SAFE AND DRUG-FREE SCHOOLS

HANDBOOK FOR COORDINATORS

UNDERSTANDING THE PROCESS OF PROGRAM EVALUATION

2003

Developed for University of North Florida, Florida Institute of Education, Safe, Disciplined, and Drug-Free Schools Project by Meena Harris, MS

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ABOUT THIS HANDBOOK

As mandated by the Principles of Effectiveness as found in Title IV, 21st Century Schools, Part A – Safe and Drug-Free Schools and Communities, SEC.4115, of the No Child Left Behind Act of 2001, local education agencies must periodically evaluate the accomplishments of their funded prevention programs in order to demonstrate a substantial likelihood of success.

Program evaluation is a critical step to ensuring that the programs we offer youth are effective in reducing drug use and violence. Further, program evaluation activities are a mechanism providing local education agencies with feedback on progress of program delivery and outcome objectives. Information gathered from a quality evaluation allows districts to make relevant and meaningful improvements to their programs in particular and to their prevention policies more broadly.

This handbook has been provided for the Safe and Drug-Free Schools Project (SDFS) Coordinators in order to clarify the scope of the Florida SDFS evaluation effort. Regulatory procedures already require districts to implement programs supported by scientifically based research; what is unknown is whether these implemented programs do produce a substantial likelihood of success within district-specific situations. SDFS Coordinators must focus their evaluation efforts on the way in which a program(s) has been implemented within their school district, given the student population targeted, the resources available, and other circumstances or conditions specific to that district. Of primary importance is the need to know if a particular program is producing positive results for that district.

This handbook is designed to:

Offer SDFS Coordinators who are using outside evaluator services with a means to both understand what the evaluator is doing, and to stay involved in the evaluation process.

Offer SDFS Coordinators who are conducting in-house evaluations a step-by-step instructional guide for planning and executing a program evaluation.

How to use this handbook:

This handbook is not meant to be read from beginning to end all at one time like a novel. Use it primarily as a reference to aid and improve your understanding of the various activities of program evaluation.

This handbook begins with a short presentation of some elementary program evaluation concepts. The sections that follow are divided into evaluation phases; each outlining the basic tasks involved in the evaluation process from initial design plans to report writing. Additional resources are listed for more advanced instruction in specific areas if necessary.

NOTE

In order to illustrate certain points, the fictitious district, Oceanside, and its implementation of the Life Skills Training Program (LST) will be used throughout this handbook.

Life Skills Training (LST) focuses on (1) developing personal and social skills to improve student's general competence and reduce the motivation to use alcohol, tobacco, and other drugs, and (2) improving students' ability to apply these skills to situations in which they may experience social pressure to use drugs.

The LifeSkills program consists of three major components that cover the critical domains found to promote drug use.

- Drug Resistance Skills
- Personal Self-Management Skills
- General Social Skills

OVERVIEW

Evaluating The Effectiveness Of Prevention Programs

What is Program Evaluation?

Asking relevant questions

Program evaluation has to do with collecting information about a program in order to answer questions asked about it. The types of questions asked when evaluating a prevention program in particular primarily focus on issues of assessment: 'Did we accomplish what we set out to achieve?' Finding the answers to evaluation questions entails scrutinizing both program results and the qualities that make the program work.

The specific type of information an evaluation seeks to investigate depends upon its intended audience. The type of information an audience is looking for will frame the scope of evaluation questions developed. These questions, in turn, will determine the evaluation design and dictate the kinds of information collected that will help answer the evaluation questions.

More than just a matter of opinion

In order to establish evaluation findings as objective, the evaluation must be carried out in a systematic manner based on scientific methods of research. This means following procedures that obtain reliable and valid knowledge relevant to the program under evaluation.

¹ Hawkins, J.D., and Nederhood, B. (1987) *Handbook for Evaluating Drug and Alcohol Prevention Program*. p.2.

This handbook is organized around the most basic phases of the evaluation process regardless of the particular evaluation model employed. They consist of:

Phase I: Preparing for the evaluation

Phase II: Choosing the right evaluation questions

Phase III: Designing a data collection plan

Phase IV: Analyzing and interpreting the data collected

Phase V: Reporting the findings

Within each of these phases, steps are outlined to provide you, as the evaluator, with the means to conduct an evaluation that can reliably substantiate information beyond mere opinion.

Need for reporting accurate results

The United States Department of Education must report to Congress on the effectiveness of prevention programs, and their ability to reduce violence, alcohol, and other drug use in K-12 grades as funded under the SDFSA. In order to meet this requirement, local education agencies are asked to evaluate the accomplishments of their funded prevention programs. Providing accurate information within the context of a quality evaluation does more than just satisfy federal accountability. More importantly, accurate information provides local education agencies with the means to make meaningful decisions about which prevention strategies to implement and which policies to adopt.

How Do We Know Our Prevention Programs Are Actually Changing the Behavior of Our Youths?

Effects are not always immediately apparent

The ultimate goal of any prevention program is to change the attitudes and behaviors that put youths at risk. A unique characteristic of prevention programs is that they seek to avert a problem before it starts. When prevention programs are evaluated, it becomes necessary to show that something did not happen which would likely have happened if the prevention program service had not been provided.

A second characteristic of prevention programs is that results cannot always be assessed immediately. At the time of program completion, participants may be able to demonstrate a gain in skills or knowledge, a change in attitudes, perceptions, and/or intentions. Changes in behavior, however, may not manifest themselves for months or even years following the program. Measuring success rates

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of prevention programs, therefore, becomes more complicated than measuring the success rates of something like a job-training program for example. The question then becomes, how do we evaluate the effectiveness of prevention programs?

Support of scientifically based research, in general

There already exists a body of scientifically based research² that demonstrates the positive effects of the various SDFS prevention programs and activities currently in use. This body of evidence supports claims that these programs influence participants, not only in reducing the use of violence, alcohol and other drugs among youth, but also in providing youths with beneficial skills that can be incorporated into their lives. These studies, which demonstrate the effectiveness of those prevention programs, assume that they work within any school given the targeted population.

NOTE

SDFS Coordinators need to know whether the implementation of a specific program is effective for the given situation within their district. *In other words, is the program applicable to district-specific conditions?* Is it producing positive results efficiently within the target group?

Demonstrate evidence of program effects, in specific

By using sound methodological evaluation procedures, district coordinators can assess whether the program is accomplishing what it was designed to do. Assessment simply requires asking evaluation questions concerning how well the program objectives were accomplished and if the program goals were achieved.

² For state code definition of scientifically based research, see Appendix 1

Gathering evidence to demonstrate the impact of a program on its participants requires the formulation of an evaluation design plan that includes:

- Assessing how faithfully to program design the program has been delivered:
- Measuring program outcome objectives using various and appropriate student performance standards;
- Establishing baseline and comparison data to which program outcome data may be compared.

Building these three components into a program evaluation is essential to document evidence of program effect.

Getting Started

Each district's evaluation projects will vary depending on resources available, on the scope of the evaluation, the quality of evaluation questions, as well as the evaluation design to be implemented.

All evaluation projects should produce:

- ☑ A documentation of what happened in the program,
- ☑ A description of which strategies worked best in the program,
- A measurement of program outcome objectives.

At the onset of an evaluation, address such basic questions as:

- Who is your audience?
- What type of information does this audience want to know?
- What activity/activities can you measure to answer your evaluation question(s)?
- How will you collect information about these activities to demonstrate evidence of effect?
- From whom and from what source will information be provided?
- What is the timeline for data collection?
- In what form and by what means will results be reported to your audience?

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Things To Remember

- 1. There is no perfect *one size fits all* recipe that determines success or failure of an evaluation. Each district's situation is different and will require variations within evaluation activities.
- 2. A program evaluation does not have to be overly complex. A narrowly focused evaluation yielding meaningful results is more useful than one that tries to *bite off more than it can chew*.
- 3. A program evaluation does not have to be something external to staff responsibilities. Many evaluation activities are already a part of staff duties.
- 4. This evaluation project is not just about accounting for outcomes, but also about gaining relevant information in order to make meaningful decisions to improve the implementation of a program.
- 5. Ultimately the results of the project should benefit our youth.

NOTES

PHASE I

Preparing For The Evaluation

Making the effort to follow these steps in your evaluation project will be well worth the time and effort.

Step 1: Select a program to evaluate

• Choose a program that is worth the effort of evaluation.

Step 2: Identify key stakeholders

- Decide which stakeholders take priority in regard to this evaluation project.
- Identify information that the key stakeholders want to know from the evaluation project.
- Establish a relationship with key stakeholders in order to garner their support for the evaluation, particularly those who deliver the program.

Step 3: Establish an evaluation team

• Enlist district staff, school board members, teachers, school administrators, volunteers, members of collaborative community services, and evaluation consultants to serve as resources during all or part of the evaluation project.

Step 4: Consider a budget

Make initial and adequate budget computations.

Step 5: Decide how to keep track of this evaluation project

Establish a system to keep evaluation materials organized.

Step 6: Establish an initial timeline

Schedule completion dates for each step.



Select A Program To Evaluate

Each district should choose an Alcohol, Tobacco, or Other Drug (ATOD) or a Violence prevention program that addresses the district's SDFS Priority Goals. If only one SDFS program is funded, then the decision has already been made, and you can move on to the next step.

If that is not the case, consider the following list:

- Give preference to promising programs over proven programs.
 More systematic knowledge is needed to support the implementation of promising programs, since promising programs have a two-year limit to demonstrate a positive impact on program outcomes.
- Consider choosing a program in which you are spending the bulk of your funds. Determining the extent to which desired results are gained in a given situation is valuable information to have, especially when resources and personnel are limited.
- Consider choosing a program you are especially proud of in terms of its success. A sound evaluation will provide more support to your claims.

In addition, also consider:

- Is there a vested interest in a program within your school district and/or local community? Is it a program that is of particular interest to stakeholders? If so, consider choosing this program to evaluate.
- Can information that stakeholders want to know about the program be collected through your evaluation efforts?
- Is there a program that is highly charged politically? If so, will evaluation efforts be compromised? Or, instead, will the evaluation efforts provide means to a resolution of the political issue?
- Is this a program that is going to be continued? If not, is the evaluation effort worthwhile?
- Is this a program that may be easily modified, based on recommendations that emerge from the results of the evaluation?
- Are the goals and objectives of the program measurable, given the resources available?
- If you are using a commercial program, does it come with a packaged evaluation kit? Does it include pre and post test tools?

Worksneet 1.1 Notes for Program Selection			
Name of Program:			
(List reasons for selecting this program)			
	╝		



Identify Key Stakeholders

Stakeholders within a district include any group of people or organization involved in or affected by the performance and results of the program under evaluation. These might include students, parents, teachers, counselors, administrators, local advisory councils, the local law enforcement agency, members of collaborative community services, or state and local agencies. When beginning this evaluation project, it is important to identify key stakeholders for the following reasons:

- ▶ Stakeholders within a school district are a primary audience of the evaluation report. Identifying their concerns will provide added focus when setting the goals of the evaluation.
- ▶ **Key stakeholders can help to determine relevant evaluation questions**. The types of information stakeholders want to know about the program depend upon their perspectives on the program. Drawing from a broad base of viewpoints when developing evaluation questions leads to more relevancy of evaluation results within the community.
- ▶ Key stakeholders, particularly those who are directly associated with the program, must buy into this evaluation project. Garnering the support of key stakeholders will not only facilitate the information and resources they can contribute, but will also lessen the resistance to the final product and its recommendations.
- ▶ Key stakeholders can provide valuable resources to the evaluation project. Involving stakeholders in the planning and execution of the evaluation project not only recognizes their vested interests but, may also provide your evaluation efforts with additional resources, e.g., parents or other community volunteers, data resources, computer support, in-house evaluation expertise, etc.

Worksheet 1.2 Identify Stakeholders			
Stakeholder	Vested Interest	Type of information stakeholder would like to know as a result of evaluation	Primary Audience Yes/No
SDFS Coordinator and SDFS staff			Yes



Establish An Evaluation Team

Each district must establish an evaluation team consisting of stakeholder representatives who will take an active role in all or part of the evaluation process. There are many advantages to such an evaluation team:

- No single person has to take full responsibility of the entire project, although individual responsibilities have to be clearly designated.
- ▶ Spreading the responsibilities of the project among team members, particularly in the collection phase, can increase the amount of information collected.
- ▶ Inclusion of major stakeholders ensures that different perspectives and areas of expertise are brought to the project. Putting together a team with diverse areas of expertise and access to various network pools provides a diversity of resources and will benefit the evaluation project.

