and excludes studies of multicomponent programs. Researchers interested in studying the effect of individual strategies should look first at the program components used by these innovative model programs.

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CHAPTER 4: LESSONS ON PROGRAM DEVELOPMENT

The 22 model programs selected from 1999 to 2004 under the Alcohol and Other Drug Prevention Models on College Campuses Grants program reflect the state of the art in campus-based prevention. College and university administrators should consider these programs as a source of ideas for their own alcohol and other drug (AOD) abuse prevention programming, ideas that can then be adapted and refined to meet the needs of their campuses. In addition to these ideas, administrators can benefit from the lessons the directors of these model programs offer on what it takes to implement, evaluate, and sustain a comprehensive and effective prevention effort.

These lessons, focused on the principles and processes by which the grantees successfully implemented their programs, were the primary focus of the site visit and telephone interviews conducted with the program directors and key stakeholders at the 21 grantee institutions. This chapter reviews general principles gleaned from the grantees' experiences related to program development: (1) exercising leadership, (2) building collaborations, and (3) choosing evidence-based programs.

1. EXERCISING LEADERSHIP

Strong leadership is vital to effective prevention. On every model program campus, the knowledge and skill of the AOD prevention coordinator were widely recognized as the single most important contributors to a program's success.

Attributes of Effective Leadership

As change agents, effective leaders in AOD abuse prevention exhibit remarkably similar personal qualities and behaviors.² The following are among the attributes needed for effective leadership on campus.

Vision. An effective leader will be able to articulate a clear image of a better future for the institution,4 which is tied to its primary academic mission, is consistent with the community's values, and builds on the positive foundation already in place. A strongly worded vision statement can create a unified sense of purpose⁵ and help motivate campus and community groups to create synergy among their various programs and policies.

The U.S. Department of Transportation's Community How To Guide on Coalition Building lists several leadership qualities that a prevention coordinator should have.3 See also the guidebook's appendix, "Attributes of a Good Coordinator."

Connectedness. Leaders are more effective when they can draw upon and build alliances with an extensive network of contacts, including leaders of key departments, organizations, and associations; representatives of important constituencies; and content experts. Working collaboratively in a coalition with a wide diversity of people is a sign of strong leadership.6

Especially in cases where multiple strategies are being used and a wide range of stakeholders are participating, the leader's skills must go beyond education and program development to include community organizing, coalition building, and advocacy.

Organizational Skills. Competent leaders have proven administrative skills: they can set agendas, run efficient meetings, organize action teams, delegate responsibility, acknowledge and appreciate good work, and hold people accountable. They must accomplish all of this while also promoting equal status among members of the working group.

Strategic Planning Skills. Campus-based AOD abuse prevention depends on a high-quality strategic planning process. Able leaders know how to guide this process: frame the problem, identify key points

of leverage, outline goals and objectives, develop task plans, and garner resources. At the same time, strong leaders can depart from their original plans to take advantage of unexpected opportunities.

Communication Skills. Successful leaders have access to the media and know how to build and use other communication channels to reach key audiences. They also know how to construct effective arguments to build momentum for change and widespread support for new programs and policies. In addition, they know how to create mechanisms for constant communication and information sharing among team members.

Political Skills. Effective leaders demonstrate a high level of political knowledge and ability. Specifically, they are able to (1) encourage collaboration in the name of shared goals, (2) be responsive to the institutional and personal incentives that shape other people's priorities, (3) anticipate and neutralize opposition, (4) find creative ways to overcome obstacles, and (5) resolve conflict by negotiating "win-win" solutions.

Personal Traits. Being an advocate for change requires optimism and energy. The leader must convince members that their collaboration will produce desired outcomes, create positive expectations for their work together, educate members about the issues involved, and guide members in taking on coalition tasks.8

The "spirit of cooperation" forged when coalitions are first formed may be the most important reason they become cohesive and effective.7

In these ways the leader creates a climate of optimism that sustains members' commitment.9

Personal courage and steadfastness are also required. Successful leaders assert themselves confidently, looking for opportunities to move their agenda forward. This behavior will invite opposition and sometimes even personal attacks, so having a "thick skin" is helpful, but even more critical is knowing how to marshal evidence, frame counterarguments, and build additional alliances to address criticism.

Leadership in Action

Despite their variety of titles and operating at different levels of college administration, the 22 model program directors in large measure shared this set of leadership attributes.

Consider Kim Dude at the University of Missouri-Columbia, a longtime leader of that university's AOD abuse prevention program. Dude helped organize the members of a campus and community coalition into action teams to address specific aspects of the university's prevention plan. For example, one team—representing bar owners, neighborhood associations, residential life, student affairs, and campus and community police—focused on enforcement issues. Each action team followed a structured agenda to ensure that participants would derive real benefits from being involved.

Going beyond simple information sharing, Dude began by encouraging coalition members to raise issues and challenges they faced that members from other parts of the university or community might be able to help solve. The resolution of these problems was widely viewed as an important early "win" for the coalition, providing momentum to accomplish the work ahead. When asked why they kept coming to the coalition meetings, members confirmed that the information they learned helped them do their own jobs well. Over time, they said, the value of these meetings had not diminished.

Most of the 22 program directors came to the role already possessing many of the skills they needed, but they also continued to expand their knowledge and skills by participating in national conferences and advanced training, keeping up with the research literature, visiting other campuses to learn about best One study of 35 community-based prevention initiatives found that coalitions led by coordinators with a greater number of paid hours produced higher-quality strategic plans.10

A model job description for director of the Safety, Environment, and Education (SEE) Center at the University of Tennessee, Knoxville, identifies several duties that reflect important leadership qualities:

- Establish and maintain a coordinated, strategic partnership between key campus and community stakeholders.
- Train working group members in areas related to environmental management, best practices in prevention, and community building.
- Research, develop, and submit grants to support office operations and programming incentives.
- Direct and coordinate working groups to ensure that strategies are data driven, clearly defined, and based on best practices research.
- · Monitor and evaluate the effectiveness and influence of the activities of the project and its work groups.
- · Disseminate information on the work and progress of the program at local, regional, and national meetings and conferences.
- Develop, manage, and monitor all budgets and accounts pertaining to these areas, including federal and state grants.

Listed personal qualities include excellent interpersonal and communication skills and a demonstrated ability to work effectively with multiple and culturally diverse constituencies.12

Because the tenure of many coalition leaders is relatively short, the leadership team continually needs to identify and foster a cadre of emerging leaders.14

> The task of addressing health problems in a community must be seen as everyone's job, not just the responsibility of the leader.

practices, and participating in or leading statewide college AOD abuse prevention initiatives in their states. Because they have continued to develop their skills, many of these program directors have been selected to conduct trainings about AOD abuse prevention and consult with individual campuses or groups of campuses.

To exercise leadership effectively, AOD abuse prevention coordinators must be able to devote a substantial portion of their time to this work, undistracted by other duties. 11 Job descriptions for this position should itemize both the prevention perspective and leadership skills required. One of the model program institutions, the University of Chicago, relied for many years on a clinician in the counseling center to oversee student AOD education. By 2001, administrators saw the need for a more comprehensive prevention program and created the position of health education specialist within health services. Kelley Carameli, who holds a master's degree in community health, was hired to fill the position. Carameli transformed the program, according to one campus official. Her knowledge of evidence-based prevention strategies, her experience in program design, her understanding of what the campus was ready to undertake, and her presentation and relationship-building skills all contributed to helping the university shift to a broader range of prevention strategies.

Sharing Responsibility

Successful campus and community coalitions often involve more than one person in a leadership role. The coalition can benefit from having multiple leaders who have different skill sets, "understand and appreciate different perspectives, are able to bridge diverse constituency groups, and are comfortable sharing ideas, resources, and power."13 Shared leadership also means that the loss of one leader will not bring the program to a halt.

For example, at another grantee institution, San Diego State University, researcher and faculty member John Clapp and

> community organizer Marian Novak combined their skills to lead a six-campus effort in the San Diego area. Clapp brought a background in research, data management, strategic planning, and evaluation to the effort, while Novak developed relationships with key stakeholders at the city, county, and state levels

and organized and maintained an active and effective coalition with 60 members.

Even where there is clear central leadership, sharing responsibility among team members is essential. A climate of mutual support is in evidence at the University of Northern Colorado, where AOD abuse prevention is seen as everyone's job. Many of the team members grew up in Greeley, where the university is located, and have worked together on this issue over time. Both a high level of collaboration and a significant degree of shared responsibility, built on mutual respect and trust, are deeply embedded in the professional culture. They help each other out, even if the task at hand is outside their normal duties. One member remarked, "We consider ourselves to be part of each other's staffs."

Building on Presidential Support

A program director's ability to exercise leadership depends to a great extent on whether the president and other senior administrators actively support comprehensive AOD abuse prevention and the coalition process. The Presidents Leadership Group, formed in 1997 by the Center for College Health and Safety at Education Development Center, Inc., Newton, Mass., urged higher education presidents to make prevention both a personal and institutional priority.16

Not surprisingly, strong support from the president and the top student affairs administrator was an important factor for success on many of the model program campuses. The program at the State University of New York at New Paltz, for example, grew out of a set of recommendations made by a presidential commission. Similarly, a special committee at the University of Pennsylvania pushed hard for a new, full-time, senior administrative position to oversee the institution's growing prevention efforts.

At Syracuse University, increased rates of alcohol-related misconduct and the university's growing "party school" image prompted the chancellor to appoint a Commission on Substance Abuse Prevention in 1999. This led directly to development of the Substance Abuse Prevention and Health Enhancement (SAPHE) program and its Twelve Point Plan, which became the basis for Syracuse's model program designation.

In a widely disseminated report to academic leaders, the Presidents Leadership Group (PLG) stated that college presidents should "use every opportunity to help keep the issue of student alcohol abuse at the top of the school's agenda..." (p. 19).15 The PLG's recommendations (p.18):

- Be Vocal. College presidents should openly and publicly acknowledge that alcohol and other drug abuse problems exist and then reach out to campus, community, and state-level groups to develop and implement a comprehensive strategy for prevention.
- Be Visible. College presidents should take
- an active stand on alcohol and other drug issues, convey clear expectations and standards. and serve as a role model to other senior administrators, faculty, and students.

