1978

Evaluating Serving Learning Programs: A Guide of Program Coordinators

ACTION

#347

EVALUATING SERVICE-LEARNING PROGRAMS

A Guide
For Program Coordinators

ACTION

National Student Volunteer Program

806 Connecticut Avenue, N.W.
Washington, D.C. 20525

ACTION PAMPHLET NO. 4300.7 (4/78)

Evaluation is a skill which is often surrounded with an aura of mystery. As a result, many program coordinators are reluctant to undertake evaluations. Some feel they do not have the necessary and special skills. Others do not see how evaluation -- which seems to concern itself with past activity -- can work to make programs different or better in the future.

In point of fact, however, evaluation is one of the administrator's most important tools for planning future operations. And evaluation is most definitely a tool that can be used successfully by program coordinators who have not had any special technical training.

ACTION's National Student Volunteer Program has therefore developed this guide for program coordinators who want to use evaluation to make their programs work better -- for both the volunteers who participate in them and the clients who are served by them.

NSVP welcomes any comments or suggestions you may have on the manual.

ACTION's National Student Volunteer Program exists to support service-learning programs in high schools and colleges across the country. NSVP:

- provides both on-site consultation and written and telephone assistance to institutions and groups sponsoring service-learning programs;

- sponsors training workshops for high school and college program coordinators;

- develops and distributes resource materials (including technical manuals and Synergist journal) focusing on both theoretical and practical aspects of service-learning.

#961

Table of Contents

Introduction

The purpose of this manual is to help those concerned with student volunteer programs design and implement evaluations which will provide information on program activities and effectiveness. The information compiled and analyzed from a thoughtful evaluation can be utilized in effecting improvements in program operations and services. Through evaluation, programs can:

- Determine the extent to which goals and objectives have been achieved
- Obtain information about activities which can be used in planning and in documenting achievements
- Measure achievements against external standards
- Obtain information which suggests reasons for program successes or failures.

The manual provides information on some of the basic research approaches and tools which can be used to make analysis of a program's effectiveness more objective. It stresses:

- Creating an evaluation and research plan
- Designing ways of collecting information
- Translating the information into quantifiable terms
- Comparing the results with criteria which have been established
- Putting the results obtained to work.

The manual has seven sections:

SECTION 1 discusses the reasons for evaluation and the resources available to help programs design and implement evaluations.

SECTION 2 reviews the steps a program should take in preparing for an evaluation.

SECTION 3 describes some of the evaluation designs a program can use.

SECTION 4 gives tips on developing instruments for gathering the needed information.

SECTION 5 examines ways in which the information collected can be compiled and analyzed.

SECTION 6 discusses ways to maximize the use of evaluation results.

SECTION 7 presents a case study showing how one student volunteer program developed and implemented an evaluation.

The Appendices contain samples of various forms and questionnaires used in evaluations, detailed information on certain statistical techniques, as well as a selected bibliography on evaluation methodology and a glossary.

This manual uses a split page format with the text on one side and key points and words on the other. Room has been left for reader notes.

Section 1

Deciding When To Evaluate

There are many ways to evaluate and assess student volunteer programs. Some are informal, such as examining reports and records to prepare a report for a funding source, or calling a meeting of staff, volunteers or agency personnel to review program activities and plans. Other ways of evaluation are formal and involve a carefully designed effort in which certain information is collected and analyzed in a standardized way, over a specified period of time, for a specific purpose.

DEFINITION OF EVALUATION

When we use the term evaluation in this manual, we are referring to a formal process by which an outcome of a program, or of one program component, is measured against objectives in order to provide specific information which can be used in problem solving, decision making and improving future programming. This involves:

- Defining program goals and objectives in terms that are measurable
- Devising ways to measure and quantify program activities and outcomes
- Collecting information to show the program's effectiveness in areas you are evaluating.

Depending upon the nature of your evaluation, the type of information you collect, and the way you analyze your data, the evaluation results can also provide you with an indication of why certain things are happening and how various factors appear to relate to program outcomes.