Even if a third party professional is hired to conduct the evaluation project, it is still a good idea to establish a team or committee to work with the evaluator to ensure that the scope of the evaluation is met and that relevant questions are addressed.

Whom should the evaluation team consist of?

☑ One person from the district SDFS office, preferably the coordinator, should actively oversee the entire project. This person should have sufficient background knowledge of SDFS program implementation within the district to make key decisions in developing evaluation questions and to provide oversight of the processes of this project.

- ✓ Additional team members can be drawn from various stakeholder groups. Some may serve as advisory members, while others, such as SDSF staff, or other district staff, must be capable of assuming responsibility for necessary activities during the course of the evaluation. Teachers, administrators, parent volunteers, and other collaborators may also serve in advisory or support roles.
- A qualified evaluator can ensure that the evaluation design plan has internal integrity and validity.

There are three ways to use an evaluator's services:

- 1 The district can contract an external evaluator to oversee the entire project; however, it is still essential that someone from the SDFS district office work closely with the evaluator as evaluation questions are developed.
- 2 The district can recruit someone within the district staff who has evaluation experience. This person can assist the evaluation team, providing technical assistance where needed.
- 3 The district can hire an evaluator as a consultant. The evaluation team can rely on this person for advise on methodological soundness and solutions to various problems as they arise.

Hiring an external evaluator provides the evaluation project with a valuable independent perspective. External evaluators may also have access to additional staff, database management resources, as well as sufficient time to conduct a quality evaluation. Whether using an external evaluator or an in-house evaluator, both should know the history and context of the program under evaluation.

NOTE

For those who will be using evaluator services, refer to Appendix 2 for suggestions on how to hire a qualified evaluator.



Consider A Budget

Evaluations require money, and the amount of money depends on the commitment of district leadership, the size of the program, the number of specific evaluation questions that will be addressed, and the availability of evaluation resources, especially staff time. A dollar amount cannot be specified until an evaluation design plan is actually formulated. Theoretically, the more money a district is able to set aside for evaluation activities, the more program objectives the district can assess. Generally speaking, investing a small amount of money in the evaluation will allow a district to do little more than monitor some program activities and to count the number of participants. It will take more money to evaluate already existing data sources when assessing participant outcome objectives, and it will take an even larger investment of funds to conduct data collection by means of surveys, interviews, focus groups, and observations.

General items to consider during budget development are:

- Salary for evaluation staff,
- Consultant fees,
- Travel expenses to cover travel to different sites, if necessary,
- Communication costs: i.e., postage, telephone calls,
- Printed materials: records and other documents, printing of data collection instruments, and the final reports, and
- Supplies and equipment.

NOTE

Remember that budget revision will have to occur as you make your evaluation design more concrete. In turn, you will need to track availability of resources as you develop your evaluation design plan.

Keep A Record Of All Evaluation Project Activities

To avoid confusion during the evaluation project, a meticulous record of all evaluation decisions and activities must be kept. In particular special care must be taken during the data collection phase. Given the highly detailed nature of data collection, any disorganization problems can compromise the accuracy of your evaluation results.

There are numerous organizational methods for tracking projects. Since different styles work for different people, choose one or more that will work for your evaluation team.

A few examples include, but are not limited to:

- ☑ A dated journal that includes detailed information of decisions, tasks assigned, tasks performed, and notes about unplanned or unexpected situations;
- A system of file folders that are sorted by tasks, team members, dates, or sites;
- ✓ A filing cabinet, or set of boxes that are sorted by tasks, team members, data, or site;
- ✓ **Notations made in this handbook** for record keeping purposes or as a quick reference to the location of various project materials.

Keeping a well organized, clearly documented project will facilitate the ease with which the final report can be written.



Establish An Initial TimeLine

Items 1 through 4 in the worksheet below pertain to the steps in Phase I. In addition, it is also part of the preparation phase to consider items 5 through 8 which broadly span the duration of the evaluation project. A more detailed timetable will be necessary later as more specific evaluation activities are planned.

Worksheet 1.3 **Timetable During Phase 1 Activity** Schedule finish date 1. Select a program. 2. Identify stakeholders; talk to them. 3. Assemble the evaluation team. 4. Schedule meetings to formulate a design plan. 5. Finished Design Plan 6. Submit Evaluation Proposal to Fall of the school year program the Department of Education, activities are being evaluated Office of Safe Schools 7. Finish Collecting Data 8. Submit Final Report

Things To Remember

- 1. Choose a program that is worthy of an effort of evaluation.
- 2. Remember that you, the SDFS coordinator and staff, are key stakeholders as well. To conduct this evaluation project with a measure of independence and impartiality (so as not to bias the results) it is important to understand, early on, your own vested interest in this program.
- 3. Each district must decide what type of evaluation team to put together based on local circumstances and available resources.
- 4. Including a representation from each and every group and sub-group in your community is not a realistic goal for your evaluation team. Nor is it practical to attempt to address every need of every stakeholder in the evaluation. Based on your own experience and knowledge of the nuances of your school district, you will have to prioritize both stakeholder representation and their concerns as is feasible.
- 5. Keep precise records of all the various activities and circumstances of the evaluation project. Not only is it a sound methodological practice, but it also serves as a mechanism to support credibility of your evaluation proceedings. If for some reason the evaluation data or findings are called into question, a detailed journal and a well-organized collection of data materials will verify that you were not falsifying information.

NOTES

PHASE II

Choosing The Right Evaluation Questions

Writing well thought-out, relevant evaluation questions is the secret to a meaningful evaluation. Keep in mind that the more specific the focus of the evaluation, the more efficiently the evaluation team can use its resources. In addition, the fewer evaluation questions asked, the more information that can be collected about each question. Conversely, the broader the scope of the evaluation, the less time and resources there are to devote to single issues.

Step 1: Define the program

- Explain the rationale for the program's implementation within the district.
- Describe the design features of the program.
- Outline the program's goals and objectives.

Step 2: Set the scope of the evaluation project

- Articulate what the evaluation team intends to accomplish with this evaluation project.
- Think about what means it will take to accomplish this evaluation project.
- Decide what kind of analysis to present to the intended audience.

Step 3: Develop general evaluation questions

- Write general questions about program implementation objectives.
- Write general questions about participant outcomes

Step 4: Write specific evaluation questions

- Write evaluation questions in measurable terms.
- Note questions that will not be addressed in this study.



Define The Program

Evaluation questions stem from the information key stakeholders and other primary audiences want to know about the program. Usually, more answers are sought after than can be efficiently provided in a single evaluation effort. While choosing what to evaluate within a single program can be daunting, a clear understanding of the program itself will illuminate the elements of a program that should be addressed.

With completion of this step the evaluation team will have a description of the program in concrete terms, *as it is designed to be implemented*. This will be helpful in the following ways:

- ► Clearly identified program characteristics, goals and objectives will give the intended audience the necessary background to understand the scope of the evaluation study.
- ▶ The evaluation team should identify the selected program's implementation objectives and participant outcome objectives in precise terms. The more precise the objective, the easier it becomes to link specific operations to specific outcomes. This process will help generate clearly focused and manageable evaluation questions.
- ▶ A clearly stated, well-understood program design will enable the evaluation team to make decisions about what components of the program to focus on and to select program objectives that are feasible to evaluate within the scope and time frame of the evaluation.
- ▶ Clearly defining terms and stating program objectives enables evaluators to compare actual implementation of the program with the program design as it was intended to be implemented.

TASK Describe District Background Information

This section should briefly describe any district demographic information that would help the audience understand the rationale for implementing this program. These might include:

- County or district population,
- Level of unemployment,
- Number of juvenile arrests,
- Number of elementary schools,
- Number of middle schools,
- Number of high schools,
- Percent of free and reduced lunches,
- Number of non-public schools within the county,
- List of risk factors and protective factors as assessed in your needs assessment,
- Other school district characteristics that you feel are relevant.

TASK Delineate a Program Overview

- Give the name of the program, explain any acronyms.
- Identify the type of program: ATOD, Violence Prevention, or both;
- Identify state SDFS goals or district-developed goals the program is addressing;
- List risk factors and protective factors addressed specifically by this program;
- Provide a general description of the program design:
 - What are the basic components of the program?
 - If the program is a commercial package, what are the manufacture specifications?
- List the materials and resources required to administer program;
- Summarize program costs.

Clarifying Program Goals and Program Objectives

For the purposes of this evaluation project, and particularly the next task, "program goals" and "program objectives" assume specific and separate meanings.

Program goals address the overall purpose, or mission, of a specific program. They outline the conceptual scope of what the program plans to achieve. Program goals are stated in a general fashion and denote intent. In the case of SDFS projects, for example, a five-year goal may be to reduce vulnerability to pro-drug social influences by a certain amount across the district. *Used in this manner, program goals provide the overall direction for the program.* Do not confuse program goals with the 5-Year Project Goals. These refer to the overall goals for the state regardless of the programs implemented. The program goals defined here refer specifically to the program to be evaluated.

Program objectives are concerned with the design and implementation of specific activities within a given program, as well as the range of outcomes expected as a result of that program. An example of a program objective would be one that addresses providing adolescents with the skills to handle social situations with confidence.

Program objectives can be categorized into two types³:

- · Program implementation objectives
- Participant outcome objectives

Program implementation objectives

Objectives of this type concern themselves primarily with processes, including identification of target populations, the manner in which specific skills are taught, staff, material resources required, and the scheduling of planned activities throughout the school year. *Program implementation objectives address the program's effect on outcomes in terms of the efforts made in design and operation of the program.*

It is important to understand that the manner in which these objectives are actually applied during the life of the program directly affect program outcomes.

³ Use of these two terms is inspired by, but not limited to, the approach in the Administration of Children, Youth, and Family's *The Programmer's Guide to Evaluation*.

TABLE 2.2 Program Participant Outcome Objectives

Participant Outcome Objectives Address:

Oceanside District Examples

What you expect to happen to your participants as a result of your program?

Immediate Results: The expectations about the changes in a participant's knowledge, skill, intentions, attitudes, and/or perceptions, as well as behavior (when applicable) immediately after completion of the program.

Longer-term Outcomes: The changes in behavior anticipated to follow the immediate results. These can be reflected in rates of expected change, as stated in the district's established Priority Project Goals 2005 or for any time period in the interim such as the 1-Year Outcome Objectives.

Immediate Results:

- Provide students with the necessary skills to resist social (peer) pressures to smoke, drink and use drugs;
- Help them to develop greater selfesteem, self-mastery, and selfconfidence;
- Enable children to effectively cope with social anxiety;
- Increase their knowledge of the immediate consequences of substance abuse;
- Enhance cognitive and behavioral competency to reduce and prevent a variety of health risk behaviors;
- Reduce vulnerability to pro-drug social influences.

Longer-term outcomes:

- Decrease drug abuse risk by reducing intrapersonal motivations to use drugs
- Cut tobacco, alcohol, and marijuana use 50%-75%.
- Cut polydrug use up to 66%.
- Decreases use of inhalants, narcotics, and hallucinogens

Participant outcome objectives

Objectives of this type address the anticipated changes in participant knowledge, skills, perceptions, attitudes, intentions, and/or behaviors that occur as a result of program implementation. Ultimately, anticipated changes in participants are reductions of ATOD use and violence among youth. The very nature of prevention programs is such that expected outcomes often do not occur immediately following program implementation. It may take months or years after program delivery before changes in participants' behavior come to fruition.

For the purpose of program evaluation, therefore, participant outcome objectives need to be separated into two types: (1) ones that occur immediately following the completion of the program and (2) those that occur in the longer-term⁴. (This will be discussed in greater detail in Step 1 of Designing a Data Collection Plan.)

TABLE 2.2 Program Participant Outcome Objectives

Participant Outcome Objectives Address:

Oceanside District Examples

What you expect to happen to your participants as a result of your program?

Immediate Results: The expectations about the changes in a participant's knowledge, skill, intentions, attitudes, and/or perceptions, as well as behavior (when applicable) immediately after completion of the program.

Immediate Results:

- Provide students with the necessary skills to resist social (peer) pressures to smoke, drink and use drugs;
- Help them to develop greater self-esteem, self-mastery, and self-confidence;
- Enable children to effectively cope with social anxiety;
- Increase their knowledge of the immediate consequences of substance abuse;
- Enhance cognitive and behavioral competency to reduce and prevent a variety of health risk behaviors;
- Reduce vulnerability to pro-drug social influences.