Prevention can be regarded as a true priority for a particular campus only when the job descriptions for key senior administrators and the annual budget indicate that AOD issues are at the top of the institution's agenda.

• Be Visionary. College presidents should make alcohol and other drug abuse prevention a **priority** in their strategic plan for the school.

Some presidents may be reluctant to admit that their school has AOD problems or may worry that an ambitious prevention program will attract unfavorable publicity. Coalition leaders can motivate presidential support by (1) presenting needs assessment data on the AOD problem; (2) describing the steps being taken by other col-

lege presidents, especially at peer institutions; (3) emphasizing the public relations advantages of being proactive; (4) outlining how an advanced prevention effort, implemented to be consistent with best practices, can help reduce the institution's legal liability; and (5) highlighting how

Surveys conducted at 32 four-year institutions of higher education (IHEs) found majority student support at every campus for stricter disciplinary sanctions for alcohol-related violence. Majority support was found at more than half of the schools for two additional policy proposals: (1) applying stricter penalties for the use of false IDs to purchase alcohol illegally, and (2) prohibiting kegs on campus.17

strong prevention programs attract high-achieving students who want assurances that the school is addressing high-risk drinking

An institution's top administrators need to stay informed and involved. Capitalizing on the freedom that her tenured faculty position allowed her, as well as the relationships she had developed as dean of social sciences, Nancy Harper of Grand Valley State University (GVSU) leveraged significant campus support for a stepped-up prevention effort. In part because of her ongoing access to the president, faculty, and senior administrators, she was able to build the program very quickly and maintain support for it. Harper was also well connected with national leaders in the campus AOD abuse prevention field, and she consulted with them extensively in developing and implementing the GVSU program.

2. BUILDING COALITIONS

The mobilization of a community coalition—a group of key stakeholders who represent diverse organizations and constituencies and agree to work together to achieve a common goal¹⁸—has long been recognized as a key element of successful AOD abuse prevention.²⁰ More recently, a published evaluation of campus and community coalitions affiliated with the A Matter of Degree initiative showed that such coalitions can work effectively to implement environmental management strategies and reduce heavy drinking, driving after drinking, and other alcoholrelated problems.21

A coalition's defining action is to guide the design and execution of targeted initiatives. The role that coalitions play in actual

> implementation varies considerably, however: Some are directly involved in putting the programs and policies into operation, while others act as catalysts in identifying community needs, selecting or designing initiatives, and mobilizing community support for these efforts.²²

Coalitions make it possible for a group of individuals to come together to bring about desired changes that the individual mem-

bers could not achieve independently.²³ Thus, a fundamental characteristic of effective prevention leadership is the ability to build and manage an effective campus and community coalition. Where a community prevention coalition already exists, college

Funding agencies and community activists favor broad-based community partnerships, due to their ability to represent and engage disparate constituencies, mobilize talent and resources, develop and implement interventions that operate at multiple levels, and foster community ownership and institutionalization.19

Many individuals and organizations have the expertise, access, and commitment required to reduce problem drinking on campus. Coalitions are an effective way to draw upon the contributions each participant can make.

Syracuse University's participation in a campus-community coalition has led to the elimination of city block party permits, enforcement sweeps ("Operation Prevent") to crack down on fake IDs, and other initiatives.

and university officials should be invited to participate. Where no coalition is in place, higher education officials should join with community partners to start a coalition and set its agenda.

The 22 model program directors all agreed that collaboration with key stakeholders was critical to their success. However, the extent and nature of their cooperative efforts vary widely, with some arrangements more formally structured than others. (For the sake of simplicity, each of these arrangements will be referred to as a "coalition.") Whatever the case, the program directors saw building the professional relationships required to make this work possible as one of their most critical responsibilities.

Selecting and Recruiting Coalition Members

Securing broad representation is critical to a coalition's success; membership should include individuals from key campus departments, organizations, and associations as well as representatives of important constituencies and various experts. A diverse, talented, and motivated membership is a coalition's most important asset.²⁷ Possible choices for coalition membership include the following:

- · Campus leaders: senior administrators, faculty and staff, students, campus police chief
- · Business representatives: liquor store owners, bar and restaurant owners, apartment owners
- Local government leaders: elected officials, public health director, community development and zoning officials
- Local law enforcement officials: municipal police chief, alcohol beverage control (ABC) officials
- Prevention and treatment experts: AOD treatment directors, community-based prevention leaders (e.g., MADD representative), community-based traffic safety leaders
- · Other community leaders: neighborhood coalition leaders, faith-based organization leaders, local news media representatives, parents

For a coalition to be successful, this diverse group of individuals must endorse its missions, goals, and objectives, including a shared belief in the benefits of an environmental

Several arrangements are possible, with varying demands on the parties involved in terms of organizational commitment, resource sharing, and interdependency.24 Networking, the most informal level, is an exchange of information for the mutual benefit of the parties. Coordinating is similar to networking but implies some

degree of synchronization. Cooperating involves a higher level of mutual assistance. Collaborating represents a shared commitment to achieve a distinct mission. Coalitions generally fall into this category.

What makes a true coalition different from other kinds of joint efforts is the degree to which members collaborate. not just on their own behalf or on behalf of the organization or agency they represent, but also on behalf of the coalition's mission.26

In some cases an AOD abuse prevention coordinator will reach out to individual stakeholders to implement specific programs and policies rather than undertake broader systems change. This effort does not require a coalition, but rather a series of one-on-one exchanges between the coordinator and each stakeholder. Once the desired outcomes are achieved, the collaboration may not need to continue.25

Students can make several contributions to a coalition:²⁸ (1) provide background information on the problem, contributory factors, and local conditions; (2) interpret student survey data, offering suggestions and giving feedback on policies and programs being considered; (3) conduct student focus groups to pretest prevention messages and information materials; and (4) advise on how to present the prevention program to students so that they will understand the need for it and offer their support.

A coalition's efforts will have limited success if it neglects to address students' AOD use off campus. Community leaders need to be involved in order to change alcohol promotion targeted to youths and to encourage stricter enforcement of underage drinking laws. Local residents will be angry if alcohol use restrictions on campus shift abusive drinking from the campus to the community.

Trying to recruit coalition members by telling them that preventing AOD abuse is the right thing to do is usually ineffective. Instead, identify a specific way in which participating will address their concerns or interests.

management approach to preventing alcohol-related problems, both on campus and in the community.

It is essential to have an action-oriented group focused on a shared vision, not an assemblage of people who simply want to consult or learn about the problem. Membership selection should also be guided by the work style, skill sets, political clout, networking contacts, public credibility, and other assets that individuals might bring to the group.

Members should be motivated to participate by either institutional or personal self-interest, yet willing to give the coalition

> control over some of their efforts. They must be able to work together effectively, with shared decision making, even if they represent competing interests, and they must be able to make a long-term commitment to participating in and sustaining the coalition.

Recruiting and then nurturing a productive coalition requires the AOD abuse prevention coordinator to invest considerable time and effort in relationship building. Pat Fabiano at Western Washington University calls this process "having one hundred cups of coffee," referring to the many opportunities she takes to sit down and talk

and listen with prospective partners. When recruiting new members, the coordinator should explain the purpose of the coalition, describe what the potential recruits could do to help, and outline how they would benefit from participating, all while conveying a sense of excitement about what the coalition can accomplish.

Building an Effective Team

Program directors of the model programs described several early steps that an AOD abuse prevention coordinator can take to develop a sense of group identity and unified purpose among coalition members:

- Give the coalition a title that captures both the scope and importance of its work.
- Establish ground rules that allow members to express their positions openly, but without rancor or finger-pointing.
- · Identify and address any preconceptions or assumptions that individual members might have about student AOD problems.

- · Work with the group to develop a common understanding of the nature, scope, and consequences of the problems.
- · Acknowledge that turf issues are an inherent aspect of collaborative work and can be resolved over time.
- · Encourage members to seek common ground.
- Provide continuing opportunities for members to get to know each other.

Developing a cohesive and functioning team can take time. It is not unusual for early meetings to be dominated by members who want to vent their anger over long-standing problems. The coordinator's challenge is to help coalition members move beyond their frustration to see that they share the same goals, are equally committed to the coalition process, and together can make things better.

The coordinator also must remember that it is unrealistic to require coalition members to do a lot of work or to participate in every coalition activity. Indeed, some members whose membership in the coalition is mandatory may resist participating actively, at least at first.

Given this reality, many coalitions form subcommittees (also called "work groups" or "action teams") to oversee activities that require focused time and specialization—for example, campus alcohol policy, substance-free events, alcohol access, neighborhood problems, law enforcement, fundraising, and media relations. A subcommittee structure gives coalition members an opportunity to provide input on the issues that interest or affect them most, while helping the coalition work more efficiently. Every coalition member should be encouraged to become actively involved in at least one subcommitee.

For the sake of coalition unity, it is useful to involve the members in a few early activities in which everyone can play at least some part—for example, contributing to a problem analysis; establishing strategic priorities; brainstorming program and policy ideas; talking to members of coalitions in other campus communities; and identifying local, state, or national contacts. Opportunities for broadly shared work can be found at every stage of the coalition's work.

Coalition members may need help in persuading their own constituents to support the coalition's mission or activities.

Linda Lederman, the model program director at Rutgers University, described a longstanding collaboration on her campus as "mutual back scratching": "Our continuing partnership grows out of a real commitment ... and our enjoyment in working together. For something like this to succeed, everyone has to see how working with others advances their own objectives."

Running efficient and productive meetings is critical to maintaining a coalition's focus and sustaining active membership over time. Below are meeting tips suggested by the 22 model program directors and other leaders in campusbased AOD abuse prevention:

- Announce the agenda two weeks in advance of the meeting date.
- · Vary the location of the meeting.
- Announce in advance that food will be served.
- · Send a reminder a few days before the meeting date or call key members.
- · Start and end the meeting on time.
- Make sure all participants and the facilitator can see and hear one another.
- Keep the meeting on task.
- Set a tone that invites everyone to participate.
- Review, publicize, and celebrate progress.
- Review decisions and long-term plans.
- Identify achievable steps that can take place before the next meeting.
- Set the date and preliminary agenda for the next meeting while people are still engaged.
- Keep the meeting to no more than 90 minutes.
- Encourage people to stay after the meeting to network with one another.
- Within a week, send a summary of decisions made and future plans.
- Work between meetings to help resolve any conflicts that arose during the meeting.