REASONS FOR EVALUATING

There are many reasons for undertaking an evaluation. Some of them are:

- To identify the specific services the program is performing, the number of persons involved, the ways in which volunteers and program staff spend their time, and to compare the results of these efforts with program goals and objectives or with other similar programs

- To compile information which will indicate program effectiveness and help determine the adequacy of current management structure

- To compile information which program staff and volunteers can use to improve operations and services

- To decide if the program should be expanded, modified or discontinued

- To collect the information required by sponsoring organizations or the university for justifying funding the volunteer program

- To collect information which can be used to establish the program's legitimacy, attract students, secure placements for volunteers, and improve community and student understanding of the program.

REASONS FOR DEFERRING AN EVALUATION

Before discussing how you can go about evaluating your program, it is important to realize there are some situations when a program may not be ready for a formal evaluation. These include:

1. The program has no clear orientation

2. People who should know cannot agree on what the program is trying to achieve

3. There are really no questions about the program

4. After careful and complete exploration, the staff concludes the program does not have or cannot get the resources needed to carry out the evaluation.

If your program fits into either of the first two categories above, consider undertaking goal setting and planning activities.

A comparatively easy method of doing this is to have key people involved draw on their experiences with the program and try to frame the goals and objectives as they see them. Then have them meet with others involved in the program, discuss the goals and objectives, and agree which goal statements and objectives should be used in the evaluation. This method enables you to undertake an evaluation even if your program did not start out with clearly stated goals and objectives.

Another way to determine program goals is to use a system called "Planning by Objectives" (PBO). NSVP publishes a manual on how to use this system. If you wish to use PBO, this manual can be a resource for planning your evaluation.

If there are no questions about your program, (#3 above), think again. The program which raises no questions among its staff, clients, and volunteers would be rare, and perhaps needs to assess (or evaluate) its worth.

RESOURCES EVALUATION

If you would like to evaluate but don't think you have the time or the resources, (#4 above), consider involving other groups of volunteers to help you. For example:

- College or university students might undertake an evaluation of your program as part of their course work

- The agencies to whom you provide volunteers might be as interested as you are in assessing program results and willing to provide you with the help you need

- Evaluation experts might be convinced to volunteer time to help design your plan and instruments.

Finally, if you still feel you don't have the resources, try narrowing the scope of your effort. For example, collect information which will show the exact services the program has provided. Try putting a dollar figure on them. That will give the community an idea of the program's impact. Also, instead of trying to measure what the students learned, think about what you want them to feel they got out of the experience. Articulate the outcomes. Ask them to complete a single questionnaire. Compare the results with those you hoped to achieve.

The material which follows in Sections 2 through 5 is designed to help you plan an evaluation which is feasible for your program and to explain various techniques of evaluation which may be easily used by most student volunteer programs.

Section 2

Preparing For Your Evaluation

Your evaluation effort will generally involve nine basic steps:

1. Articulating program goals and objectives
2. Stating your reasons for evaluation
3. Determining which program goals and objectives your evaluation will examine
4. Identifying "measures of achievement" you will use to define progress toward program goals and objectives
5. Designing a plan for conducting your evaluation
6. Selecting the vehicle(s) necessary to get the information you need
7. Gathering information
8. Compiling and interpreting the information
9. Using evaluation results.

This section will focus on the first four steps. The last five will be discussed in Sections 3 through 6.

ARTICULATE PROGRAM GOALS AND OBJECTIVES

It is very tempting for a program to try to evaluate its achievements without having clearly articulated its goals and objectives. But an intuitive understanding of what you're about is not sufficient for evaluating objectively if your program is achieving its intended results.

For example, suppose a program wants to provide a meaningful experience for student volunteers and at the same time help them improve their ability to speak Spanish. How does a program know if it has done this? What's a meaningful experience? What constitutes improvement? These general ideas must be translated into a series of specific, measurable objectives which can be used as yardsticks to determine the extent to which a program has achieved what it set out to do. For example, one objective which could serve as a yardstick would be:

"At the end of one year of tutoring, each student volunteer will have increased his/her score on the foreign service language exam by one point."

OBJECTIVES:

Feasible
Dated
Measurable
Achievable

If you do not have goal statements and objectives which tell you what to measure and give you a standard against which to measure, look at the material on this page and the next one. It summarizes the important characteristics of program goals and objectives.