Longer-term Outcomes: The changes in behavior anticipated to follow the immediate results. These can be reflected in

rates of expected change, as stated in the district's established Priority Project Goals 2005 or for any time period in the interim such as the 1-Year Outcome Objectives.

Longer-term outcomes:

- Decrease drug abuse risk by reducing intrapersonal motivations to use drugs
- Cut tobacco, alcohol, and marijuana use 50%-75%.
- Cut polydrug use up to 66%.
- Decreases use of inhalants, narcotics, and hallucinogens

⁴ Discussion of outcome objectives as immediate and longer-term has been taken from Hawkins and Nederhood (1987), but is not limited to this source. Program outcomes may also be categorized into immediate, intermediate, and long-term outcomes. This would be suited for programs that have outcomes that can be clearly delineated into three such stages and distinctly measured as such. Use of a three stage categorization of program outcomes is best utilized for a program evaluation that can extend beyond a 1-year school timeframe. For more information see for example, McNamara (1999) *Basic Guide to Outcomes-Based Evaluation for Non-Profit Organizations with Very Limited Resources*.

TASK

Outline Program Goals and Objectives

Using the preceding definitions as a guide, outline the program's goals and objectives based on the following suggestions:

- 1. State the mission (or overall goal) of the program.
- 2. Describe the overall program objective(s).

Again, these are not the 1-year outcome objectives established in the grant application, but the overall agenda the program is designed to accomplish, i.e., teach children specific interpersonal skills providing them with the ability to say no to drugs in peer pressure situations.

- 3. List specific program implementation objectives.
 - What activities or curriculum or other services will be delivered?
 - For whom is the program designed?
 - Identify the target population for whom this program is designed;
 - In which school(s) is the program being administered?
 - Which students will participate?
 - How will the program be built into the existing school(s)?
 - Who will administer the program activities?
 - How will the program activities be administered?
 - What is the schedule of activities throughout the school year?
 - Other information relating to the planned implementation of the program
- 4. List immediate participant outcome objectives.

These include what is expected to change in the participant's knowledge, skill, perceptions, attitudes, intentions, and/or behavior immediately after the completion of the program. These will be specific to the content of the prevention service delivered.

5. List longer-term anticipated outcomes of the program.

These are the anticipated changes in behavior, perceptions, attitudes, and/or intentions some time after completion of the program. These are both specific to the content of the prevention service delivered and related to the corresponding 5-Year Goals of the district.

Worksheet 2.1 Defining the Key Aspects of Your Program

Mission statement: What does this program intend to accomplish? Target Population: What are the important characteristics of the			
-	eted population?	Gridiacionolio	
Linking Progra	m Processes to Participo	ant Outcomes	
What are the key targeted Risk or Protective Factors?	What specific implementation objective addresses the risk or protective factor listed?	What are the immediate outcomes expected? , I.e., skills gained, or change in intentions	What are the longer-term anticipated outcomes? i.e., 1 yr Program Outcome



Set The Scope Of The Evaluation Project

Begin to establish the scope of the evaluation project by setting goals for the evaluation itself. Decide what the evaluation team can achieve with this evaluation project; then, conceptualize what it will take to accomplish those goals.

🖒 TASK

Set Specific Evaluation Goals For the District Evaluation Project

The focus of the SDFS evaluation project in general centers on whether the programs currently in progress are working effectively within districts. District evaluation teams must focus on setting goals for the evaluation project that are specific to the circumstances within their own district. For example, if the program is a large one, a reasonable goal may be to evaluate only a single grade level of a multi-grade level program. If issues of program delivery are a major concern, then an appropriate goal would be to place emphasis on an evaluation of program implementation objectives. If the program happens to be in its first year of implementation, it would be appropriate to set a goal to establish a baseline of outcome information with which to compare future years' outcomes.

Use these questions as prompts to develop goals of the evaluation:

- What is the rationale for choosing this program to evaluate?
- What information would the SDFS Advisory Council, the School Board, the school administration, or other primary audiences, like to learn from this evaluation?
- What decisions do you want to make as a result of this evaluation?
- If it is a large program, do you want to document just one component of it?
- Which program objectives take priority in this evaluation project?
- Is there a particular component of the program that would benefit most from a careful examination?

NOTE

An evaluation project can have as many goals as necessary; however, too many goals will convolute the evaluation process. Each goal should clearly reflect what it is the evaluation team wants to learn.

Worksheet 2.2 Setting the Scope of your Evaluation Project		
Goal(s) of the Evaluation Reason for choosing this God		



Envision the Major Aspects of The Evaluation Project

This is not the point to outline specific details of the evaluation plan. Rather, it is the time to conceptualize the entire process of the evaluation so that the evaluation team can assess available resources, time limitations, and effort involved in conducting the evaluation. It is time to get an idea of what evaluation strategies are feasible.

Important questions for the evaluation team to consider include:

- Which program activities can be examined that fit within the scope of your evaluation? For example, if you are evaluating only a single component of your program, what service or curriculum will you evaluate?
- How might evaluators examine these program activities? For example, would surveys best measure participant behaviors and attitudes? Would teacher interviews on program delivery provide additional relevant information?
- What types of information will be compared with your results: School disciplinary referral records, already existing state or county youth surveys?
- Who can responsibly collect information (data) for the evaluation project?
- Will information be collected from the entire target population or just a sample of them? What is the rationale for sample selection?
- Can you foresee any potential problems that might hinder the evaluation team's ability to accomplish the goals of the evaluation?
- What is the best way to report the findings in a useful way to your intended audience?
- How much time do you have to collect data?

NOTE

Again, do not try to outline the specific details of an evaluation plan here. The purpose is to envision the evaluation project as a whole from start to finish. As the evaluation team looks at its own situation, it will become apparent what can be realistically accomplished with the evaluation project.



Develop General Evaluation Questions

General evaluation questions follow from the goals set for the evaluation process. For example, a general evaluation question regarding program implementation would be, 'Is the program being implemented with fidelity?'

There is no specific formula for writing evaluation questions. They must be asked in a manner that requires a response that can be accurately measured, analyzed, and reported. As a rule of thumb, avoid vague and complex evaluation questions. It is far more constructive to keep the scope of the evaluation project small and develop meaningful results than to try to accomplish too much and not do an adequate job.

TASK

Review Previous Evaluation Research on the Same or Similar Programs.

Other evaluation studies will provide ideas on evaluation questions, data collection methods, and depth of analysis of findings. Check for previously published studies online or ask a resource librarian for help. If the program is produced commercially, contact the company directly for documentation on previous evaluations. (Also inquire about any evaluation kits or data collection tools available from the publisher?)

TASK: Ask Questions About Program Objectives That Are Relevant to the Goals of the Evaluation

Evaluation questions need to be concerned with how well program objectives were met. The program objectives under question must relate to, or fall within the scope of, the goals of the evaluation.

The number of general questions to be asked depends upon what the evaluation team deems to be efficient relative to the size and focus of the evaluation project.

If helpful, refer back to Worksheet 1.2 to review what it is that key stakeholders want to find out about the program. Link this information to specific program implementation objectives and participant outcome objectives as described in Step 1. Generate a list of questions from these two sources.

TABLE 2.3 Examples of General Questions

- 1. How does the LST program affect the health knowledge of 6th to 8th grade students towards tobacco, alcohol, and other drugs?
- 2. Is there any evidence of changes in behavior or attitudes towards tobacco, alcohol, and other drugs in 6th to 8th grade students who have participated in the LST program?
- 3. Do teachers follow the program implementation instructions as planned?
- 4. Do any variations in the original LST design plan such as targeted student population affect program outcomes?

TASK

Select Which Questions to Evaluate

More than likely the evaluation team will come up with more questions than can be evaluated in this study. It is not feasible to address every question, no matter how significant. The evaluation team must decide which question(s) take priority.

Suggestions for selecting questions:

- Which stakeholder concerns do you want to satisfy?
- Who among your audience will make good use the evaluation information provided in the final report?
- Is there something about your program that is not being answered adequately elsewhere? Would the evaluation questions you select address that something?
- Would the information resulting from the selected evaluation questions be considered interesting?
- Will the resulting evaluation information contribute to new knowledge about the program?
- Do you have the resources available to answer the selected question adequately? Costs include labor, a reliable method of collection, a quality data source, adequately trained evaluation staff, etc.
- Do you have a sufficient amount of time to answer the selected question adequately?

Worksheet 2.3 Selected Evaluation Questions		
General Question(s)	Rationale for Evaluating this Question	

TASK

Note Questions Not Selected

It is helpful to make a list of those questions that will not be evaluated⁵. Inevitably, at some point later in the evaluation, you will find yourself asking, "Why didn't we evaluate this?" Refer back to this list to remind yourself of your rationale.

Worksheet 2.4 Evaluation Questions Not Selected			
General Question(s) Rationale for Not Evaluating t Question			

⁵ Hawkins and Nederhood, p.9



Write Specific Evaluation Questions

In order to plan a data collection procedure it is necessary to develop specific evaluation questions for each general question which will actually measure what is being asked.

TASK

Develop at Least One Specific Evaluation Question for Each General Question.

General evaluation questions need to be broken down into specific questions that ask for concrete evidence. Each specific question should specify an activity that can be clearly measured or observed, e.g., occurrence of fights on school grounds, self-reported attitudes about drug use, number of students completing the program. Specific evaluation questions are the basis of actual student surveys, teacher implementation questionnaires, and other forms or records that you may use to collect the desired information.

Often there is more than one type of evidence that will answer a general evaluation question. For example:

- ▶ When tracking the impact of the program on participants, evaluators may look at gains in skill, changes in attitudes, and/or changes in behavior. These are three distinct elements all of which indicate an answer to the same general evaluation question.
- ▶ When documenting the actual delivery of a specific program activity, evaluators may want to ask about teachers' training sessions prior to the program. In addition, specific questions can be asked about how teachers actually used the program curricula in the classroom. Both are distinct elements that are equally valid and important to the evaluation of program implementation.

Specific evaluation questions need to be written in a manner that points to only one distinct facet of change. For example:

▶ In a program that aims to reduce vulnerability to pro-social influences, asking students if they experience a positive change in their perceptions of drug-use after participation in the program examines just *one* facet of change within that program. Testing students knowledge about refusal skills is another.

Specific questions concerning implementation of program services can be stated in a manner that asks for a description. For example:

- ▶ A numerical count: How many students participated in a specific scheduled activity? How much time is actually spent on program curriculum in the classroom?
- ▶ A verbal account: In what settings is the program being offered? Which components of the program were actually implemented by each teacher? How did teachers actually implement program activities within their own classrooms?

Specific questions concerning program outcome objectives are usually phrased in a manner that establishes a relationship between some facet of the program and a desired change in outcome. For example:

- ▶ Is there a decline in fighting incidents?
- ► How does this decline compare with schools without the same program over the same period of time?
- ▶ What is the difference between students' knowledge of tobacco before and after program curriculum was taught?

Specific evaluation questions concerning program outcomes will reflect an inquiry into changes over time resulting from program participation, or an inquiry into the differences in changes over time because of age, gender, socio-economic status, or other characteristics.

General Evaluation Question Specific Evaluation Questions			
 How does the LST program affect the health knowledge of 6th to 8th grade students towards tobacco, alcohol, and other drugs? 	1a. Do 8th grade students show significan improvement in knowledge about the detrimental effects of tobacco or individuals' health?		
	1b. Do students show a significant increase in knowledge about effects of alcohol or the central nervous system? (Studen surveys might include specific knowledge questions about the risk or lung diseases, or blood-alcohol levels etc.)		
2. Is there any evidence of changes in behavior or attitudes towards tobacco, alcohol, and other drugs in 6 th to 8 th grade students who have participated in the LST program?	 2a. Is there a significant decrease in the number of student participants who report using tobacco products? 2b. Is there any difference in attitudes concerning use of alcohol or other drugs. Between 6th, 7th, or 8th graders? 		
3. Do teachers follow the program implementation instructions as planned?	3a. Are teachers working within the timeframe recommended by the LST program instructions?3b. Are teachers actually teaching the LST program curriculum as instructed in the teaching manual?		
4. Do any variations in the original LST design plan such as targeted student population affect program outcomes?	4a. Are the students receiving the LST curriculum within the target age group?4b. Do the students receiving the LST curriculum fall within the risk factors listed by the LST program?		