Team unity can also be enhanced by selecting early objectives that can be easy "wins," demonstrating to group members and others that the coalition can create change. With each accomplishment, it is important for the coalition to celebrate its achievements and to recognize individual participants for their part in the group's success.

Sustaining the Coalition

The model program directors made clear that the work of nurturing and sustaining a coalition is an ongoing process. This effort has paid off on several of the campuses, where many of the coalition members describe the working climate as collegial and cooperative, with some calling attention to how much they enjoy working together.

The AOD abuse prevention coordinator should monitor the coalition's vitality using several indicators of constructive mobilization and engagement, 29 as listed in figure 2 (see p. 47). Instruments are also available to assess the members' views of how well the collaboration is functioning.30

Maintaining a smoothly functioning and productive coalition over time depends on preserving a "task-focused social climate."31 The model program directors identified several strategies to help maintain coalition members' interest in the group and its work:

- Review the coalition's mission periodically to make sure its action plans are still on target.
- · Run efficient and productive meetings.
- · Recruit new members who can match the evolving needs of the coalition and bring new ideas and energy to the group.
- · Continue to expand connections with community agencies and groups.32
- · Stagger membership terms so that there is always a core of experienced members.
- · Continue to replenish funding, so that new prevention initiatives will not have to end with the termination of current outside funding.

- Keep demands on members simple and realistic.
- · Continue to publicize coalition victories and to give frequent recognition to coalition members.
- · Encourage members to regard and use the coalition as a resource that can help them do their own jobs more effectively.

Sustaining a coalition also depends on the AOD abuse prevention coordinator's efforts to improve its capacity to effect change through focused collaboration.33 In one study, coalition members' assessments of how much their knowledge and skills had increased correlated positively with community leaders' ratings of coalition effectiveness.34 Key capacities include knowing how to build positive internal and external relationships; how to engage members in work tasks; and how to select, develop, and implement effective programs and policies.35 It is equally critical for the coordinator to train and mentor future coalition leaders.

3. CHOOSING EVIDENCE-BASED PROGRAMS

Guidebooks for effective AOD abuse prevention often state how important it is for coalitions to choose programs based on evidence of effectiveness, referred to as "evidence-based programs." This advice seems simple enough. After all, other things being equal, a prevention coalition will naturally want to use approaches that well-executed evaluation research has shown to be effective. In practice, however, matters are not that simple.³⁶

One complicating factor is that program developers out to sell or otherwise promote their approaches will use adjectives like "effective," "proven," "model," "science-based," or "evidencebased" fairly indiscriminately, almost without regard to the actual quality of the research evidence.

Further confusion is created by the label "promising." This label is intended to suggest that although rigorously designed evaluations are lacking, encouraging pilot studies have been done, or the program or policy in question is consistent with behavior change theory or that the program or policy makes logical sense.37 In practice, however, some program directors treat such programs as if they have been fully evaluated.

While practitioners, in seeking suitable programs for their campuses, may come across programs identified as evidence-based, Accept that while several core members may always attend meetings and participate in planning activities, some members—although always invited to attend—may not participate until the group is addressing one of their priority issues.

It is important to remember that even with the best research designs, evaluators can speak in terms of probabilities only, not certainties. When evaluators declare that a finding is statistically significant, they are, by definition, admitting the possibility of error.

The purpose of more advanced research designs—involving data collection at nonintervention sites—is to increase confidence that any outcome changes that coincide with the program can actually be attributed to it.

that designation does not necessarily mean that the program evaluations actually meet rigorous scientific standards.

One reason this is the case is the lack of consensus about what those standards should be. All experts recognize that a randomized control trial, with groups randomly assigned to treatment and control conditions, is the ideal evaluation design. 38 Unfortunately, it is not always possible to do a randomized control trial. Thus, the debate centers on how evaluations that fall short of that ideal should be regarded.

At one extreme, some researchers insist on a fully randomized control trial and deem any quasi-experimental evaluation (using a research design without random assignment to experimental conditions) to be without value, undeserving of publication or consideration. Although some research designs are unquestionably better than others, top-of-the-line evaluations can be extremely expensive and are therefore rare. Given that, taking the stance that less-than-ideal studies must be disregarded does a disservice to the many practitioners who face difficult choices about which AOD abuse prevention programs to choose.

At the other extreme, some researchers are content to rely on a single group pretest-posttest design, in which data are collected both before and after the program is implemented but there is no nonintervention control group. This research design is weak because there are many potential explanations for the observed changes, most of which are unrelated to the intervention.39 A program or policy evaluated using this design might reasonably be designated as "promising," but not "evidence-based." Nevertheless, several programs are being widely replicated on the basis of such information.

In between these two poles of a fully randomized control trial design and a simple pretest-posttest design is the vast middle ground occupied by researchers who employ quasi-experimental designs with both treatment and control groups, but without random assignment to groups. There are several such designs, with varying strengths and weaknesses. Thus, practitioners who have not been trained in research methods may find it difficult to assess the quality of such research, given its variety and the several potentially confounding factors that have to be considered.

FIGURE 2. Indicators of Constructive Mobilization and ENGAGEMENT FOR AOD ABUSE PREVENTION COALITIONS

Sense of Community

Active members of the coalition share the following characteristics:

- They share a sense of connectedness and mutual dependence.
- They profess common beliefs about the nature and causes of the AOD problem and the community values that will guide their prevention efforts.
- They come together to bond and network.
- They accept mutual responsibility for sustaining or enhancing the quality of their interrelationships.

Mobilization Capacity

- · The coalition is formalized and guided by sustained leadership.
- · Coalition members have incentives to participate.

- The coalition has behind-the-scenes support.
- · Participants have the organizational knowhow to mobilize the coalition.
- Active members communicate with one another and the media to share information.

Readiness for Focused Action

- · Active members are oriented toward highperformance team functioning.
- The coalition has a specific set of goals and a feasible plan of action and timeline.
- · Participation in the prevention effort is broad-based and includes those most affected by the proposed changes.
- · Active members have the capability and access to necessary resources to implement the plan.
- Participants have a passion for immediate action.

Adapted from Effective Community Mobilization: Lessons from Experience, Implementation Guide. 40

Reviews of the Literature

With so much confusion about which programs can be counted as "evidence-based," how can practitioners sort out which programs and policies to try? Despite their imperfections, reviews of the literature prepared by consensus panels or individual content experts offer practitioners the best guidance on which programs deserve replication.

Presently, the best overall review of campus-based prevention is the National Institute on Alcohol Abuse and Alcoholism (NIAAA) Task Force on College Drinking's report, A Call to Action: Changing the Culture of Drinking at U.S. Colleges, which summarizes the research literature on successful prevention strategies. 41

The Task Force's report also includes a list of the specific prevention strategies for which there is the strongest research evidence of effectiveness. Key strategies with evidence of success include the following:

The Alcohol Skills Training Program (ASTP), for example, focuses on specific skills for moderating drinking and coping with high-risk situations (cognitive-behavioral training); presents accurate information on the percentage of students who drink heavily (norms clarification); and provides nonjudgmental feedback on personal drinking behavior in comparison with current norms, as well as information on the negative consequences of excessive consumption (motivational enhancement).42

> Alcohol expectancy challenge is an experiential method designed to show drinkers that the positive effects they attribute to alcohol (e.g., sociability, sexual attractiveness) are due to their expectations and not the alcohol itself.⁴³ One method is to convince students that they are drinking alcohol when they are not and then have them reflect on how they felt and acted without actually consuming any alcohol.

Alcohol outlet density is the number of alcohol retail outlets within a certain distance of campus (e.g., three miles) per 1,000 students enrolled. High outlet density is strongly associated with alcohol problems in the community.44

> See chapter 2, p. 8, for a description of RBS.

Strategies that target individual drinkers (tier 1):

- Programs that combine cognitive-behavioral skills training, norms clarification, and motivational enhancement interventions
- Brief motivational enhancement interventions
- Alcohol-expectancy challenge

Strategies that target the general population, including college students (tier 2):

- · Increased enforcement of minimum drinking-age laws
- Implementation, increased publicity, and enforcement of other laws to reduce alcohol-impaired driving
- Restrictions on alcohol retail outlet density
- Increased prices and excise taxes on alcoholic beverages
- •Responsible beverage service (RBS) policies in social and commercial settings

As discussed in chapter 3, tier 1 strategies have two or more research studies that demonstrate their effectiveness with college students, while tier 2 strategies "have been successful with similar populations" but have "not yet been comprehensively evaluated with college students."45

Three caveats regarding this list of strategies should be noted. First, a true experiment to study individually focused interventions, with random assignment at the student level, is far less costly to implement than a true experiment to study environmental management interventions, with random assignment at the institutional, community, or state level. In fact, at the time of the NIAAA Task Force's review, no randomized control trials of student-focused environmental prevention strategies had been conducted. As a result, only individually focused interventions could be categorized as tier 1, though their efficacy as part of a campuswide program has not been tested.

Second, the NIAAA report describes the tier 2 strategies at a fairly general level rather than providing specificity. For example, which laws to reduce alcohol-impaired driving should be implemented? How should they be enforced? How should these laws and their enforcement be publicized? Practitioners will need to consult with colleagues at other institutions or review the literature themselves to get the specific guidance they need.

Third, it is to be expected that some programs and policies will be implemented despite their lack of demonstrated effectiveness in the research literature. For example, unproven education and awareness programs may be implemented because they can play a role in mobilizing students or other key constituencies. Other programs may complement a proven strategy. For instance, if RBS policies are being implemented in local alcohol outlets—a tier 2 strategy—it makes strategic sense to train fraternity and sorority leaders to host a party that follows RBS principles.