WRITING GOALS AND OBJECTIVES ACCORDING TO PLANNING BY OBJECTIVES

GOALS:

A goal or purpose statement tells why you are in business, whom you serve, and what you do for your clients. It provides boundaries that indicate what you would logically do and not do.

An example of a goal for a bilingual tutoring project is: "To help Spanish-speaking students in the metropolitan area elementary schools improve their ability to read English."

You may have one or several goals or purpose statements for your program. It is important that everyone involved in your program, especially volunteers, understand the goals. Goals should be reviewed at least once a year.

WRITING GOALS AND OBJECTIVES ACCORDING TO PLANNING BY OBJECTIVES

OBJECTIVES:

Objectives are specific statements of what you wish your program to achieve by a certain time in the future. These statements originate from your goals and are a more detailed list of proposed program activities.

Objectives must be feasible, dated, measurable, and indicate an acceptable level of achievement.

- To be FEASIBLE, objectives must be possible and reasonable. Your experience or the advice of others must suggest that they can be accomplished.
- To be DATED, objectives must set a time frame that indicates the end-date by which something specific is to be accomplished.
- To be MEASURABLE, objectives must enable you to tell whether you have hit your target. Usually the objective itself gives the specific means of measurement.
- To be ACHIEVABLE, objectives must state how much of the desired result must be obtained for you to consider the effort successful.

Some examples of well-written objectives for the bilingual tutoring project are:

- By October 1, 1979 we will have recruited and trained 20 high school seniors to serve as volunteer tutors for Spanish-speaking children in grades 1-5.
- By January 31, 1980 thirty Spanish-speaking children in grades 1 through 5 of Parkside Elementary School will be reading at one grade level above their present level as measured by a school approved test.

STATE EVALUATION PURPOSES and SELECT OBJECTIVES TO BE ASSESSED

When you have reviewed your stated program goals and objectives, it's time to decide which of them to test in your evaluation. To make the selection you must be clear as to the purpose of your evaluation and the questions the evaluation is to answer. The purpose and questions will in turn depend on who will be using the evaluation results and what they will want to know.

Some possible users might be:

- Program directors, staff, and volunteers
- Agency staff
- Funding organizations
- The high school or university in which the program is located
- Groups in the community that the project serves.

Each user may need somewhat different information. For example, the Project Director may wish to know to what extent the organizational objectives set forth at the beginning of the year have been reached; funding organizations may need to know how much money was spent delivering services to how many clients and how this compares to anticipated costs; school administrators may need to know whether assignments were vehicles for learning; and agencies using volunteers may need to know how well the volunteers performed their jobs.

<u>Review your list</u> of users and information needs. Does more than one user have the same needs? If so, put them together on the list.

<u>Set some priorities</u>. On which need(s) should your evaluation focus? Remember, one evaluation may not give you information to meet all of your evaluation needs. Consider the usability, practicality and relative importance of the information you will obtain. Then take this consideration and define a specific purpose or set of purposes for the evaluation (e.g., "to determine the cost effectiveness of the tutoring program for Spanish-speaking children").

Having defined the purpose, it is time to identify the kinds of information you will collect, and to identify the way achievements will be measured and the standards against which they will be judged.

IDENTIFY TYPES OF INFORMATION NEEDED

In undertaking any evaluation, remember there are two basic kinds of information which can be collected:

Descriptive

1. Information which describes what your program is doing (e.g., the number of volunteers, the number of clients, the tasks volunteers are performing, the services clients are receiving, and the number of hours per client).

Evaluative

2. Information which analyzes the consequences, effects or impact of your program on its participants (e.g., the extent to which students receiving tutoring in algebra learned algebra; the extent to which volunteers learned to teach).

Based on these two general categories of information to be collected, two types of evaluation studies are often differentiated:

- <u>Program Analysis Studies</u> which focus on forming accurate, factual, firsthand accounts of what is actually being done in programs. These are generally straightforward and feasible if your resources are limited.

- <u>Program Impact Studies</u> which focus on developing and applying indicators to assess the impact of programs on the groups they are designed to serve. For most service-learning programs, impact studies would involve evaluating the services delivered to the community and the learning achieved by the student volunteers. Impact studies are generally more challenging as there are many variables to be considered.