Worksheet 2.5 **Writing Your Specific Measurable Questions** List your general evaluation Write specific evaluation questions here questions for each general question

Select specific evaluation questions based on what you and other stakeholders want to find out. Follow the same list of considerations as given for selecting general evaluation questions in order to determine which specific evaluation questions to pursue.

Things To Remember

- 1. It is not necessary to construct a highly detailed description of your program. Listing the major program objectives should be enough to "kick start" the process of developing evaluation questions. As you develop your evaluation plan it will become evident which program objectives will require more attention to detail.
- 2. The goals of the evaluation reflect what the evaluation team wants to accomplish, which in turn reflects what the key stakeholders and other primary audience want and need to learn about the program.
- 3. Evaluation questions always need to relate to what key stakeholders and the primary audience wants to find out about the program as a result of the evaluation.
- 4. Delineate the goals of the evaluation clearly. The more clearly delineated, the easier it will be to write questions and formulate a design plan.
- 5. All evaluation questions must relate to how well the program is working in the school district.
- 6. Be prepared to refine specific evaluation questions as you work through the data design and collection phase of the evaluation project.

PHASE III

Designing A Data Collection Plan

The purpose of this phase is to design a procedure in which to collect the information necessary to answer selected evaluation questions. This section requires the most detailed planning. Now is the time to decide what relevant data should be collected in order to prevent the collection of useless information later. Remember to be flexible: although steps are laid out in sequence, earlier steps in this section may need to be revised as design issues are worked out in later steps.

Step 1: Determine what data must be collected in order to answer each evaluation question

- Create clearly defined measures that relate directly to the evaluation questions.
- Choose a means to compare the program results with non-program circumstance.

Step 2: Determine where to find the best source of data in order to answer each evaluation question

Decide from whom or where to get the necessary source of information.

Step 3: Determine how to collect the data

• Select the data collection procedure best suited to the needs of the evaluation project.

Step 4: Determine how much data to collect

Decide on sample size.

Step 5: Develop an analysis plan

• Make sure appropriate information is collected to answer specific evaluation questions.

Step 6: Determine when to collect the data

- Outline specific collection times.
- Determine latest possible completion dates.

Step 7: Attend to data collection issues

- Be aware of responsibilities to respondents.
- Determine who will collect the data.
- Keep track of data in an organized fashion.

NOTE

Each evaluation question must be answered in a way that ensures its:

- ✓ **Validity**: The extent to which your data collection procedures accurately measure what they are intended to measure.
- ☑ Reliability: The extent to which the data collection procedures, which include both the techniques to collect the data and the activities of the data collectors, produce consistent results each time the procedure is administered.
- ✓ **Credibility**: The extent to which you can prove that you are not fabricating your findings

Determine What Data Is Needed To Answer The Evaluation Questions



Data are facts, statistics, or other items of information that have to do with this evaluation. The types of data necessary for evaluation purposes will depend upon the program objectives and their related questions under investigation.

In general, data collected for questions about program implementation (processes or functions) tend to be descriptive. These include such information as number of participants or the amount of time spent implementing a certain activity. It may include teachers' opinions or written descriptions about the program, information that can be obtained from interviews with teachers.

An **indicator** is an empirical observation, or description, that signifies a relative change in the relationship being measured. Data collected for questions concerning participant outcomes can usually be counted and measured. Specific evaluation questions that concern an outcome ask about the change in a single indicator such as the difference in self-reported attitudes that exists between two administrations of a survey to the same respondents at different time intervals.

As the types of questions differ, so will the measures best suited for evaluation of the program

🖒 TASK

Create Measures of Program Implementation (Program Processes)

Implementation questions seek to measure the processes of the program. The evaluation activities surrounding this type of information will document how closely actual program implementation followed the initial design plan.

Implementation measures can focus on three different aspects of program functions:

- ▶ Level of effort: involves documentation of staff time and resources invested in the scope and frequency of services delivered.
- ▶ **Level of participation:** involves tracking program completion, attrition, and attendance rates among participants.
- Quality of program delivery: involves documentation of the history of the program with all its deviations from the design model.

Keeping careful records, or examining records already being kept as part of the program's administrative organization, will yield counts of deliverables and participants, etc.

Asking program staff more qualitative information about the process of the program functions during the school year, e.g., opinions on curriculum or activities delivered, and/or their self-perceptions of confidence in ability to implement services, will yield more contextual information that is not captured by administrative records.

Table 3.1 lists some types of general questions asked about program implementation objectives and the types of information collected as a result.

Types of General Questions	Type of Information Collected	Sources of Information
Is the program being implemented as designed?	Information on level of effort: the types of activities, services, or educational curriculum products being implemented; who received them, their duration and intensity	Information on services come from program records, or interviews with program staff
Is the program staff adequately trained to administer program components?	Information on level of effort: characteristics of staff, how they were selected, training they received	Information on staff come from program records, interviews with staff that administers the program or other program managers, training workshop evaluations
Who will participate? Is the targeted population being served?	Information on the level of participation: characteristics of the population, numbers of participants, how they were selected, attrition rates, etc.	Information on participant selection strategies come from program records and interviews with program staff or managers
What are some of the unanticipated outcomes of the activity?	Information on quality of program delivery: document history of how the program was actually implemented throughout the school year	Information on unanticipated outcomes can come from interviews with program staff, and participants, and parents;
What changes could the program make to better achieve its outcome objectives?	Information on the quality of program delivery: a compilation of the above types of information	Information on factors that hinder or promote program implementation come from interviews with relevant program staff

TASK Create Measures of Participant Outcomes

There are two general considerations to keep in mind when designing program outcome measurements.

- 1. Prevention programs focus on changing behavior in a target population over time and sustaining that behavior beyond the duration of the program. In some cases, the desired behavior may not show up in program participants for months or even years after program duration. This distance from the time of program involvement to the display of desired behavior would require a long-term assessment of individual program participants. Most school districts do not have the resources to conduct an evaluation that tracks the long-term participant outcomes of a single program. If it were a possibility, it would be an excellent behavioral change to measure.
- 2. Most locally funded evaluation efforts do not have the resources available to set up a true experimental design that controls for all variables (various contingencies or circumstances) in order to show causation. In other words, they cannot provide proof that the desired behavior is caused directly by the program. There are too many other external influences on participants to consider at one time.

The key for this level evaluation, therefore, is to discover if things got better or worse after the program was initiated. This can be accomplished by examining trends in behavior recorded in school discipline records or in self-report youth surveys, for example. By providing this early evidence, evaluators can demonstrate a link between participation in the program and actualization of desired behavior.

There are other related outcome measures that can be assessed immediately following participation in the program. Measures such as:

- skills gained,
- · knowledge gained
- changes in attitudes,
- changes in perceptions, and/or
- · changes in intentions.

These can be directly associated with immediate participant changes which resulted from program participation. These measures gauge a program's immediate effectiveness without waiting to measure changes in desired behavior. These measures are also very helpful in providing information for program improvement.

In deciding what indicators to use when accessing a programs's outcomes, be clear on what level and type of change the program seeks to prevent or promote. Make sure the constructed measure captures this information. For example, if evaluating an ATOD prevention program that aims to raise the initial age of first alcohol use, data collection must include a construct that measures first time use of alcohol.

Program outcome measures are typically assessed in one of these three ways:

- 1. **Self-Reports of program participants**: Self-reports are the most frequently used. Studies have shown that self-report survey data are valid and reliable enough to provide accurate estimates of drug and violence related behavior⁶.
- 2. **Other reports** such as parent questionnaires and/or interviews, police reports, school discipline referral data, institutional records. Record data is an adequate way to provide information, however, remember that not all behavior is captured in reports.
- 3. **Direct observation**: Direct observations can be valuable as an outcome measure in certain situations, but it is costly and time and labor intensive to capture frequency of overt and hidden illicit behavior.

Table 3.2 lists types of general questions asked about participant outcome objectives and the types of information collected as a result.

⁶ Hawkins and Nederhood, p. 35.

TABLE 3.2 Measuring Participant Outcome Objectives			
Examples of General Evaluation Questions	Examples of the Type of Information Collected	Examples of Sources of Information	
Immediate Outcomes: Is there a measurable difference in knowledge and/or skills participants gained after completion of the program?	 Measures might include indicators such as: Level of students' tested knowledge of program subject matter, and/or skills attained Student grades Performance on 	Gather information from such places as: • Program survey and/or program test results • Local school records	
Is there a positive change in participants' attitudes and perceptions about drug use after program participation?	achievement tests • Attendance levels • Promotion rates • Students' self-reported confidence pertaining to their knowledge, abilities, skills, and success immediately following the program and later in their lives. • Students' self-reported	Participant self-report surveys prior to and at exit of program	
Did some participants change more than others (across gender, race, and/or grade)? Why?	attitudes and perceptions immediately following program participation • Characteristics of target population	 School records Student survey items about student characteristics 	
Is there a measurable difference in violent occurrences after delivery of program services?	 Participants self-reported behavior after program completion School discipline referral data Local law enforcement data 	 Self-report surveys prior to and at exit of program Local school records Law enforcement statistics 	
Longer term outcomes: Is there a measurable reduction in violent behaviors (or drug use) among participants of this program compared to non-participants?	Comparison in trends of school discipline referrals and/or self -reported behavior	 School Environmental Safety Incident Reporting System (SESIR)* Florida Youth Substance Abuse Survey (FYSAS)* Florida Youth Tobacco Survey (FYTS)* 	

* See Appendix 3 for more specific detail on secondary data sources.



Build Baseline Standards for Comparison into the Design Plan

To report only measures of participant attitudes and behaviors at time of program completion offers limited information about the program's impact within a given community. In order to substantiate that participation in the program effected a change in its participants, the evaluation design plan must incorporate baseline standards with which to compare program outcome results. The aim of these comparisons is to demonstrate that program participation does have an impact on its participants. There are basically three ways to demonstrate this:

Standard for Comparison	Method of comparison	Baseline of Comparison
Compare program participants before program begins and again after program ends.	Pre and Post Tests: The pretest establishes a baseline of the specific item(s) being measured. This baseline is compared to a post-test measure of the change in participants after completion of the program across the same items.	Looking at same participants across two points in time. Can only draw conclusions about the program participants as compared with themselves before and after prevention service
Compare program participants with a selected group that has similar characteristics but does not receive the prevention service.	Use of a Comparison group: a pre-selected group with the same or similar characteristics as the program participants that do not participate in the program; measured on the same indicators as the program group.	Looking at two groups within the same timeframe. Can draw conclusions of program's impact on participants by comparing the rates of change between the two groups across the same indicators.
Compare program participants with the larger population of Florida youth at a specified point in time.	Use of Archival Data: examine specific indicators of the larger population from already existing data (for example, school discipline referral data); compare these with the same indicators of participants after completion of the program.	These already existing data sources survey all students, not just program participants; comparing changes in participant attitudes and behaviors with similar indicators of attitudes and behavior in the larger population surveyed at a previous point in time.

The evaluation design must build in at least one method of comparison.

- A pre and post-test design of program participants is one of the simplest forms of comparison. If this is the only method of comparison used, then further support your evaluation results with research from the literature which indicates that the program or the strategies used are already proven effective.
- ☑ Building a control group into the evaluation design can produce even stronger evidence of program effectiveness. Under laboratory conditions, establishing an "exact" comparison between a control group and an "experimental" group is possible; however, within a specific school environment, a control group may not be an ethical or practical possibility. Comparison groups, however, may be readily identified if there is another classroom or school with the same identified characteristics, e.g., grade level, associated risk and protective factors, as the targeted program participants.
- ☑ Finally, use of **archival data** provides a comparison between program participant outcomes and the corresponding attitudinal and behavioral trends of a larger specified population. This situates overall program impacts within a broader context.



Determine Where To Find The Best Source Of Data To Answer Evaluation Questions

Determining the type of data to collect depends on the availability of data sources.

Data can mainly be collected from two types of sources:

- 1 Primary sources: These are sources in which the information collected is directly for the purpose of the program evaluation. Program participants, program staff, parents, are examples of primary sources from which to gather data. Documentation of actual program implementation within classrooms must be collected from teachers. In this instance teachers are the primary source of program implementation information.
- 2 Secondary sources: These are pre-existing data sources in which data have been collected at a previous time for a purpose other than this evaluation project. Administrative or other records compiled for the program itself, either at a previous point in time or during the current program delivery are good sources of program implementation information. Pre- existing state surveys or discipline files are a good source of pre-existing data that may address program outcome objectives.