A critical function of consensus panel reports is to help AOD abuse prevention coordinators decide which current programs and policies should be discontinued due to a lack of supportive research evidence. The NIAAA Task Force report, for example, highlights the fact that evaluation research showed "informational, knowledge-based, or values clarification interventions," when used alone, to be ineffective in reducing student drinking and alcohol-related problems.46

Individual campuses can make similar determinations based on their own program assessments. Several of the model program directors, when interviewed about their prevention efforts, talked about letting go of things that weren't working. The State University of New York at New Paltz, for example, dropped its peer education program, while the University of Pennsylvania discontinued its observation of Alcohol Awareness Week and the Century Council's Alcohol 101 awareness education program.

As published reviews of the literature become outdated, it will be important for AOD abuse prevention coordinators to keep up with new research findings. The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention assembles annotated literature on its Web site annually, with a focus on established and reputable academic journals that publish sound research (http://www.higheredcenter.org/ta/lit-review).

When reading individual studies, it is important to keep in mind that a sign of higher-quality evaluation studies is that they use comparison groups or otherwise control for nonprogram factors that are likely to affect results. If surveys are used, the sample

Alcohol 101 is an interactive CD-ROM produced by the Century Council, a nonprofit organization dedicated to combating alcohol-impaired driving and underage drinking, funded by a consortium of U.S.based alcohol distillers.47

should be representative of the student population, and the response rate should be high (at least 50 percent). Also, findings have greater credibility when they provide evidence of sustained change over time and successful replications at other sites.

An AOD abuse prevention coordinator must show leadership by demonstrating a familiarity with best practices identified in the research literature, yet also avoid being perceived as insensitive to community needs and preferences.

Adaptation and Innovation

While AOD abuse prevention coordinators will want to draw upon evidence-based programs and policies, they should avoid following those models rigidly and without regard for local context. While it is critical to replicate the "core elements" of the intervention, it is always necessary to adapt to some degree to be appropriate to the nature of the institution and its student body, the characteristics of the local community, the nature and scope of existing efforts, and the types of resources that are available. Finding the right balance is a challenge. Thus, even when following an evidence-based model, it is important for the prevention team to evaluate the new program, looking at both process and outcome measures (see chapter 5, "Lessons on Program Implementation").

Another consideration is the continuing need for innovation. Without new experiments the field will never advance. At the Massachusetts Institute of Technology (MIT), the program director was impressed by a long-term evaluation of BASICS (Brief Alcohol Screening and Intervention for College Students), a brief motivational interviewing program. 48 Going beyond the research, MIT, like many other institutions, began to use BASICS in conjunction with its disciplinary systems. As a result, a growing body of literature suggests that brief motivational interviewing can also be effective under these conditions.

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CHAPTER 5: LESSONS ON PROGRAM IMPLEMENTATION

This chapter continues a review of lessons learned from the 22 model programs selected from 1999 to 2004 under the Alcohol and Other Drug Prevention Models on College Campuses Grants program, with a focus on four essential aspects of effective prevention work: (1) implementing strategic planning, (2) conducting a program evaluation, (3) working toward program sustainability, and (4) taking the long view.

All four aspects are necessary to achieve long-term improvements in student AOD abuse prevention. If well-designed evaluations are not conducted, the prevention planning group cannot learn from experience and advance the quality of its programs and policies. If efforts are not made early to plan the maintenance and growth of prevention activities, priorities will shift, and the scope and quality of that work will gradually deteriorate. Finally, if campus officials do not take a long view, frustration with the pace of change will build, and they may slip into the fatalistic—and incorrect—view that campus AOD problems are intractable.

1. IMPLEMENTING STRATEGIC PLANNING

With the stakes so high, and with public scrutiny as great as it is, AOD abuse prevention coordinators are

under great pressure to produce results quickly. This pressure can be especially severe on campuses that have seen a student die or suffer severe injuries due to AOD abuse, when both institutional and public demands to do something about the problem reach their peak.

In such situations there is a strong temptation to put new programs and policies in place quickly, sometimes before the nature of the problem is fully understood or before goals and objectives have been clearly stated. Practitioners may rush to replicate programs and policies being tried at other campuses, even when not enough information is available to know if the programs and policies are a good match for the campus or can actually produce favorable outcomes.1

Strategic planning is an ongoing and structured effort to shape and guide a prevention initiative. Without careful planning, an institution may end up with a collection of programs and policies that are unconnected to specific objectives, seem disjointed, and may even work at cross-purposes.

The research literature suggests that AOD abuse prevention programs are most effective when they are designed to achieve realistic goals, have clear and focused objectives, are comprehensive in scope, and are adapted to fit the specific community and social context.2 Matching that standard requires participation in a strategic planning and evaluation process.

Figure 3 (see p. 58) lists five essential steps in strategic planning. This process is presented as a step-bystep procedure, but it is common to review and rework earlier steps as a strategic plan evolves. The first four steps are described below. The final step, evaluation, is considered in a subsequent section, "Conducting a Program Evaluation."

This step is frequently called a "needs assessment," but the term "problem analysis" is more focused and more accurate.

> The problem analysis will reveal not only the nature and scope of the problem but also the broader social, economic, and physical contexts that might shape both the problem and the range of appropriate strategies that might be adopted to reduce it.3

Conduct a Problem Analysis

An essential first step is to generate a list of priorities that the prevention program will address, based on a thorough analysis of the problem. As noted in the previous chapter, an early challenge for working coalitions is to develop a common understanding of the nature, extent, and causes of alcohol-related problems in the

campus community.

Key sources of information include student surveys and archival data kept by campus and local police, judicial affairs, residential life, health services, community hospitals, and other departments and agencies. Planners will also want to interview key stakeholders (e.g., senior administrators, elected officials, law enforcement officials) and conduct field observations to deepen their knowledge.

At Bowling Green State University, for example, faculty members investigated where students cited for alcohol-related violations had consumed their last drink before being apprehended. This information made clear that unlicensed settings—private homes and residence halls—were the most prevalent places where these students drank heavily. Hobart and William Smith Colleges keeps track of liquor law violations, property damage, and other indicators to track the progress of the institution's alcohol prevention efforts.

Problem analysis should go beyond individual-level factors associated with high-risk drinking to consider key environmental factors, such as: too few substance-free extracurricular and recreational options, mixed messages regarding campus drinking norms, the availability of low-cost or free alcohol, inappropriate alcohol promotions directed at students, and weak alcohol policy and law enforcement.4

This early assessment should also be broadened to assemble information on assets in the community—current AOD programs and policies, potential allies, content and skill experts, and other resources. Gathering this information can help ensure that the new prevention initiative takes advantage of available assets and opportunities.

The planning group should prepare a full report of its findings to establish a rational basis for the strategic plan and to motivate action.

Establish Long-Term Goals and Objectives

The next step is to decide on the primary changes in student behavior or other outcomes that the prevention initiative should achieve. There are several factors to consider. Should the focus be on high-risk drinking, including underage consumption, or on reducing negative consequences due to drinking? Should the focus be on illicit drugs or on prescription medications? Should efforts to reduce alcohol use be accompanied by strategies such as a safe rides program? Should the strategic plan focus only on on-campus issues or also take off-campus considerations into account? The goals should be precisely written so that there is no ambiguity about their meaning and their achievement can be observed and measured readily.

Next, a list of measurable objectives can be developed, each linked to a specific long-term goal. These objectives will emerge from the problem analysis, which will have considered the times, places, and circumstances of the institution's alcohol-related problems. For example, on a campus surrounded by several alcohol retail outlets, a specific objective might be to decrease the percentage of underage students who report buying alcohol illegally.

Consult Research, Program Experience, and Theory to **Identify Potential Strategies**

Primary consideration must be given to using programs and policies that are supported by well-executed evaluation research. As noted in the section "Choosing Evidence-Based Programs" (p. 45), consensus panel reports, published reviews of the literature, and annotated bibliographies are available for consultation. See "Resources" (p. 73) for a list of organizations that archive these types of sources. For more specific guidance, and to keep up with the literature, planners will also need to review individual studies.

"[S]tating that 'alcohol consumption' will be reduced is too imprecise. Instead, a specific goal might be to decrease the number of separate occasions on which students consume alcohol per month, or to decrease the percentage of students who report having three or more drinks the last time they consumed alcohol. In some cases, it will be important to specify the time and place where the changes will be observed."5

With relatively few college-specific intervention studies, it will be essential to consult studies on community-based programs with similar goals. Many of the approaches studied may be transferable to campus settings.

FIGURE 3. THE STRATEGIC PLANNING PROCESS

1. Conduct a problem analysis.

- Gather data on the nature and scope of the problem.
- · Examine existing resources and assets.
- Analyze and summarize the information to clarify needs and opportunities.
- 2. Establish long-term goals and objectives.
- 3. Consult research, program experience, and theory to identify potential strategies.

4. Create a strategic plan.

- Choose the strategies that seem most likely to produce the desired outcomes.
- Translate the selected strategies into specific activities.
- · Create a "logic model" that describes the intervention components and explains how they are expected to work.
- · Create a work plan.

5. Execute an iterative evaluation plan.

- · Monitor implementation of the work plan.
- · Evaluate programs and policies.
- Use the findings to guide improvements.

Networking with AOD abuse prevention coordinators and other professional colleagues is also recommended, as they can offer new ideas, outline specific implementation guidelines, and issue warnings about various pitfalls. Use caution in adopting an intervention that has not been well evaluated.

If suitable evaluated programs and policies cannot be identified, the planning group can draw on behavior change theory or other theoretical frameworks to develop and evaluate new interventions. For example, two theories inspired the development of social norms marketing campaigns at several of the model program sites: Social cognitive theory, whereby people learn new behaviors by observing models and then perform those behaviors in anticipation of desired rewards;⁶ and the theory of planned behavior, whereby normative information helps shape the behavior choices people make. 7 Such campaigns are designed to convey accurate information about student drinking norms, present positive role models who abstain or drink moderately, and convey the social rewards students can expect if they too make these choices.8

In other cases, planners can develop new intervention ideas through logical analysis. For example, if campus police reports reveal a spike in alcohol-related problems just before classes start for the term, campus and town officials could consider several approaches, including allowing fewer days for students to move into residence halls, expanding substance-free recreational options, and increasing police presence at the beginning of the academic year.