A full evaluation generally makes use of analyses and descriptive data as well as effectiveness or impact data.

Take the case of <u>Project Amistad</u>, where students taking advanced Spanish courses receive credit for tutoring Spanish-speaking elementary school children for a semester. One goal of the program is to improve the volunteers' fluency in Spanish. Another is to provide services to the elementary school and its students. The University Spanish Department has asked the project for information to help decide whether to continue to give credit to students for participating in the program. The Department has said it will consider factors including the hours of service the student provided as well as a measurable increase in fluency of the volunteer. What should the project look at to give the Spanish Department what it needs?

DEFINE MEASURES OF ACHIEVEMENT

Measures of achievement are directly related to the purpose of the evaluation and kind of information needed. In this case, the project can do a Program Analysis Study to review its records and to obtain data on: the number of students serving as volunteer tutors; the number of hours per week each student devotes to the project; the number and grade of the students being tutored; and the number of tutoring sessions each volunteer holds with each child being tutored. Although this information is important and tells a great deal about the program itself and what the students did, the figures do not tell the Spanish Department all of what it needs to know (i.e., whether the program is effective in improving the students' fluency in Spanish). To establish the project's effectiveness in this area, a second set of data relating to impact would have to be collected. Such data might include scores on tests designed to measure a student's fluency in Spanish and evaluations from persons in a position to observe a student's improvement.

To meet evaluation needs, it is important for programs to be able to formulate both program analysis measures and impact measures. For student volunteer programs, the measures would generally include those of service and learning. Give thought to all aspects of your program which can affect the achievement of the objectives under study. For example, try to collect information which will let you discover if there is a relationship between certain aspects of your program such as client achievement, and the number of hours spent with a volunteer. This will make it easier for you to consider changes for improving your program's effectiveness based on evaluation results.

DETERMINE PROGRAM ANALYSIS MEASURES

Program analysis basically involves looking at the size and composition of your program. While most of the information needed is easily quantifiable, measures must be chosen carefully. For example:

- Size could be measured by the number of volunteers, the average number of hours contributed by volunteers each month, the number of clients served, or the amount of economic support needed to run the program

- Composition could be measured by characteristics of the volunteers such as age, academic major, sex, and socio-economic status; or characteristics of the program such as the level of integration of various projects into academic coursework.

Each measure may give very different impressions of the program and, depending on the purpose of your evaluation, you may need to use one or all of them.

You will need to identify the questions the program analysis part of your evaluation should address, the objective to which they are related, and the program analysis measures you would use.

DETERMINE PROGRAM IMPACT MEASURES

Measures of the impact of a student volunteer program are usually more difficult to devise than are program analysis measures as they involve the impact of the program on the clients being served (service) and on volunteers providing service (learning).

SERVICE MEASUREMENTS

Effect on Clients

The services a program provides can affect its client's:

- Knowledge

- Skill

- Behavior

- Attitude.

The areas you look at and the way you measure them will depend on the purposes of the service and of the evaluation.

Take the case of a group of urban student volunteers helping home-bound elderly people by providing them with one good meal daily in their homes. The funding agency has asked for an evaluation of the program which includes:

- A description of the clients being served (number, age, geographic location)

. <u>A description of the service</u> being provided (number of meals, nutrition supplied per meal as a percentage of the minimum daily requirements)

. The <u>effect of the program</u> on the attitudes and behavior of those receiving meals.

An evaluator can easily assess the first two points (program analysis information) by consulting program records and staff or by taking his or her own count based on a typical week.

Assessing attitude change, however, is harder because it is very difficult to:

1. Construct meaningful and reliable scales to measure psychological states

2. Show that an attitude change was caused by a given event.

To meet the requirements for #1 above, it is necessary to try to define concrete, behavioral manifestations of the psychological state. For example, measuring an individual's "happiness" by simply choosing a number from 1 to 6 on a scale may not be valid. Different persons might have very different definitions of happiness on any given day. A better way to measure happiness would be to specify certain behavioral manifestations of happiness. Some possible behavioral expressions of happiness might be talkativeness, appetite and mobility.