Which data source to use will depend upon its relevancy to the evaluation questions, its accessibility, as well as it's availability. **Collect both primary and secondary sources of information whenever possible.**

The following is a list of useful secondary data sources available for use:

- SESIR: School Environmental Safety Incident Report
- **FYSAS**: Florida Youth Substance Abuse Survey
- **YTBS**: Youth Risk Behavior Survey
- FYTS: Florida Youth Tobacco Survey
- · School Climate Survey: locally determined
- · Student Discipline Reports on suspension and expulsion
- School Discipline Reports: based on local discipline infractions

Refer to Appendix 3 for tables that chart these available secondary sources of information.

Determine How To Collect the Data



There is often more than one way to collect evidence (data) to accurately answer an evaluation question. It is always practical to choose an approach that is efficient and feasible.



Determine What Type of Procedure Is Best Suited to Collect Evidence for Questions of Program Implementation

Ttable 3.4 lists some methods of data collection most appropriate for the purposes of assessing implementation objectives. Remember, evaluation questions focus on how well the actual implementation of the program follows the program design plan.

Consider:

- What 'best practices' can be assessed from an evaluative study.
- What, if any, unanticipated outcomes resulted from program activities.
- What types of changes could be made to improve program delivery.

Evaluating program operations is more than a monitoring mechanism. It is a means to tell the story behind program delivery. Using more than one procedure to evaluate program implementation objectives will help capture the nuances of the program that cannot be found in administrative forms alone.

TABLE 3.4 Most Common Collection Techniques For Questions of Program Implementation

Procedure	Procedure General Purpose Advantage Drawback						
Interviews (I.e., telephone, face-to-face with an interviewer, open-ended response mailed survey)	To gather in-depth understanding of a respondent's experiences or impressions about program processes	Can gain a full range of detailed information	Can be time consuming to administer and analyze; can be costly				
Document Review	To gather information from existing records collected for program administration purposes	The information already exists; it is the least expensive procedure	Information may be incomplete, inaccurate, or out of date				
Observation	To gather detailed information about participants' behavior during program implementation; to gather detailed information on various processes of program delivery	Can gain very detailed information about the actual implementation of program processes	Can be expensive, requires more extensive training of the observer, can be difficult to analyze				
Case Studies	To gather specific information about a single unit within the study, e.g., the actual implementation of the program within one school	Can gain a very comprehensive understanding of the actual implementation of the program	Very time consuming; can be expensive; not easy to generalize across other units under study				

TABLE 3.5	Most Common Collection Techniques For Questions
	of Program Outcomes

Procedure	General Purpose	Advantage	Drawback
Surveys, questionnaires	To get abundant information from respondents in a non-threatening way	It is relatively inexpensive. Many sample surveys already exist. Easy to compare and analyze as numerical data. Easy to administer to lots of people.	Must pay careful attention to proper sampling procedures in order not to compromise validity. Does not capture all the detail.
Document Review	To gather existing data such as surveys or reports collected from outside agencies	The information already exists; it is the least expensive	Information may be incomplete, or inaccurate; many of these data sources survey all students not just program participants.
Observation	To gather detailed and accurate information about a participant's behavior	Can gain very detailed information on occurrences of certain behaviors	Can be expensive; requires more extensive training of the observer; can be difficult to analyze; may not capture information that would be captured in self-report surveys.
Tests	Used to assess skills, knowledge, and attitudes after participation in the program	Pre and post tests can be obtained from the program developer or other reliable evaluation sources	Must pay careful attention to proper sampling procedures. Does not capture all the detail.



Determine What Type of Procedure Is Best Suited to Collect Evidence for Questions About Program Outcome Objectives

Collecting information from primary sources such as students in the program and students assigned to the comparison groups is most often done through surveys. For many prevention programs, there already exist survey instruments that have been proven reliable. Whenever possible, choose one of these already existing instruments that is applicable to the evaluation at hand.

Collecting information about trends in student behavior such as discipline referrals is most often done by document review. Table 3.5 lists a few of the data collection methods most often used to measure changes in participants' knowledge, skills, perceptions, attitudes, intentions and behaviors.

Questions to consider in selecting a method for collecting evidence (data)

- Who are your respondents, and what is the most non-threatening way to get information from them?
- What is the most practical and efficient procedure to use without sacrificing the accuracy of the information collected?
- Will the method you choose get all the information you need?
- How accurate will the information be from the method you select?
- Will the information collected from this method answer the questions you are asking?
- Will your audience see this information as credible and useful?
- Who can collect this data using this method?
- What training is required for data collectors?
- Do you have enough time to accurately collect your data using this method?
- Is this method the least disruptive to program operations?



Determine How Much Data To Collect

The sources of information from which the data is collected are made up of the members or elements that are collected individually and then assessed as an aggregate. The entire group of members or elements, together, is called the **population**. For example:

- ► The target population of student respondents would consist of all program participants within a given school district.
- ➤ The target population of program staff respondents would consist of all teachers and other program administrators participating in the delivery of program services within a given school district.
- ▶ The population of discipline referrals for a school would consist of discipline referral records for all students in that school.

It is not always necessary to collect data from the entire population of respondents or other secondary data source. If the population is large enough, it is sufficient to collect the data from just a portion as long as it is done in a manner that obtains the same evidence as with the entire population.

The decision whether to evaluate the entire population or just a portion ought to be based on a number of considerations:

- The size of the population: it may be too difficult to collect data from a large population.
- The information to be gained or lost: the population may be too small from which to draw a sample that would provide significant conclusions about data collected.
- The available resources: the resources used in financial cost, labor, time, and equipment to collect and analyze information may necessitate evaluating only a sample of the population.

Task Select a Sample Size, If Necessary

When it is too difficult or not necessary to collect information from an entire population, it is possible to work with a portion of that population. This is called a **sample**. Most evaluators use a sample. Sample selection is a technical procedure that requires much time and effort to explain in its entirety⁷. The main objective of sampling is to ensure that the population characteristics important to the focus of the evaluation are represented in the sample drawn.

There are three types of sampling strategies applicable for this study:

- ▶ Random sampling: Drawn from the list of members or elements of the target population, this selection process is based on a random selection procedure likened in theory to putting all names into a hat. It avoids any conscious or unconscious biases in selection on the part of the evaluator. There are various probability-sampling procedures that give all members of the population an equal chance of being selected so that the sample will be representative of the population from which it is selected. Therefore, evaluation findings from the sample can be generalized to the larger target population.
- ▶ Weighted sampling: If members of a population have unequal chances of selection into the sample, then steps can be taken to improve the probability of their selection. This can be useful if there are certain population characteristics of particular interest in the evaluation. It may be appropriate then to sample subgroups of the target population disproportionately to ensure sufficient number of cases from each for analysis. Keep in mind that analysis of findings must take into account the differential representation of subgroups.
- ▶ Convenience sampling: There are instances when the chosen sampling procedure is based on non-probability methods of selection. A sample may be chosen on the basis of convenience, accessibility, or particular interest in a specific subgroup within the target population. It is important to explain clearly the rationale and the criteria for this method of sample selection. When using a non-probability sampling procedure, it is important to understand that often findings based on the sample cannot be generalized beyond that sample to the larger population. In gen-

⁷ For more information, refer to the additional resources listed in Appendix 4.

eral convenience sampling methods are regarded as less reliable than methods based on probability. On the other hand, they are often easier and cheaper to use.

No matter the sampling method used, a perfect representation of the population can never be achieved. There will always be some degree of sampling error. Probability sampling methods make it possible to estimate the degree of sampling error. This is important to know when making inferences to the larger target population.

🖒 Task

Keep Sampling Selections Congruent Across Data Sources

Depending on the evaluation questions, there will be more than one population to collect data from. Schools, students, teachers, and documents for review all comprise separate populations from which to draw samples. Although different sampling techniques may be used for each population, they need to be drawn in concordance with each other. For example:

- ▶ Draw samples from program participant population and corresponding comparison group population in the same fashion across all selected schools under evaluation.
- ▶ If drawing samples of both students and program staff, make sure to draw samples from the same schools. Note that sampling procedures used for students do not need to be the same as those used to draw a sample of program staff. Information gathered from each type of respondent will be used to answer different evaluation questions.
- ▶ Documents to be selected for review must be chosen in the same manner across all selected schools. In addition, document review must take place within the same schools in which students are part of the evaluation.



Make A Data Analysis Plan Before Data Collection Begins

It is very important to make a plan of how data will be analyzed before collection procedures begin. For example, in order to test for a difference in attitude changes between adolescent boys and girls, a gender item must be included on the self-report survey of participants. A plan will assure that the information needed to answer specific evaluation questions will be gathered.

When preparing an analysis plan, consider the following items for each general evaluation question:

- Who will be interested in your results?
- What descriptive information will you want to report? For example, which characteristics, such as gender, ethnicity, age, grade, etc. are relevant to the evaluation questions under study?
- How will you use selected baseline data to present comparisons with the data collected in the evaluation? For example, the Florida Youth Substance Abuse Survey (FYSAS) contains questions pertaining to 30-day use of alcohol, tobacco and other drugs for 6th through 12th graders. In order to examine a rate of change in the same behaviors among program participants as compared to the rate reported in the FYSAS, data must be collected from participants about their own 30-day use of the same substances.
- How will you measure statistical significance in your outcome data?
- How will you present the information collected about the implementation of your program? Will it be in a narrative form?
- How do you initially plan to display data?

As you develop your data analysis plan, also keep in mind your specific evaluation questions. For every indicator you are measuring, make certain you have a reason to analyze it.

Determine When To Collect The Data





Create a Timeline or Schedule of Collection Intervals and Completion Dates

Planning a timetable depends upon the time and resources available for the evaluation, as well as the logical considerations of program implementation delivery schedules.

Worksheet 3.1 Timetable of Collection Activities				
Data collection activity	When will the data be collected?	How much time do you have for follow- up collection activities?	When must data collection be completed?	
1.				
2.				
3				



Decide How Often Data Should be Collected for Each Specific Evaluation Question.

For example:

- ▶ When interviewing teachers or other program staff, decide when to collect interview information: at the end of the program or at one or more times during the course of the program.
- ▶ When collecting information from program administrative records, decide when to gather information: on a weekly or monthly basis.

Allow plenty of time for completion of data collection.

- ▶ Plan enough time for unforeseeable problems.
- ▶ Be aware of school schedules and program delivery schedules in order to avoid missed opportunities.
- ▶ Plan time for follow-up data collection activities.

Attend To Collection Issues



There are a number of additional elements that must be considered when designing an evaluation plan.

🖒 Task

Responsibilities to the Respondents

- Obtain the proper clearances and consent forms as necessary or required by statute, policy, or law.
- Take into account ethical considerations, such as privacy to respondents, etc.
- Be aware of the needs and sensitivities of the respondents, such as cultural differences, and/or issues of confidentiality

🖒 Task

Manage and Organize the Procedures of Data Collection

- Assign an individual(s) to take responsibility for each component of the data collection activity.
- Select and train data collectors.
- Pilot test selected survey or interview collection instruments.
- Develop a tracking system for data collection activities. This includes using identifier codes on surveys or interview instruments. It is important to know where the information came from while still maintaining anonyminity when necessary.
- Store data in an organized fashion
- Decide how to handle circumstances that might create error in sampling or other collection procedures.
- Monitor the data collection process regularly.

For each general evaluation question list the specific question and answer the following:

Worksheet 3.2 Evaluation Plan Design Matrix

Evaluation you use to answer you use to get procedure will the constitution: Question: your question? your data? you use to be					
	Evaluation	you use to answer	you use to get	procedure will you use to collect this	When will the data be collected

Worksheet 3.2, continued Evaluation Plan Design Matrix

General Evaluation Question: Do you foresee any potential Who will collect Who is primarily What is your the data? interested in this analysis plan? problems? Can you see how information? to get around these?

Things To Remember

- 1. Each district's plan will be unique. Each district's data collection specifications will depend entirely upon the evaluation questions and the techniques chosen in the evaluation plan.
- 2. Invest heavily in planning! Not only will it ensure a better product, but it will also make data collection and report writing flow much more smoothly.
- 3. With each question, consider the resources available; consider cost, quality, labor, technological equipment, organization, time, effort, and skill level of the evaluator. You do not want to gather a massive amount of data and not have the funds or qualifications to analyze it properly.
- 4. Collecting evidence to answer specific evaluation questions must be accomplished systematically using reliable instruments of measurement. Collected correctly, their purpose is to ensure the reliability with which data are gathered and/or measured.
- 5. The validity of the collected data depends upon the assumption that the created evaluation measures are accurately measuring what they intend to measure.
- For more specific and detailed instructions on particular data collection techniques, refer to Appendix 4 for some additional resources that go beyond the scope this handbook.
- 7. You know you are finished with this phase when your design plan demonstrates congruity and when your instruments of measurement and corresponding data sources will in fact answer the evaluation questions you have selected.