This review of program and policy options can be facilitated by the use of a typology matrix developed by the U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention (see fig. 1 on p. 18). The matrix is a useful tool for categorizing existing efforts,

identifying missing program elements, and guiding new strategic planning.9

Each area of strategic intervention involves a menu of program, policy, and services options, many of which can operate at different levels of the social ecological model. Consider the environmental change objective of increasing enforcement of the minimum drinking age 21 laws. This effort could be organized primarily at the community level, with targeted police patrols at local alcohol retailers. At the institutional level, retailers could be trained and provided with special equipment to detect fake IDs. Resident assistants could be provided stronger support for writing up residence hall infractions. Campus administrators could adopt a policy that applies college disciplinary procedures to off-campus student misconduct. At the group level, campus officials might require party hosts to apply RBS principles to prevent alcohol service to underage students. At the individual level, a campus media campaign could publicize these new programs and policies, together with any stepped-up enforcement actions.

Menus of intervention options are presented in Safe Lanes on Campus: A Guide for Preventing Impaired Driving and Underage Drinking.10

Create a Strategic Plan

With the background work completed, the planning group is ready to assemble a strategic plan, tied to the long-term goals and objectives just outlined. There are several key points for the planning group to consider:

- A plan must be comprehensive, involving multiple programs and policies.11
- The heart of the plan should be environmental management, with a focus on addressing the campus and community conditions that give rise to alcohol-related problems.¹²
- Interventions are more effective when prevention efforts are implemented at multiple levels of the social ecological model (see fig. 1 on p. 18) and reinforce one another.14
- Prevention efforts can be enhanced by implementing complementary efforts in other categories of the typology matrix (see fig. 1 on p. 18).
- There should be a sequence of activities that naturally build from one to the next.

With a focus on alcohol, the strategic plan should incorporate enforcement of the state's age 21 law (i.e., the minimum drinking age law).

> Health educators and counselors who run traditional education and treatment programs will be pushing uphill when the campus and community environments continue to facilitate or even encourage high-risk drinking behaviors.

No one should expect to find a single program, even if it is evidence-based, that will solve the campus AOD abuse problem. Substance use, like any healthrelated behavior, is affected by multiple influences, including individual, interpersonal (group), institutional, community, and societal factors.13

The logic model is best created after a tentative selection of program activities but prior to their execution. Constructing a logic model can help to do the following:

- Identify areas of uncertainty, confusion, or disagreement among members of the planning group.
- Expose any false assumptions that need to be addressed.
- · Ensure that all program activities and policies can be linked logically to specific objectives.
- · Serve as an educational and communications tool.
- · Help track changes in the intervention or in its implementation.
- Guide the process and outcome evaluation.

Working with a logic model allows corrections to be made on paper well before the program is in the field.15

If a prevention plan is not coherently tied to specific outcomes, it may have little effect even if it uses a broad array of strategies. 17

- · It is useful to start with a simple, achievable objective to get an early "win" and develop momentum for other efforts.
- Compromises may be necessary due to staff inexperience, the unavailability of supportive infrastructure and systems, and campus and local politics.
- It may be helpful to identify a concept or theme to organize or unify the initiative.

The strategic plan can be enhanced by developing a logic model, a diagram that makes explicit the chain of events that is expected to lead from the intervention activities to the achievement of short-term, intermediate, and long-term goals. 16 Figure 4 (see p. 61) presents a hypothetical example for a social norms marketing campaign. When the logic model is complete, it represents the group's commonsense understanding of how the program activities will lead to the desired outcomes. The logic model also drives the evaluation plan.

Once it has selected the intervention strategies, the planning group will develop a work plan. This involves settling on a set of specific activities, each with a precisely worded task objective. For example, if a chosen strategy is to increase publicity about

> DUI enforcement, the work plan should itemize exactly which media channels will be used, when, and for what types of messages. The work plan should also itemize a list of necessary resources, including staff, lines of decision-making authority, and a timeline for development and implementation.

FIGURE 4. Social Norms Marketing Campaign Logic Model

Program Resources

Presidential support for social norms marketing campaign **Campus and community** management oversight coalition to provide

Campaign coordinator to oversee day-to-day operations Budget to purchase materials and place campaign ads Student interns to conduct pretesting, and tracking formative research, studies Student interns to develop campaign materials and produce media

Meetings with newspaper editorial boards to secure campaign endorsement

Program Activities

drinking norms on campus Student survey on alcohol use and perceptions of



campaign development, Message selection, and pretesting



reduce perceptions of Media campaign to student drinking

Posters Fliers

Letters to the editor Campaign e-mails Giveaway items Group trainings Newspaper ads Display booths Radio/TV ads Stadium ads Table tents Contests

ntermediate Outcomes

exposure to the media campaign materials. Students will report



Students will recall the campaign message.



Students will accept the validity of the campaign message.



reduced perceptions of peer drinking levels. Students will report



reduced normative expectations to drink heavily. Students will report

Long-Term Outcomes

fewer drinks per drinking Students will consume occasion.

fewer drinks per week. Students will consume



Quality of Life Health and

negative consequences due Students will suffer fewer to their own or other students' alcohol consumption.

Unsafe sex Date rape Assaults

Academic problems Property damage

Source: This logic model was developed by W. DeJong, Boston University School of Public Health and the Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention, 2004.

2. CONDUCTING A PROGRAM EVALUATION

Senior campus and community officials will want to see evaluation data showing that the prevention efforts are a worthwhile endeavor deserving of continued support. Any program that is not evaluated is vulnerable to budget cuts.

There are three basic types of evaluation. A process evaluation documents how the prevention work is being implemented and gauges the fidelity of that work against what was originally planned. An outcome evaluation looks at whether each program and policy is accomplishing its short-term and intermediate objectives. An impact or summative evaluation examines whether the overall prevention effort is reducing student AOD use and its consequences.

Most of the 22 model programs used evaluation as a management tool. With evaluation plans in place, the program directors and their colleagues could assess whether a particular program or policy was working as intended and then decide whether it should continue or be expanded, revised, or terminated. As noted above, evaluation is an essential part of strategic planning, since research findings are used to guide plans for midcourse improvements. Effective strategic planning, then, is a cyclical process (for instance, see fig. 4 on p. 61).

Evaluations are most useful when they are planned at the same time as the prevention effort itself, rather than after the fact. This approach ensures that the evaluation design is crafted to fit the program's goals, objectives, and activities; that the short-term, intermediate, and long-term outcomes are clearly specified; and that the resources needed to conduct a proper evaluation are in place in advance. Planning the prevention effort and its evaluation simultaneously helps the planning group see evaluation as a management tool, rather than as a drain on program resources or an external threat to the program.

Having an evaluator assigned to the planning group early on will facilitate this perspective. 18 Specifically, the evaluator can help ensure that (1) the needs assessment provides baseline (pre-intervention) data

When college and university administrators feel pressured to do something now about alcohol and other drug problems on campus, they may scrimp on evaluation planning in favor of putting a new prevention initiative in place as soon as possible. In the long run, this will hurt the program.

for the evaluation; (2) the intervention plan features programs and policies that are either evidence-based or grounded in theory; (3) the achievement of goals and objectives can be measured; (4) each program and policy can be linked to specific objectives; and (5) there are sufficient resources to fulfill the plan.

The previous section highlights the value of creating a logic model to facilitate strategic planning. The logic model diagram lists the program's key components and then shows the chain of expected events, moving from specific programs and policies to intermediate and longterm outcomes. Developing a logic model is also necessary for evaluation planning. When a research team is

brought in to evaluate an ongoing program, its first step should be to work with the staff to create a logic model that describes the program.

A well-crafted logic model will make clear exactly what needs to be measured: (1) the resources and activities that constitute the intervention (process evaluation), (2) intermediate objectives (outcome evaluation), and (3) long-term goals (impact or summative evaluation). A comprehensive evaluation enables researchers either to establish that the planned activities contributed directly to achieving the intervention's objectives or to diagnose why a particular intervention did not work as planned.

The next step is to develop process measures that can be used to document the nature, extent, and quality of program imple-

mentation. Common types of process measures include resources (staff, volunteers, and funds) or numbers of people or groups being served or materials distributed or similar measures of activity levels. Process measures can also be used to assess the formation and operation of a campus and community coalition. Key milestones include establishing a core leadership team and a subcommittee structure; developing rules of governance; recruiting members; conducting a needs assessment, including a scan of the campus and community environment; identifying research-based program and policy options; and outlining a strategic plan.19

Outcome measures can be divided into two categories: (1) intermediate behavioral outcomes and (2) changes in the structure or functioning of the campus and community environment.

The program's logic model will list intermediate behavioral outcomes that are necessary for achieving desired long-term outcomes. For example, for a safe rides program, intermediate outcomes might include on-premise alcohol retailers promoting the program through advertising and waitstaff reminders. Long-term behavioral outcomes usually focus on students, especially AOD use and AOD-related consequences. With a safe rides program, a long-term outcome would be for students to call the service to arrange a ride to avoid driving after drinking. The best method for assessing student behaviors is a survey administered to a random sample of students selected from the registrar's list, with steps taken to produce high response rates.²³ AOD-related consequences can be assessed through student surveys or archival records kept by campus and community officials (e.g., health records, police records).

For an intervention designed to reduce disturbances due to off-campus student parties, process measures might include the number of off-campus student residences receiving a pamphlet about applicable town ordinances; the number of extra police patrols used on weekend nights in student-dominated neighborhoods; and the number and reach of campus newspaper ads, fliers, e-mails, and other media efforts used to inform students about those increased enforcement efforts.

Coalitions assessed only by the quality of their deliberative process, rather than by the success of the programs and interventions they implement and the effects of their efforts, may not be accomplishing anything of value.

> Web-based surveys, with participants recruited by e-mail, are now the method of choice due to their lower costs and the ease and speed of

administration. Existing survey instruments can be examined for questions to include.20

The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention maintains a searchable database of surveys and other evaluation instruments (http://www.higheredcenter.org/instruments).

Guidance on how large a sample to draw can be found in Methods for Assessing Student Use of Alcohol and Other Drugs.21

Researchers prefer response rates of 70 percent or higher, but recent national studies have typically reached rates between 50 and 60 percent.22

The Higher Education Center publication Evaluating Environmental Management Approaches to Alcohol and Other Drug Abuse Prevention provides additional examples of appropriate measures, which are organized by environmental management strategy.24

Environmental outcomes concern changes in the campus and community environment, which are then expected to result in long-term changes in student AOD use. Environmental changes can be gauged through surveys, interviews, or focus groups with students or other campus constituencies—for example, perceptions of responsible beverage service (RBS) practices at local alcohol outlets—and archival records. Outcome measures should be chosen that correspond to the particular interventions being employed and the specific environmental changes that are outlined in the logic model. Examples include the following:

Alcohol-free options

- 1. Student self-report: number of substance-free events attended.
- 2. Archival record: daily sales receipts at an on-campus coffee house.

Normative environment

- 1. Student self-report: number of faculty-student contacts outside of class.
- 2. Archival record: number of students enrolling in early morning and Friday classes.

Alcohol availability

- 1. Student self-report: perceived ease or difficulty of acquiring alcohol when under age.
- 2. Archival record: average retail price for a six-pack of beer.

Alcohol marketing and promotion

- 1. Student self-report: attendance at events with alcohol industry sponsorship.
- 2. Archival record: number of alcohol advertisements appearing in sports venues.

Policy development and enforcement

- 1. Student self-report: perceived risk of police being called to house parties in response to neighborhood complaints.
- 2. Archival record: number of fake IDs confiscated by local alcohol retailers.

To improve the quality of archival records, the evaluation team will usually need to work with campus and community agencies to develop or refine data collection forms and other record-keeping procedures.

Once the process and outcome measures are selected, the research design needs to be considered. A research design is the basic structure of the evaluation, which outlines when and where data will be collected to study the intervention.

The simplest design has a treatment group but no control group (i.e., a comparison group that does not receive the intervention), with data collection both before and after the intervention is launched (single group pretest-posttest design). Observed changes may be due to the intervention, but there may be many competing explanations as well.

The research design is strengthened by adding a control group, which makes it possible to rule out many competing explanations for pretest-to-posttest changes in the treatment group. The most common such design does not involve random assignment to the two groups (nonequivalent comparison group design). A more advanced design does involve random assignment (true experiment or randomized trial).

A well-designed evaluation will document how a prevention initiative was implemented and assess its intermediate and long-term outcomes. With these findings in hand, the planning group can develop plans for strengthening or improving that effort. In some cases it will be discovered that a program or policy was not implemented as planned, or that too few resources were invested in it. Or it may be that too few students knew about the initiative for it to be effective. In other cases, the evaluation will show that an entirely new approach is needed.

Embracing evaluation as a management tool is especially important in an academic environment, where the collection, assessment, and interpretation of evidence are highly valued activities. The next section highlights another reason to spend time and resources on evaluation: there are many competing demands on college budgets, and senior administrators will want to know that an initiative works, or that evaluation is being used to improve it, before they commit the institution to a long-term investment of resources.26

3. WORKING TOWARD SUSTAINABILITY

College and university administrators are very concerned about student AOD problems, 27 and they recognize their legal duty to take steps to provide a safe and drug-free campus.²⁸ Even so, staff coordinators responsible for AOD abuse prevention often

The purpose of more advanced research designs—involving data

collection for a nonintervention control group—is to rule out competing explanations, thus increasing confidence that any outcome changes that coincide with the program can actually be attributed to it. Using an advanced de-

Finding Out What Works and Why: A Guide to Evaluating College Prevention Programs and Policies describes research designs and the types of competing explanations they can help rule out.25

sign is less important if the strategies being used are already known to be effective, if not with college students then with the general population, e.g., higher alcohol prices or increased enforcement of the minimum drinking age law.

An evaluation of a campus- or community-wide strategy can involve a control group only when one or more comparison sites are available. Often, however, there are not enough comparable sites, other interventions exist at those sites, or funding is inadequate. The alternative in such cases is to examine how changes observed at the treatment site compare with statewide or national changes, if such data are available.

say that building and sustaining senior administrative and financial support is the toughest challenge they face. The 22 model programs have faced this challenge as well.

To meet this challenge, the inevitable starting point is to imple-

The challenge of creating a new prevention program is difficult enough, but sustaining support for the program over time once a start-up grant has ended can be even harder.29

ment a prevention initiative that deserves to be institutionalized. That means having goals and objectives

that can be linked to a larger set of issues that the college community cares about, developing a longrange plan, selecting evidence-based programs and policies, and conducting an evaluation to hold the program accountable and to guide quality improvement efforts. Importantly, the 22 model programs also serve

to illuminate other steps that can be taken to work toward program sustainability.

The institution's paramount concern is the fulfillment of its academic mission. Within that context, issues of concern include student retention and success, student health (or "wellness"), campus security, and fiscal management.

Better prevention initiatives emerge from collaboration, both on and off campus. Collaboration facilitates institutionalization as well. Most critically, having invested collaborators creates a critical mass of strong support for the initiative. If various campus and community officials have firsthand experience with it, they will be more likely to urge the administration to preserve it. When an AOD abuse prevention coalition is being assembled, the program director should recruit members who have professional or personal ties to the president and other senior administrators and who can advocate on the coalition's behalf.

The best time to think about how to get a program institutionalized is at the beginning of the planning process, before the program begins. 30

In addition, a collaborative program will feature cosponsored activities, which can stretch the resources assigned directly to AOD abuse prevention. Senior administrators are then more likely to see the college's investment in AOD abuse prevention not as a standalone activity, but as a cost-effective way of leveraging a comprehensive effort. The program director should also recruit members whose agency, office, or depart-

ment has staff resources or funds that can be channeled into prevention-related work while also serving to meet their own work objectives.

Collaboration with local leaders and community representatives also represents a public statement about the college's commitment to address problems in the larger community caused by student AOD use. Putting this in place will make it far more difficult for senior administrators to withdraw their support for the program at a later time, since doing so may sour campus-

Helping other groups meet their institutional needs will sometimes mean including program elements that are of lesser priority (e.g., education and awareness activities). Such steps must be undertaken cautiously. They may be the price of getting a group on board, but having the AOD abuse prevention staff bogged down in too many of these activities could be counterproductive.

community relations and create other problems for the college. Likewise, senior administrators will be less likely to end or cut an AOD abuse prevention initiative if its leaders are actively involved in a regional or statewide consortium, especially if

that group has political ties to a state agency or other government officials with influence over the college.31

Generating favorable publicity about the initiative is another means of building support.32 A high-profile awareness event is one way to do this, 33 especially if senior administrators can be invited to participate or attend. Visibility can also be raised through Web sites, posters, paid advertising, commentaries, and other media activities. The prevention coordinator can become a source of accurate information for campus news outlets through holding press briefings,

It is helpful to associate the program with a department or center that can provide additional credibility and standing in the college community. The RU Sure? program at Rutgers, (see p. 21) for example, was led by a senior faculty member in the university's communications department, which served to broaden faculty support for the program.

sending out news releases, and setting up interviews with local experts.34 The AOD abuse prevention coordinator may need clearance from a top-level administrator to release information about the program or be expected to work with the college's press office. Finally, senior administrators and other members of the campus community should receive regular and easy-to-read reports highlighting both the program's accomplishments and any favorable publicity or public recognition it receives.

Developing additional resources as part of the long-range planning process is critical to a program's long-term continuation. This is necessary even when senior administrators are committed to continuing the program, since they are unlikely to provide all of the funding the program could use. Potential sources of funding or in-kind contributions include student fees, disciplinary fines, alumni donations, business donations, and grants from corporations or foundations. Grant-writing guidelines can be found in Building Long-Term Support for Alcohol and Other Drug Programs.35

Auburn University, for example, once charged students \$40 for the BASICS program utilized by its Health Behavior Assessment Center. With its model program grant, and then with "concession grants" from vending machine companies and the intercollegiate athletics program, Auburn no longer charges for this service.

Many of the most effective techniques for AOD abuse prevention—e.g., being active in local community efforts to control alcohol availability, reducing disturbances caused by off-campus parties, and fighting alcohol-impaired driving—do not take large financial resources, but require only that the prevention staff make that work a priority.

> When a program is initiated through a new grant, the planning group should see the grant as part of a long-range plan, so that the money is used not just to fund the program temporarily but to help make the long-term plan a reality.

The program also benefits from an ongoing graduate assistantship supported by the Department of Psychology.

Many college administrators question whether to accept donations from the alcohol industry, believing that it might compromise their credibility with students or restrict the range of prevention options they can consider. If a college or university does agree to receive alcohol industry monies, limits should be set on what say the donor has in how those monies are used, what types of prevention messages are disseminated, and on how the donor presents that relationship to the public. Moreover, the planning group should work hard to diversify its funding base to ensure its prevention work is not vulnerable to industry pressure.

Finally, long-term program continuity requires planning ahead for changes in the prevention coalition's leadership. Allowing an initiative to become too dependent on the vision, energy, and skill of a single individual is shortsighted. On a continuing basis, the planning group should identify and train volunteers and staff who can assume positions of leadership in the coalition.³⁶ The University of Arizona clearly benefited from the foresight of program director Koreen Johannessen, who built an effective project team that could carry on the university's environmental management work and its social norms marketing campaign after her retirement.

4. TAKING THE LONG VIEW

The model program directors emphasized that changing the culture of student drinking and other drug use will take time. There are no quick fixes, no silver bullets, no magic formulas to follow—just a lot of hard work. The problems have a complex etiology, with a mix of contributory psychological, interpersonal, and environmental factors, and it will take a sustained effort to combat them.