PHASE IV

Analyzing And Interpreting The Data

Now is the time to make sense of all the data collected. It is important to organize collected data in a manner in which numerical information can be grouped, descriptive information can be summarized, and trends can be identified. Cleaning and coding data can begin before all collection activities are completed.

Step 1: Clean the raw data

- Check data for errors.
- Put aside unreliable and invalid data.

Step 2: Analyze program implementation data

- Code and categorize raw data.
- Review and summarize descriptions about program processes.
- Answer evaluation questions.

Step 3: Analyze data relating to participant outcomes

- Code data.
- Conduct descriptive analysis of raw data.
- Answer evaluation questions.

Step 4: Integrate and synthesize findings of the analysis

- Link patterns found in program implementation data with patterns found in program outcome data.
- Build tables and graphs to summarize findings.
- Decide what information is relevant.

NOTE

Since evaluation projects will differ across districts, this handbook will only outline broad analytical procedures. Refer to Appendix 4 for sources listing more detailed information.



Clean The Raw Data

Raw data are the unchanged pieces of information that have been collected from or about students and teachers and/or other program staff.

Raw data include:

- Demographic information, e.g., gender, age, ethnicity, etc.,
- Test scores,
- Grades,
- School attendance and disciplinary records,
- Survey results (Pre and post test scores).

Before any type of description or analysis can begin, the data must be checked for errors. This is referred to as **cleaning the data**. It will require a visual inspection of completed surveys and interviews, school records or other documents under study.

Data cleaning includes asking:

- Are surveys filled out correctly, e.g., is there only one answer per survey question?
- Are survey, interview, and other document materials identified by school location or some other chosen identifier?
- Are interviews completely filled out? If hand written, are they legible?
- Are already existing document records complete and accurate?

Inaccurate or incomplete data must be corrected by gathering follow-up information when possible. Data that cannot be cleaned should be set aside. It is no longer valid. For example, an item on a student survey in which two responses were chosen where only one is needed makes that data item useless. It is not known whether the double response was accidental or intended; it is not possible to know which of the two answers would be the correct one.

Keep a record of the set aside data that cannot be used in the analysis. It will be necessary to report the original sample size that is determined after the data has been cleaned.

Step 2

Analyze Program Implementation Data



Raw data dealing with program processes should be coded, organized into categories, summarized, and interpreted in order to answer evaluation questions. The objective is to compare the program design plan with the actual delivery of the program. This comparison provides a way to determine whether program implementation objectives were met, and if not why.

1

Task

Code Raw Data

To code data is to assign a numerical value to each response of every question on a survey, interview or other data collection instrument. The number assigned to each response of a question represents the answer. The assigned number can have a numerical value as in an age question or it can be representative in name only such as answer categories listed for questions asking for opinions.

- ▶ Data that can be tabulated numerically should be entered into a database or spreadsheet. This information comes from questions such as: "How many students were served?" "How much time was actually spent on program curricula within the classroom?" Responses to questions such as these can be easily coded into a database.
- ▶ Data derived from scaled-item responses can be assigned a numerical value and treated in a rank order fashion. In an opinion scale, for example, the response 'strongly agree' might be assigned the number 1, 'no opinion' the number 0, and 'strongly disagree' the number 5.
- ▶ Narrative data derived from face-to-face interviews with teachers or from teacher survey questions with open-ended space for answers should be compiled in some fashion. Response information can be sorted into broad categories. If appropriate to the design plan, these categorizations can be further assigned numbers and then coded into the database.

Task Conduct a Descriptive Analysis of Raw Data

After data have been cleaned, coded and/or categorized, describe the data in summary form:

- ▶ Describe your sample or population. How many respondents are represented in this data? Run frequencies to count respondents by pertinent characteristics such as the number of teachers interviewed per school. If you are working with a sample, is it representative of the larger target population (the total number of teachers who implement the program)? Do any anomalies exist?
- ► Create frequency counts that answer evaluation questions concerning the number of participants served, the number of participants completing the program, the amount of time spent on delivery of activities, etc.
- ▶ Report numerical information in the form of rates, e.g., rate (i.e., per 1000) of attendance, rate of program completion, rate of teacher opinions, etc. It makes it easier to identify patterns that will emerge when further analyzing data.
- ▶ Review non-numerical data. If responses deal with idiosyncrasies or glitches observed throughout the program delivery process, describe them in narrative form.



Answer Evaluation Questions and Look For Emerging Patterns

Were implementation objectives met? Why or why not? This is the crux of this part of the analysis. Look for patterns that identify elements of 'best practices' and hindrances or other barriers encountered:

- ▶ The identification of differences between the actual delivery of services and the program design plan is of significant importance. Differences point to reasons why implementation objectives were met or not met.
- ▶ Numerical data can be reported in the form of charts, tables, or graphs. Good visual representations offer a lot of information quickly.
- Non-numerical data can be reported in the form of a narrative. Tell the story of how the program was actually implemented including all the deviations from the intended design plan.

Step3



Analyze Data Relating To Participant Outcomes

In large part raw data pertaining to participant outcome information will be numerical in form. Analysis will, therefore, largely consist of *number crunching*. The overall objective is to capture any changes in participant knowledge, skills, perceptions, attitudes, intentions, and or behavior as a result of program participation.

Task Code Data

It is most useful to code data and enter it into a **database**, even if the quantity of data is very small. After checking the data for errors, choose a way to code it. Every possible response for each question on a student survey or other data collection instrument must have a distinct assigned number that represents that answer. Do not repeat assigned numbers within the same question. Frequencies tabulated on responses to a given question count the number of times each answer appears.

Task Conduct a Descriptive Analysis on Raw Data

Once the raw data has been entered into a database, summarize it:

- Count the number of respondents surveyed.
- Run frequencies to count respondents by age, ethnicity, gender, grade level, etc. Is the sample of respondents representative of the target population? Do any anomalies exist?
- Make frequency counts of answers to survey questions.
- Sort answers to survey questions (items) by group characteristics such as gender, ethnicity, age, school, etc.
- Create tables comparing the results from pre and post test responses across various items on the survey.
- Convert number counts into percentages. A percentage reports what portion of the population is involved in the behavior or other measured item.

Report measures of central tendency. These are measures of average rates in a given population, i.e., the mean, median, and mode of number of participants smoking cigarettes in the last 30 days.

These types of summary descriptions present the data in a format that can make patterns more readily apparent. As stated earlier, tables, graphs, and charts are good visual representations that offer a lot of quick information.

Task Answer Evaluation Questions and Look for Emerging Patterns

What program outcome results can you identify? Do they meet the program's expected outcome objectives? Why or why not. And, do these results indicate whether ATOD use and/or violent behaviors are increasing or decreasing within the district? These are the most important questions of this section of the analysis. Answering these questions as well as the specific evaluation questions will require:

- ► Looking for patterns that demonstrate changes in participants as a result of program participation;
- ► Looking at baseline and comparison data and comparing these with program outcome results;
- ▶ Looking at individual participants as a group or a subset of groups (i.e., a particular school) to determine whether or not, as a group, program outcome objectives were met.

Analyzing comparison data will show whether things are getting better or worse. Items to compare include:

- ▶ A comparison between pre and post test survey results across specific items of information.
- ► A comparison of program outcome results on specific items of information with previous years evaluation studies. Be sure items have been measured in the same manner.
- ▶ A comparison of program outcome results with local or state aggregate data collected on same items of information. For example, past 30-day use of marijuana.

Task: Perform Statistical Measures, When Appropriate

There is no scientific formula to specify whether a given association (an identified pattern) is substantively significant, strong, and important. Whether it is worth reporting ultimately rests on what the evaluation committee intends to report to its audience. There are, however, statistical measures that establish the credibility of identified patterns found within the data at hand.

There are two levels of statistical measures to be considered in order to further substantiate any identified patterns under analysis.

Measures of Association: These are a class of statistical computations and techniques that summarize the relationships (identified patterns) under study. What is important to remember is that any conclusions drawn from these analyses make no assertions beyond the data at hand. For example, to demonstrate that the changes in attitudes and/or behavior observed in the initial analysis occurred not because of errors in the sample drawn but because of participation in the program, certain statistical procedures could be used to assert that these observed patterns within the sample did not happen by chance or by some other influence.

Tests of Statistical Significance: These tests estimate the unlikelihood that a pattern identified in the sample could be attributed to sampling error alone. Such tests can only be applied to samples based on random and representative sampling strategies; they do not hold for samples drawn on the basis of convenience. Tests of significance are used to estimate how much the identified patterns within the sample surveyed are generalizable to the larger target population from which the sample was drawn.

For example, if initial data analysis shows that self-reported past 30-day use of marijuana has declined from 15% to 14.2% over the past year, simply reporting the .8% difference is meaningless by itself. In order to make a claim that this observed decrease in marijuana use within the sample could be generalized to the larger target population, it must be substantiated by a statistical test of significance.

The complexity of the statistical procedures used depends entirely on the capabilities of the person(s) analyzing the information. If no one on the evaluation team is skilled in measures of statistical analysis, then it is recommended that someone with the necessary skills be hired for this purpose.

⁸ Babbie, (1992) The Practice of Social Research. 6th ed. p.G8.

Step 4

Integrate And Synthesize Findings Of The Initial Analyses



The summaries of information and the display of patterns for separate items of information must be pulled together into a larger analysis. Of particular relevance is to link analysis of program implementation data with analysis of program outcome data. It is important to be able to tie together what program processes facilitated or hindered the desired program outcomes.

Task:

Build Summary Tables and Graphs of Findings

Build a summary table of findings. For example9,

Worksheet 4.1 Summary of Findings						
Specific question	Gist of the information collected	Presence of/ absence of differences	Possible reasons for change	Barriers encountered	Factors that facilitated	

⁹ The Administration of Children Youth and Families (n.d). *The Program Manager's Guide to Evaluation*, Chap 8.

Task: Decide What Information is Relevant

When analyzing data, evaluators generally learn much more than they set out to learn. Unanticipated relationships might emerge, but remember to stay focused on the task at hand. **Answer your evaluation questions first**. Working on information that is outside the scope of your immediate questions is a separate task and should be set aside until the evaluation goals have been met.

Things To Remember

- 1. Routine monitoring of data collection will reduce the amount of raw data "cleaning" required.
- 2. Do not lose focus on the evaluation questions.
- 3. Select tables, graphs, and charts for further analysis that display the strongest relationships, patterns or indicators.
- 4. Do not confuse statistical significance with substantive significance; the latter meaning that an identified pattern or relationship is important and worthwhile to report.
- 5. Statistical tests of significance are useful procedures in the analysis and interpretation of data. However, be careful of trying to interpret statistical results too

PHASE V

Reporting The Results Of Your Evaluation

The final report must effectively communicate the results of the evaluation project to the intended audience.

Step 1: Decide what information to include

- Answer your evaluation questions.
- Include the most relevant information.

Step 2: Write the final report

- Review the sample outline.
- Draft an outline compatible to your evaluation project.

NOTE

A large part of the substantive findings concerning the implementation aspects of the evaluation will have already been written during the course of the evaluation project such as:

- Background information, program design details, and goals of the evaluation: These were identified in Phases I and II.
- Documentation on evaluation activities: The more attention paid to detail in record-keeping, the more information there is to describe evaluation procedures.

Step 1



Decide What Information To Include

The information amassed by the end of the data collection and analysis phases may likely exceed the scope of the intended evaluation. To keep the final report meaningful and relevant, stick to answering the evaluation questions. Additional information, deemed noteworthy, may be reported in an appendix or included in interpretive discussions.

It is not necessary to report every minute detail from the findings of the analysis. Decide what is relevant information worth discussing. Report the strongest indicators even if the findings were unexpected.

Report to the intended audience:

- ☑ What your evaluation set out to find.
- **☑** What you actually found.
- ☑ What you think these findings mean to your audience

The findings should include:

- ✓ A documentation of what actually happened in the program;
- ✓ A description of which strategies worked best in the program;
- ☑ An analytical review of how well program outcome objectives were met.