Prevention programs must evolve to respond to evaluation findings, adapt to changing conditions, and take advantage of new opportunities. Learning from other prevention experts is essential. Project staff need ongoing training and technical assistance support in planning, program implementation, and evaluation in order for their efforts to be successful and become institutionalized.³⁷

There will be setbacks. The pace of change may be slow. There are so many factors, many beyond the control of campus and community officials, that influence AOD use—for example, changes in alcohol taxes, new alcohol products, and greater availability of low-cost illicit drugs.

Some program critics may claim that the problem is intractable, that if students are intent on drinking, then nothing can be done to stop them. There may be calls on campus to accept underage drinking as a fact of life, or even to lower the minimum drinking age. As the model program directors responded, however, AOD program directors need to have faith in their vision. Change takes time, and only by imparting a deep confidence in that vision can they inspire others to follow it over the long haul.

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RESOURCES

OFFICE OF SAFE AND DRUG-FREE SCHOOLS (OSDFS)

U.S. Department of Education

http://www.ed.gov/osdfs

OSDFS supports efforts to create safe schools, respond to crises, prevent alcohol and other drug abuse, ensure the health and well-being of students, and teach students good citizenship and character. The agency provides financial assistance through grants, contracts, or cooperative agreements for drug abuse and violence prevention activities and activities that promote the health and well-being of students in elementary and secondary schools and institutions of higher education. OSDFS participates in the development of Department program policy and legislative proposals and in overall administration policies related to drug abuse and violence prevention. It also participates with other federal agencies in the development of a national research agenda for such prevention.

THE U.S. DEPARTMENT OF EDUCATION'S HIGHER EDUCATION CENTER FOR ALCOHOL AND OTHER DRUG ABUSE AND VIOLENCE PREVENTION

http://www.higheredcenter.org; 1-800-676-1730; TDD Relay-friendly, Dial 711

Established by the U.S. Department of Education in 1993, the Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention is the Department's primary provider of services in alcohol and other drug abuse and violence prevention in higher education founded upon state-of-the-art knowledge and research-based strategies. In this capacity, the Higher Education Center acts as a catalyst to advance collaborative campus and community teams across the nation. The Higher Education Center offers an integrated array of services to help campuses and communities come together to identify problems; assess needs; and plan, implement, and evaluate alcohol and other drug abuse and violence prevention programs. Services include training; technical assistance; publications (free and available on the Higher Education Center's Web site); support for the Network Addressing Collegiate Alcohol and Other Drug Issues; and evaluation activities.

COMMUNITY ANTI-DRUG COALITIONS OF AMERICA (CADCA)

http://www.cadca.org

CADCA is a membership organization for local coalitions that offers materials and technical assistance for developing prevention programs and policy initiatives. CADCA offers an online newsletter, extensive publications on coalition-related prevention work, and other resources.

JOIN TOGETHER

http://www.jointogether.org

A project of the Boston University School of Public Health, Join Together serves as a resource for communities working to reduce substance abuse. Join Together offers a daily news service and a Web site with extensive information on a variety of topics related to substance abuse.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA)

http://www.nhtsa.dot.gov

Established under the U.S. Department of Transportation by the Highway Safety Act of 1970, NHTSA is responsible for reducing deaths, injuries, and economic losses resulting from motor vehicle crashes. In 2001 NHTSA published a series on community-based programs for underage drinking prevention, titled Community How To Guide On . . . (Publication No. DOT HS 809 209). There are individual units on Coalition Building, Needs Assessment and Strategic Planning, Evaluation, Prevention and Education, Enforcement, Public Policy, Media Relations, Self-Sufficiency, and Resources.

NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM (NIAAA)

http://www.collegedrinkingprevention.gov

NIAAA supports and conducts biomedical and behavioral research on the causes, consequences, treatment, and prevention of alcoholism and alcohol-related problems. In 2002 NIAAA published A Call to Action: Changing the Culture of Drinking at U.S. Colleges, which summarizes the research literature on preventing alcohol abuse among students and presents program and policy recommendations from NIAAA's Task Force on College Drinking. The NIAAA Web site features fact sheets, brochures, planning guides, and other practitioner-oriented materials.

NATIONAL REGISTRY OF EVIDENCE-BASED PROGRAMS AND PRACTICES (NREPP)

http://www.nrepp.samhsa.gov

The Substance Abuse and Mental Health Services Administration (SAMHSA) was created as a services agency to focus attention, programs, and funding on improving the lives of people with or at risk for mental and substance abuse disorders. SAMHSA has developed a searchable database of scientifically tested interventions for the prevention and treatment of mental and substance use disorders.

THE NETWORK ADDRESSING COLLEGIATE ALCOHOL AND OTHER DRUG ISSUES

http://www.thenetwork.ws

The Network Addressing Collegiate Alcohol and Other Drug Issues (Network) is a national consortium of colleges and universities formed to promote healthy campus environments by addressing issues related to alcohol and other drugs. Developed in 1987 by the U.S. Department of Education, the Network comprises member institutions that voluntarily agree to work toward a set of standards aimed at reducing AOD problems at colleges and universities. It has close to 1,600 members nationwide.

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APPENDIX 1: SITE VISIT INTERVIEW PROTOCOL

The site visit teams used two structured interview protocols: one detailed set of questions for campus project directors (reproduced below) and a shorter list of queries for key campus and community team members and stakeholders (see p.79). Going beyond the protocols, the site visit teams also asked extensive follow-up questions to elicit more detailed information about principles and processes essential to effective program development, implementation, and institutionalization.

INTERVIEW PROTOCOL: CAMPUS PROJECT DIRECTOR

- 1. How long has this program been in place? How long have you been directing the program? How does this responsibility relate to your job on campus?
- 2. What was(were) the problem(s) the project was designed to address? How did you know that was a problem(s)? What was the process you engaged in to identify the problem(s)? How long did it take?
- 3. Who were your other stakeholders? How were they involved—at the beginning, during the planning process, in implementation?
- 4. What strategies had been tried in the past to address the problem(s)? Was there a point at which the campus decided to change course? If so, what caused that change to take place?
- 5. Once you had identified a problem (or set of problems) you wanted to address, what was the process you engaged in to set goals? From your perspective, how did that process go? How did you develop agreement among stakeholders as to the goals?
- 6. Please describe the process you used to choose specific programs, policies, and tactics to achieve your goals. What process did you use to come to agreement on what activities to engage in and who would do what? What were the barriers, if any, to moving forward? Did you obtain assistance from any outside consultants or organizations in identifying your goals or designing your approach?
- 7. What do you think were the particular strengths your campus had going into the implementation of your program?
- 8. Once you had chosen your strategies, how was your implementation plan developed?
- 9. What were some of the tactics you used in implementing your program? Development of campus task force or campus and community coalition? Presidential or senior administrator leadership? Faculty and-or student involvement? Education to raise awareness of the problem(s)? Other communication tactics?
- 10. Do you think that community organizing played a role in the project, either on or off campus? If so, how did you gain the campus and-or community support and involvement that you needed?
- 11. Did you work, or are you working, with an evaluator who helped design the plan and an evaluation plan? If so, how did that process go?

- 12. How are you evaluating the effectiveness of the program or approach? What quantitative and qualitative data do you collect?
- 13. Have you made any adjustments to the program or your approach as a result of evaluation data?
- 14. What is the current status of the program or effort? If it still is in place, to what would you attribute its sustainability?
- 15. Has being identified as a model program brought other opportunities for recognition or resources to build on your efforts?
- 16. From your perspective, what has made the greatest contribution to implementation of your program?
- 17. What have been the greatest barriers or challenges to the program's implementation?
- 18. To your knowledge, have any other institutions of higher education (IHEs) attempted to replicate your program? If so, which IHEs, and what were the outcomes (if known)?
- 19. What lessons would you like to share with other campuses about to embark on a similar process or implement a similar program?
- 20. Have you experienced a high volume of contacts from the field as a result of your status as a model program? If so, were you equipped to provide information and technical assistance?

INTERVIEW PROTOCOL: TEAM MEMBER/KEY STAKEHOLDER

- 1. Tell us about the program, from your perspective.
 - How did it come about? Who started it?
 - · Who took the lead?
 - · Who were the other key players?
 - How/why did you get involved?
 - What is your current role?
- How well is the program (or this stakeholder's portion of it) working?
- 3. What is the current status of the program or effort? If it still is in place, to what would you attribute its sustainability?
- 4. From your perspective what has made the greatest contribution to implementation of this program?
- 5. What have been the greatest barriers or challenges to program implementation?
- 6. What lessons would you want to share with other campuses that embark on a similar process or implement a similar program?

2: CHARACTERISTICS¹ OF 22 INSTITUTIONS OF HIGHER EDUCATION (1999–2004) PROGRAMS EDUCATION MODEL **HO** DEPARTMENT APPENDIX U.S.