Step 2

Write The Final Report



Writing the findings and conclusion sections of the report may seem the most challenging since this is one of the last activities of the project. If you have kept your focus throughout the project on:

- clearly outlined program objectives, and evaluation goals,
- specifically measurable evaluation questions,
- well organized data collection techniques, and
- a targeted analysis,

then writing these sections shouldn't be as big of an effort as it may seem.

Sample Outline for the Final Report

Executive Summary

Usually written last, it should be a non-technical overview of the evaluation, its findings, implications and conclusions. It is usually 1-3 pages.

Introduction

- 1. Begin with a list of the goals of the evaluation and the rationale for choosing these goals. If necessary, this may include an explanation of what was not intended to be accomplished within the scope of the evaluation.
- 2. State general evaluation questions.
- 3. Provide a background of county information, including assessed risk and protective factors.

- 4. Provide a summary history of the program's implementation in the county, including the rationale for its implementation.
- 5. Define the program. Refer to Phase II, Step 1. Include:
 - Overall program mission or goal;
 - Target population, schools that administered the program, and how these were selected;
 - Program design, plan, and components: this will include program implementation objectives such as planned activities, delivery specifications, planned target population, program staff selection and training;
 - Materials and resources necessary for the program delivery;
 - Program outcome objectives expected for each component of the program as stated in the design plan;
 - Program outcome objectives expected as stated in the SDFS grant proposal.
- 6. Give the rationale for evaluating this program.
- 7. List notable constraints to the evaluation project (e.g., not able to establish a comparison group or, only focusing on one component of program)

Description of the Evaluation Procedures

- 1.A brief description of general procedures including the members of the evaluation team, each members' general responsibility, and the record keeping mechanisms used.
- 2. Provide an outline of the design plan.

<u>Description of Procedures and Findings for Each General</u> Evaluation Question

- 1. State the general question and provide a statement of the findings. Include whether they were expected or unexpected.
- 2. Provide a description of data collection procedures. Every step of the evaluation process should be described. This lends credibility to and substantiates the findings. Tell exactly how the information was obtained. For each specific evaluation question include:
 - The methods used and the types of data collected,
 - A description of data collection technique used,
 - A description of data sources,
 - A description of sampling procedures.
- 3. Provide a description of data collected.
- 4. Provide a description of data analysis procedures.
- 5. Detail a description of results of the analysis.
 - For evaluation questions concerning implementation this can be written as a story or narrative. Include tables and/or charts if they are helpful.
 - For outcome evaluation questions, include charts, tables, and graphs as a way to quickly display results.
- 6. Make a statement(s) about the findings with respect to each specific evaluation question.
- 7. Make a statement regarding the factors that may have affected evaluation findings with respect to the program and with respect to the evaluation project.

Conclusions and Recommendations

- 1. Include interpretation of results for each evaluation question.
- 2. Discuss issues of program effectiveness and link implementation strategies with outcome results.
- 3. Discuss other pertinent issues.
- 4. Make recommendations.

Things To Remember

- 1. Start early.
- 2. Stay focused on answering the evaluation questions.
- 3. Tell the story of the evaluation using a mix of narrative description and statistical analysis.
- 4. Make the report concise and readable.
- 5. Report strongest findings.
- 6. Present summary tables and graphs that summarize the narrative where pertinent.
- 7. Summarize with program assessment statements throughout the report.
- 8. It may be helpful to present a draft version of the report to prospective audience or your colleagues to get feedback.

APPENDICES

APPENDIX 1

Principles of Effectiveness

The *Principles of Effectiveness (Principles)* were developed by the U. S. Department of Education's Safe and Drug-Free Schools (SDFS) Program and were codified by law with the passage of the "No Child Left Behind of 2001." From their beginnings, they were designed to help teachers, school administrators, and prevention program developers achieve safe learning environments where students are free from fear of violence and the influence of drugs. The *Principles* state that SDFS programs and activities must:

Principle 1: Conducting Needs Assessment

Based on an assessment of objective data regarding the incidence of violence and illegal drug use in the elementary schools and secondary schools and communities to be served. The assessment of the objective data includes: an objective analysis of the current conditions and consequences regarding violence and illegal drug use, including delinquency and serious discipline problems, among students who attend such schools (including private school students who participate in the drug and violence prevention program) that is based on ongoing local assessment or evaluation activities.

Principle 2: Setting Measurable Goals and Objectives

Based on an established set of performance measures aimed at ensuring that the elementary and secondary schools and communities to be served by the program have a safe, orderly, and drug-free learning environment.

Principle 3: Effective Research-based Programs

Based on <u>scientifically based research</u>* that provides evidence that the program to be used will reduce violence and illegal drug use.

Principle 4: Program Evaluation

Based on an analysis of the data reasonably available at the time, of the prevalence of risk factors, including high or increasing rates of reported cases of child abuse and domestic violence; protective factors, buffers, assets; or other variables in schools and communities in the State identified through scientifically based research.

Principle 5: Parental Involvement

Include meaningful and ongoing consultation with input from parents in the development of the application and administration of the program or activity.

*Scientifically Based Research

The term "scientifically based research" as defined in the *No Child Left Behind Act of 2001 (NCLB)*, means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and

It includes research that —

- 1) employs systematic, empirical methods that draw on observation or experiment;
- 2) involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
- 3) relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;
- 4) is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the condition of interest, with a preference for random-assignment experiments, or other designs to the extent that those designs contain within-condition or acrosscondition controls;
- 5) ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at minimum, offer the opportunity to build systematically on their findings; and
- 6) has been accepted by peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

APPENDIX 2

How to Hire An Evaluator

Determine the Evaluator's Role

Role of the Evaluator					
Type of Evaluator	Role	Advantage	Disadvantage		
External evaluator: Contracted from outside the district office	May be in charge of conducting the entire evaluation project, or major portions of it.	May have access to more resources (e.g., additional staff, computer equipment); should bring a neutral perspective to project; should possess expertise in evaluation methods	Potentially limited knowledge in SDFS project history and politics as well as program history and functions resulting in an ineffective evaluation design.		
Internal evaluator: someone with evaluation experience already on the staff or within the school district staff	May be in charge of the entire project or just a portion of it. Will need to work with an evaluation team for additional support.	This person is more familiar with the program and district characteristics. This person may be in a position to get more informal feedback throughout the evaluation process.	An internal evaluator with too much of a vested interest in a particular outcome may inadvertently bias the evaluation.		
External evaluator as consultant	Can work with the evaluation team in developing an evaluation plan; can design the data collection instruments; can be available for troubleshooting problems that may arise.	This is a less expensive way to have access to technical expertise where needed.	Depending upon your ability to communicate with the consultant, this person may be too distant from the informal processes of the evaluation to effectively help you.		

Where to Look for An Evaluator

Contact the education, sociology, psychology, or administration departments of a nearby university or college. You may find a faculty member who has experience in evaluation, or is affiliated with an evaluation-consulting firm, or who can recommend a name to you.

Contact national advocacy groups or local foundations that do work in similar fields as you. These groups may be able to provide you with a list of evaluators in your area. See for example, *The Evaluation Resource* page of The United Way Website: http://national.unitedway.org

Contact Professional Associations such the American Evaluation Association, or the American Sociological Association. Again, these professional associations may be able to provide you with a list of evaluators in your area.

Contact private research firms or consulting firms, or other independent contractors. Many of these firms offer evaluation as part of their services.

Check with the evaluation divisions of state and local agencies. They may be able to provide you with names, or with actual support staff.

Get personal recommendations from others who have used evaluator services for similar projects.

Peruse other evaluation reports. Look at recent evaluation reports similar to what you want.

When to Hire An Evaluator

The sooner the better; early involvement on the part of the evaluator facilitates a better understanding of the program and the purpose of the evaluation project.

Request for Proposal (If necessary)¹⁰

Once you have determined the purpose of your evaluation project, you are ready to develop a request for evaluation. In Florida, the service procurement document may take the form of a less formal "invitation to negotiate" or a more formal "request for proposals" (or some form). Check with your procurement office to determine which approach you should use. The RFP is designed to solicit written evaluation proposals from which you can select the best candidate. It will follow your purchasing guidelines and should include a statement of the evaluation focus, scope of work, and any other requirements. It should also include a description of the overall purpose of your prevention program, an estimate of available evaluation funds, and a list of proposed deliverables.

The RFP should require evaluators to include several main sections in their evaluation proposal:

- Statement of purpose,
- Statement of program goals and objectives that are relevant to the focus of the evaluation,
- Statement of proposed evaluation questions,
- Proposed methodology (procedures) for addressing evaluation questions,
- Proposed timeline of evaluation activities,
- Proposed deliverables,
- Proposed budget.

The Selection Process

These are some of the basic qualifications an evaluator should possess:

- Some formal training or experience in evaluation activities,
- Some educational background related to evaluation,
- The ability to communicate well with other members of the evaluation team,
- Personal style or characteristics that fit with your organization,
- The ability to be flexible with in using various methods of evaluation design and data collection appropriate to the specific circumstances of the program and the district it is being implemented within.

¹⁰ Excerpted from Florida Department of Health (2000) *How to Hire An Evaluator For Your Tobacco Prevention and Control Program* p.2-3

During the interview process:

- Review the applicant's proposal. Judge how well the applicant understands the program, and the focus of the evaluation.
- Examine previous reports authored or directed by the evaluator. Assess them for clarity, readability, and organization.
 A poorly written report or one that is difficult to understand is a definite warning sign.
- Contact references obtained from the evaluator.
- At the time of interview get a sense of the evaluators communication skills, and general repore with the evaluation team.

Responsibilities to Consider for Inclusion in a Contract

A contract whether official or not must take into account the responsibilities of the coordinator as well as the evaluator. When drawing up a contract, consider the following responsibilities.

Potential Responsibilities of the Evaluator:

- Develop an evaluation plan in conjunction with the evaluation team.
- Attend evaluation team meetings and other pertinent staff or program meetings.
- Provide monthly or quarterly progress reports to the evaluation team (written or in person).
- Train project staff on topics such as using evaluation instruments and other information collection activities.
- Design and/or select the data collection instruments.
- Establish and oversee design and collection procedures to ensure issues of validity and reliability.
- Serve as a troubleshooter for evaluation activities.
- Analyze data.
- Write the final report.

Potential Responsibilities of the Coordinator:

- Oversee the entire evaluation project.
- Educate the outside evaluator about program operations and objectives, target population, other issues pertinent to the program, the school district, and the evaluation project itself.
- Work closely with the evaluator in developing the scope of the evaluation and the general evaluation questions.
- Provide input during the evaluation-planning phase.
- Keep outside evaluator informed about changes that may occur within the scope of the evaluation or concerning the program itself.
- Ensure that program staff is fulfilling their responsibilities.
- Provide feedback to evaluator on all evaluation activities.
- Monitor the evaluation contract and completion of evaluation work and deliverables.
- Serve as a troubleshooter in resolving evaluation team problems or agency problems that may arise.
- Assist in interpreting evaluation findings.
- Specify information the evaluator should include in the final report.

APPENDIX 3

Useful Secondary Data Sources

Levels of Data				
Source	Туре	State	County	School
SESIR School Environmental Safety Incident Report	Total Incidents	✓	✓	✓
FYSAS Florida Youth Substance Abuse Survey	Sample Survey	✓	✓	
YRBS Youth Risk Behavior Survey	Sample Survey	✓		
FYTS Florida Youth Tobacco Survey	Sample Survey	✓	✓	
School Climate Survey	Survey		✓	✓
School District Discipline Records	Total Incidents		✓	✓

FLORIDA YOUTH SURVEY EFFORT

Years in which and Levels at which the Various Surveys are Administered

Survey	2000 County/State	2001 State	2002 County/State	2003 State	2004 County/State
FYSAS Florida Youth Substance Abuse Survey	✓	✓	✓	✓	✓
YRBS Youth Risk Behavior Survey		✓		✓	
FYTS Florida Youth Tobacco Survey	✓	✓	✓	✓	✓

Content of Various Surveys					
	SESIR	FYSAS	YRBS	FYTS	
Type of Data	Actual Incidents	Reported Behavior	Reported Behavior	Reported Behavior	
Substance Use	✓	✓	✓	✓	
Violence	✓	✓	✓		
Tobacco	✓	✓	✓	✓	
Weapons	✓	✓	✓		
Delinquent Behavior	✓	✓			
Antisocial Behavior	✓	✓			
Risk/Protective Factors		✓			
Suicide			✓		
Sexual Activity	✓		✓		
Accidents & Injuries			✓		
Dietary Behaviors			✓		
Physical Activity			✓		

DATA SOURCES FOR STATE GOALS: ATOD Prevention

Data Element	FYSAS Florida Youth Substance Abuse Survey	
Alcohol	Current use, gr. 6-12	
	Binge drinking, gr. 6-12	
	Age of first use, gr. 6-12	
Tobacco	Cigarettes, current use gr. 6-12	
	Smokeless tobacco, current use, gr. 6-12	
	Age of first use, gr. 6-12	
Marijuana	Current use, gr. 6-12	
	Age of first use, gr.6-12	
Other Drugs	Current use, gr. 6-12	

DATA SOURCES FOR STATE GOALS: Violence Prevention

Data Element	SESIR School Environmental Safety Incident Report	FYSAS Florida Youth Substance Abuse Survey	YRBS Youth Risk Behavior Survey
Fighting	Incidents, PK-12		
Battery	Incidents, PK-12	Students, grades 6-12, who reported attacking someone with the intention of hurting them (past 12 months)	
Threats & Intimidation	Incidents PK-12		
Weapon Possession	Incidents PK-12		Students, gr. 9-12, who reported someone had threatened or injured them with a weapon, e.g., gun or knife, on school property (past 12 months)
In or out of School Suspensions	Incidents PK-12 by gender, race, and grade		

APPENDIX 4

Supplemental Resources For Evaluation

Books

- The ABS's of Evaluation: Timeless Techniques for Program and Project Managers. (2000). Boulmetis, John and Dutwin, Phyllis. San Francisco: Jossey-Bass.
- Designing Surveys That Work! A Step-by Step Guide. (1999). Thomas, S.J. Thousand Oaks, CA: Corwin Press.
- Evaluating School Based Programs. Sanders, James. (2001). Thousand Oaks, CA: Corwin Press.
- Foundations of Empowerment Evaluation. Fetterman, David. (2000). Thousand Oaks, CA: Sage Publications.
- A Guide To Evaluating Prevention Effectiveness, CSAP Technical Report. (1998). Carmona, C.S., Steward, K., Gottfredson, D. C., & Gottfredson, G.D. (NCADI Publication No. 98-3237). Rockville, MD: Center For Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration.
- Handbook For Evaluating Drug and Alcohol Prevention Programs: Staff/team evaluation of Prevention Programs. (1987). Hawkins, J.D., & Nederhood, B. (Publication No. ADM 87-1512). Washington, D.C: U.S. Department of Health and Human Services.
- Practical Evaluation for Collaborative Services Goals, Processes, Tools, and Reporting Systems for School-Based Programs. Veale, James R., et al. (2001). Thousand Oaks, CA: Corwin Press.
- Prevention Plus III: Assessing Alcohol and Other Drug Prevention Programs at the School and Community Level. (1987). (Publication No. ADM91-1817). Washinton, D.C: U.S. Department of Health and Human Services.
- Prevention That Works! A Guide for Developing School-Based Drug and Violence Prevention Programs. (2001). Knowles, Cynthia. Thousand Oaks, CA: Corwin Press.

Program Evaluation Standards: How to Assess Evaluation of Educational Programs. (1994). Joint Committee on Standards for Educational Evaluation, James Sanders, contributor. Thousand Oaks, CA: Sage Publications.

Qualitative Research and Evaluation Methods. Patton, Michael. (2001). Thousand Oaks CA: Sage Publications. 3rd edition.

Online Evaluation Guides

Basic Guide to Outcomes-Based Evaluation for Nonprofit Organizations with Very Limited Resources. and Basic Guide to Program Evaluation. McNamara, Carter, 1999. Free Management Library's On-Line Nonprofit Organization Development Program.

http://www.mapnp.org/library/evaluatn/anchor1575679

Building a Successful Prevention Program. Western Regional Center for the Application of Prevention Technologies.

http://www.open.org/~westcapt/

Step 7. Evaluation. (Same author as above)
http://www.open.org/~westcapt/evaluate.htm (step 7)

Community Based Project Evaluation Guide. Callor, Suzanne, Betts, Sherry, Carter, Ruth, and Mary Marczak. 2000. The University of Arizona. http://ag.arizona.edu/fcr/fs/cyfar/evalgde.htm

Planning For Results. The Safe and Drug-Free Schools and Communities Program Planning and Evaluation Handbook. (2002). Virginia Department of Education.

http://www.safeanddrugfreeva.org/planningforresults.pdf

The Program Manager's Guide to Evaluation. The Administration of Children, Youth, and Families.

http://www2.acf.dhhs.gov/programs/CORE/dox/program.html

Taking Stock: A Practical Guide to Evaluating Your Own Programs. 1997. Bond, Sally, et al. Chapel Hill NC: Horizon Research, Inc.

http://www.horizon-research.com/publications/stock.pdf

Understanding Evaluation: The way to better prevention programs. (1993). Muraskin, L.D. U.S. Department of Education.

http://www.ed.gov/PDFDocs/handbook.pdf

User-Friendly Handbook for Mixed Method Evaluations Eds. Joy Frechtling. National Science Foundation.

http://www.ehr.nsf.gov/EHR/REC/pubs/NSF97-153/start.htm

User-Friendly Handbook for Program Evaluations (1993). National Science Foundation.

http://www.ehr.nsf.gov/RED/EVAL/handbook/handbook.htm

Online Prevention Program Evaluation Topics And Websites

Children Youth and Families Education and Research Network (CYFERnet). http://twosocks.ces.ncsu.edu/cyfdb/browse 2.php?search=Evaluation

Compendium of Assessment and Research Tools for Measuring Education and Youth Development Outcomes (C.A.R.T.) http://cart.rmcdenver.com/

Evaluation Primer An Overview of Education Evaluation. (1998). Muraskin, Lana. http://www.ed.gov/offices/OUS/PES/primer1.html

Example of Program Evaluations CYFERnet Exemplary Program Evaluations. University of Arizona (February 2002) http://ag.arizona.edu/fcr/fs/cyfar/exmplry_pgms/index.htm

"Improving School Violence Prevention Programs Through Meaningful Evaluation." Flannery, D.J. (1999). in Choices Briefs No2. Institute for Urban and Minority Education, Teachers College, Columbia University, New York, NY. (Eric digest reference)

http://www.ed.gov/databases/ERIC_Digests/ed417244.html

Understanding Evaluation: A Way to Better Prevention Programs. (1993). Muraskin,L.D. U.S. Department of Education.

http://www.ed.gov/PDFDocs/handbook.pdf

USDOE Safe and Drug-Free Schools Project http://www.ed.gov/offices/OESE/SDFS/links.html

General Evaluation Topics And Websites

Adapting Evaluation Measures for Hard to Reach Audiences. Earthman, Erik; Richmond, Lucinda S.; Peterson, Donna J.; Marczak, Mary S. University of Arizona (10-1999).

http://ag.arizona.edu/fcr/fs/evaluation/adapeval.pdf

Analyzing Quantitative Data University of Wisconsin Cooperative Extension. Part of Program development and Evaluation Series G3658-3, <May 1996. http://extremist.uwex.edu/ces/pubs/pdf/G3658_6.pdf

American Evaluation Association

http://www.eval.org/

Collecting Evaluation Data: An Overview of Sources and Methods. Powell and Sara Steele. June 1996

http://extremist.uwex.edu/ces/pubs/pdf/G3658 4.pdf

The Evaluation Checklist Project. (2002). The Evaluation Center, Western Michigan University:

http://www.wmich.edu/evalctr/checklists/

Evaluation Made Easy: Examples of Practical Evaluations – Overview. The University of Arizona. Feb.26, 2001

http://ag.arizona.edu/fcr/fs/cyfar/bulletin2pg.htm

Evaluation That Goes Beyond the Data. North Carolina State University Extension, 9/2001

http://www.ces.ncsu.edu/depts/fcs/pub/2001sp/debord.html

An Evaluation Workshop on Planning and Constructing Performance Based Evaluations, A Transcript. National Transition Alliance for Youth with Disabilities. Wholey, Joseph, S. and McLaughlin, John A. (1998). National Transition Alliance for Youth with Disabilities.

http://www.ed.uiuc.edu/sped/tri/evalwkshp.htm

Evaluation Exchange Harvard Research Project. http://www.gse.harvard.edu/hfrp/eval.html

Innonet.Org Resource Center http://www.innonet.org/resources/overview.cfm

The Penn State Cooperative Extension Program Evaluation Website. Kiernan, Nancy. Pennsylvania State Cooperative Extension, January 3 2002 http://www.extension.psu.edu/evaluation/

The Research Process. Dr. Marion Joppe. http://www.ryerson.ca/%7Emjoppe/rp.htm

Resources for Methods in Evaluation and Social Research http://gsociology.icaap.org/methods/

Sampling. Ellen Taylor Powell. University of Wisconsin Cooperative Extension. Part of Program development and Evaluation Series G3658-3, <May 1998 http://extremist.uwex.edu/ces/pubs/pdf/G3658 3.pdf

The United Way of America Outcome Measurement and Resource Network http://national.unitedway.org/outcomes/

The Use of Qualitative Interviews in Evaluation. Sewell, Meg University of Arizona, 2001 http://ag.arizona.edu/fcr/fs/cyfar/Intervu5.htm

Using Existing Records in Evaluation. Donna Peterson, University of Arizona 20 http://ag.arizona.edu/fcr/fs/cyfar/Exisrec5.htm

APPENDIX 5

Evaluation Worksheets

Worksheet 1.1 Notes for Program Selection m:

Name of Program:		
(List reasons for selecting this program)		

Worksheet 1.2 **Identify Stakeholders Stakeholder** Vested Type of information Primary stakeholder would Audience Interest Yes/No like to know as a result of evaluation **SDFS** Yes Coordinator and SDFS staff

Worksheet 1.3 Timetable During Phase 1

	Activity	Schedule finish date
1. \$	Select a program.	
2. I	Identify stakeholders; talk to them.	
3. A	Assemble the evaluation team.	
	Schedule meetings to formulate a design plan.	
5. I	Finished Design Plan	
I	Submit Evaluation Proposal to the Department of Education, Office of Safe Schools	Fall of the school year program activities are being evaluated
7. I	Finish Collecting Data	
8. \$	Submit Final Report	

Worksheet 2.1 Defining the Key Aspects of Your Program

Defining the key Aspects of Your Program						
Mission statement: What does this program intend to accomplish?						
Target Population: What are the important characteristics of the planned targeted population?						
Linking Progra	m Processes to Participo	ant Outcomes				
What are the key targeted Risk or Protective Factors?	What specific implementation objective addresses the risk or protective factor listed?	What are the immediate outcomes expected? , I.e., skills gained, or change in intentions	What are the longer-term anticipated outcomes? i.e., 1 yr Program Outcome Objectives			

Worksheet 2.2 Setting the Scope of your Evaluation Project Goal(s) of the Evaluation Reason for choosing this Goal

Worksheet 2.3 **Selected Evaluation Questions** Rationale for Evaluating this General Question(s) Question

Worksheet 2.4 Evaluation Questions Not Selected				
General Question(s)	Rationale for Not Evaluating this Question			

Worksheet 2.5 **Writing Your Specific Measurable Questions** List your general evaluation Write specific evaluation questions for each general questions here question

Worksheet 3.1 Timetable of Collection Activities

Data collection activity	When will the data be collected?	How much time do you have for follow-up collection activities?	When must data collection be completed?

Worksheet 3.2 Evaluation Plan Design Matrix

General Evaluation Question:

Specific Evaluation Question:	What indicator will you use to answer your question?	What source will you use to get your data?	What procedure will you use to collect this data?	When will the data be collected?

Worksheet 3.2, continued Evaluation Plan Design Matrix

General Evaluation Question:						
Who will collect the data?	Who is primarily interested in this information?	What is your analysis plan?	Do you foresee any potential problems? Can you see how to get around these?			

	Factors that facilitated			
	Barriers encountered			
rt 4.1 Findings	Possible reasons for change			
Worksheet 4.1 Summary of Findings	Presence of/ absence of differences			
	Gist of the information collected			
	Specific question			

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http://www.ed.gov/offices/OUS/PES/

The United Way of America Outcome Measurement and Resource Network. *Measuring Program Outcomes: A Practical Approach*. http://national.unitedway.org/outcomes/

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U.S. Department of Education Safe and Drug-Free Schools Project http://www.ed.gov/offices/OESE/SDFS/links.html

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