	Retention, First to Second Year	84%	82%	74%	78%	84%	83%	%86	91%	%68	82%		84%	91%
	betrimred lodoolA egA to strabut2 rot	ž	Yes	Yes	Yes	Yes	Yes	Yes	8	Yes	Yes		Yes	٥ ۷
	XaT de Beer Tax \$\gallon	.53	11.	.18	.20	11:	80.	.11	80.	.12	.20	.41	11:	11.
	Intercollegiate noisiviG esitəldtA	I/F=IA	I/F=IA	I/F=IA	=	/ =	I/ F=IAA	<u></u>	I/F=I-A	I/F=I-A	I-F=I-A		≡	I/F=IA
	Percent Female sətəldtA ytisrsV	2%	%8	2%	2%	20%	n/a	24%	2%	n/a	2%		n/a	n/a
e	Percent Male Varsity Athletes	2%	%8	3%	4%	30%	n/a	25%	2%	n/a	2%		n/a	n/a
Icohol Us	Percent Sorority Members	34%	n/a	11%	3%	n/a	43%	%2	10%	2%	%9		2%	16%
ked to A	Percent Fraternity Members	18%	n/a	%8	4%	17%	33%	12%	13%	2%	7%		3%	12%
Campus Characteristics Linked to Alcohol Use	Percent Caucasian/ White (non- Horbanic/Latino)	%68	77%	%06	%68	%88	%58	44%	85%	%09	%95	%0	77%	81%
Charact	Average Age Full- Time Students	20	n/a²	21	21	19	20	20	20	21	22		20	20
Campus	Percent Male	52%	48%	44%	40%	45%	%09	28%	53%	48%	42%	41.1%	36%	44%
	Percent of estansilqqA betrimbA	78%	31%	%06	73%	62%	40%	16%	55%	54%	%05		34%	62%
	– nO ni тпэтэ9 BnizuoH гидтьЭ	15%	78%	44%	29%	%06	%99	94%	37%	45%	11%		49%	73%
	Percent Undergraduate	83%	%59	84%	83%	100%	%02	40%	84%	%//	82%	100%	%08	%29
General Campus Characteristics	Undergraduate Population	19,251	8,851	15,481	17,807	1,873	4,679	4,112	35,002	27,365	27,345	723	6,292	10,840
us Chara	gnittə2	SMT	SUB	SMT	SMT	SMT	SUB	URB	SMT	SMT	URB		SMT	URB
l Campi	Sarnegie Roitsailiceal	DRE	DRE	DRI	W	B/LA	DRE	DRE	DRE	DRE	DRI	TRIB	-	DRE
Genera	боиегпапсе	PUB	QNI	PUB	PUB	QNI	QNI	ONI	PUB	PUB	PUB	м	PUB	QNI
Name of Institution		Auburn University	Boston College	Bowling Green State University	Grand Valley State University	Hobart and William Smith Colleges	Lehigh University	Massachusetts Institute of Technology	Pennsylvania State University, Univ. Park	Rutgers University, New Brunswick/Piscataway	San Diego State University	Southwestern Indian Polytechnic Institute	State University of New York at New Paltz	Syracuse University

Second Year	84%	%22	n/a	84%	%02	%26	%69	84%	84%
for Students of Age Retention, First to									
Alcohol Permitted	Yes	ž	Yes	S S	Yes	Yes	Š	Yes	Yes
State Beer Tax \$\gallon	17.	.16	.185	90.	80.	80.	.41	.261	.261
ersollegiate noisiviG soiteldtA	_	I/F=IA	≡	I/F=IA	=	I/F=IAA	I/F=IA	I/F=IA	=
Percent Female setelhlay Athletes	2%	1%	2%	1%	3%	3%	1%	2%	n/a
Percent Male Varsity Athletes	3%	1%	2%	2%	2%	2%	2%	2%	n/a
Percent Sorority Members	4%	11%	3%	25%	4%	16%	2%	15%	%0
Percent Fraternity Members	4%	7%	2%	20%	%9	23%	2%	15%	%0
Percent Caucasian/ White (non- Horpanic/Latino)	%//	71%	64%	%88	%58	%09	%86	84%	%5%
-Nverage Age Full- stnabut2 əmiT	20	21	20	20	21	20	22	22	21
Percent Male	20%	47%	49%	48%	38%	20%	51%	47%	43%
Percent of stabilogA bettimbA	26%	%58	40%	%68	71%	20%	94%	78%	%9/
-пО ni tnəɔrə٩ gnisuoH suqmsЭ	28%	18%	%99	42%	29%	63%	n/a	44%	30%
Percent Undergraduate	%69	%//	31%	%9/	81%	52%	%58	83%	%06
ergraduate noitaluqo4	11,796	28,482	4,355	20,441	10,664	9,836	13,958	18,746	12,477
guitha2	SUB	URB	URB	SMT	SUB	URB	URB	RUR	SMT
Clastion noitsoffication	DRE	DRE	DRE	DRE	DRI	DRE	DRE	DRE	IW
боуеглалсе	PUB	PUB	QNI	PUB	PUB	QNI	PUB	PUB	PUB
Name of Institution	University at Albany, State University of New York	University of Arizona, Tucson	University of Chicago	University of Missouri- Columbia	University of Northern Colorado, Greeley	University of Pennsylvania	Utah State University, Logan	Washington State University	Western Washington

Notes

Sources

• Peterson's Four-Year Colleges 2005 (Lawrenceville, N.J.: Thompson Peterson's Publishing Co., 2004)

• America's Best Colleges 2005 by U.S. News and World Report, premium online edition. Information about the current edition can be found at http://www. usnews.com/usnews/edu/college/rankings/rankindex_brief.php. (Accessed on July 6, 2007. Note that payment is required for access to the premium online edition.)

^{1.} All characteristics are described below, with abbreviations explained.

^{2.} The designation n/a in this chart means not available.

^{3.} Blank cells in Southwestern Indian Polytechnic Institute mean not available from the cited sources.

GENERAL CAMPUS CHARACTERISTICS

The following characteristics are useful for matching like institutions, but epidemiological research has not shown them to be related to rates of heavy alcohol use among college and university students.

Governance

This column indicates whether the institution is owned and operated by a public entity (PUB), most likely a state government, or by a private corporation (IND). Source: Peterson's.

Carnegie Classification

Since 1973 the Carnegie Foundation for the Advancement of Teaching has developed a typology of accredited, degree-granting institutions of higher education (IHEs) in the United States. The 2000 classification system was used to categorize the 22 designated grantee institutions:

- BLA: Baccalaureate Colleges—Liberal Arts. These institutions are primarily undergraduate colleges with major emphasis on baccalaureate programs. During the period studied, they awarded at least half of their baccalaureate degrees in liberal arts fields.
- DRE: Doctoral/Research Universities—Extensive. These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the doctorate. During the period studied, they awarded 50 or more doctoral degrees per year across at least 15 disciplines
- DRI: Doctoral/Research Universities—Intensive. These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the doctorate. During the period studied, they awarded at least 10 doctoral degrees per year across three or more disciplines, or at least 20 doctoral degrees per year overall.
- graduate education through the master's degree. During the period studied, they awarded 40 or more master's degrees per year across three or more • MI: Master's Colleges and Universities I. These institutions typically offer a wide range of baccalaureate programs, and they are committed to disciplines
- TRIB: Tribal Colleges and Universities. These colleges are, with few exceptions, tribally controlled and located on reservations. They are all members of the American Indian Higher Education Consortium.

Note that the typology was substantially revised in 2005. Source: http://www.carnegiefoundation.org/classifications. (Accessed on July 6, 2007.)

Setting

The IHEs are classified as rural (RUR), small town (SMT), suburban (SUB), or urban (URB). Source: Peterson's.

Undergraduate Population

This is the total enrollment in courses of study leading to associate or bachelor's degrees. Source: Peterson's.

Percent Undergraduate

This is the percentage of all students who are enrolled in courses leading to associate or bachelor's degrees. Source: U.S. Department of Education, National Center for Education Statistics at http://nces.ed.gov/ipeds/cool. (Accessed on July 6, 2007.)

Percent in On-Campus Housing

This is the percentage of all students who reside in on-campus housing. Source: America's Best Colleges.

Percent of Applicants Admitted

The percentage of undergraduate students admitted is a common measure of selectivity. Source: Peterson's.

CAMPUS CHARACTERISTICS LINKED TO ALCOHOL USE

The following characteristics are associated with higher rates of heavy drinking among college students.

Percent Male

This is the percentage of undergraduate students who are male. Source: America's Best Colleges. Males are more likely than females to engage in heavy alcohol use.¹ Campuses with a higher percentage of females had lower rates of binge drinking.²

Average Age of Full-Time Students

This is the average age in years of full-time undergraduate students. Source: America's Best Colleges. One national study found that underage students drink alcohol less frequently but are more likely to drink heavily when they do drink. $^{\scriptscriptstyle 3}$

Percent Caucasian/White (Non-Hispanic/Latino)

This is the percentage of undergraduate students who are Caucasian/white, but not Hispanic/Latino. Source: America's Best Colleges. White students are more likely than students who are not white to engage in heavy alcohol use. * Campuses with a higher percentage of students who are not white have lower binge drinking rates. 5

Percent Fraternity Members and Percent Sorority Members

Membership in these organizations is a significant risk factor for heavy drinking, especially among men. 7 Rates of heavy alcohol consumption are highest at institutions with a fraternity and sorority system. 8 One of the strongest predictors of heavy drinking in college is residence in a fraternity or sorority.9 This is the percentage of male and female undergraduates who are members of fraternities and sororities respectively. Source: America's Best Colleges.

Percent Male Varsity Athletes and Percent Female Varsity Athletes

This is the percentage of male and female undergraduates who are members of intercollegiate athletics teams. Source: America's Best Colleges. Compared with nonathletes, students involved in college athletics are more likely to engage in heavy drinking. 10

Intercollegiate Athletics Division

The National Collegiate Athletic Association (NCAA) is organized into divisions, as defined by number of sports fielded, financial aid awards, and attendance. The percentage of undergraduate students who identify themselves as sports fans is associated with drinking rates and alcohol-related problems.¹¹ Source: *Peterson's*.

mainly at division III (III+). Fuller descriptions of these divisions can be found online at http://www.ncaa.org/about/div_criteria.html. (Accessed on August others. For example, Hobart and William Smith Colleges fields a division I lacrosse (L) team, while the Massachusetts Institute of Technology competes Division I has three subdivisions—A, AA, and AAA—for football (F). Some institutions compete in one division for some sports and another division for

State Beer Tax (\$/gallon)

the cost of alcohol, 12 and price increases are an effective means of reducing excessive drinking by young adults. 13 Source: Current tax information can be This is the beer excise tax for the state in which the IHE is located, expressed in terms of dollars per gallon. Alcohol consumption is inversely related to found at the Web site for the Federation of Tax Administrators: http://www.taxadmin.org/fta/rate/beer.html. (Accessed on July 6, 2007.)

Alcohol Permitted for Students of Legal Age

colleges that ban possession of alcohol are less likely to be heavy drinkers and more likely to abstain. This is a correlational study, however, and a cause-This indicates whether an IHE allows students who are 21 or older to possess alcohol. Source: America's Best Colleges. One study found that students at effect relationship cannot be assumed; students who are light drinkers or abstainers may be more likely to select IHEs with a ban. 14

Retention, First to Second Year

This is the percentage of first-year undergraduates who return to school for their second year. Source: Peterson's. High alcohol consumption is associated with lower GPA due to fewer hours spent studying. 15

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