Changes in these behaviors can be assessed by observation, interviewing, and if practical and appropriate to a given program, psychological testing.

To deal with the second part of the assessment, you could ask clients how they think the program affected their attitudes and behavior. This information could be obtained through interviews or questionnaires.

In other programs, the impact or effect you are examining (e.g., knowledge gained) may best be obtained by using standardized tests or reviewing existing records of academic or physical achievement.

Physical Measures

In some programs, the service objectives may involve physical accomplishments, such as building furniture for a day-care center, repairing run-down houses in a neighborhood, or reducing pollution in a small lake.

These objectives present no particular measurement problems since they can be quantified -- things that are built or repaired can be counted (as long as the things being counted are equivalent), and the water pollution levels can be measured in the laboratory. The effect of the services on the programs or people that use them is more difficult to determine, and again for practical reasons you may have to rely on impressions.

The Effect on the Wider Society

There are some aspects of volunteer programs which do not involve delivering services directly to individuals or completing specified physical tasks. In such cases, measurement of program impact may have to be learned from the general population that the program attempts to influence. For example, a rape crisis center which runs a hot line for rape victims may also decide to conduct a community discussion on rape laws. Pamphlets, posters, and spot radio announcements which deal with the problem of rape in the community are also distributed. After the educational program has been in operation for six months, the program wants to assess its impact on the community.

Some possible measures include:

- The number of persons who use the crisis center hot line as a result of learning about it through the education program

- The number of persons who know of the rape crisis center and of those, the number and characteristics of persons who learned of the center through the education program

- The level of knowledge about laws concerning rape and information on where such knowledge was obtained.

This information could be collected through a survey combining questions which deal with a respondent's knowledge, perception, and opinion.

You must identify the questions the service impact part of your evaluation should address, the objectives to which they are related, and the specific measures you plan to use.

LEARNING MEASUREMENTS

Effect on Volunteers

A primary objective of most student volunteer programs is to have some positive impact on the volunteers themselves. This may range from improving technical skills to providing the volunteers with a better appreciation of social, cultural, or psychological processes. But, one thing is common -- some form of experiential learning is involved. Assessing what students learn is not always easy. <u>For example, what should be evaluated?</u> A student's attitude? Accomplishments? <u>How should it be evaluated?</u> By examinations? Reports? Faculty assessments? Field visits? The bibliography in Appendix C contains a list of some of the work done on evaluating learning. Check it out if you want to explore the subject in more depth, as this manual only briefly outlines what's involved in assessing student learning.

The first step in evaluating learning can be to set learning objectives with the volunteer. At the start of the program you and the volunteers should know what learning is expected to occur. The objectives may be the same for all volunteers or be designed to meet specific needs of each volunteer. In either case, the learning objectives should be performance-based and measurable.

Next, develop a way to collect the data needed to see how well the objectives are being met. For example, if an objective is to increase the technical knowledge or skill of volunteers, some kind of examination can probably be developed and given to the students at different points in the program.

Where the objective relates to personal attributes of the volunteer (e.g., sensitivity to others), a typical classroom examination may not be an appropriate way to measure achievement. Instead, volunteers might write detailed summaries and critiques of critical incidents they experienced in their volunteer work.

Another way of measuring the achievement of learning objectives relating to attitudinal or behavioral changes is to give questionnaires to each volunteer. For example, if the goal is to have the volunteers become more aware of the effects of poverty and the processes of social change, the volunteers could be given a short questionnaire to determine their awareness and the extent to which they perceive the program's impact on their awareness.

Section 4 discusses how to design instruments for data collection for both service and learning measurements. Some of the most commonly used techniques include:

- Program record review
- Interviews
- Questionnaires
- Tests
- Observations.

Page 16 shows some of the measures for assessing achievement and some methods of collecting information. However, before selecting specific data collection methods, it is necessary to develop a thoughtful, detailed plan for the evaluation. This is discussed in Section 3.

MEASURES AND DATA COLLECTION MECHANISMS FOR ASSESSING GOAL ACHIEVEMENT

MEASURE		DATA COLLECTION MECHANISMS (INSTRUMENTATION)
Program Analyses (e.g., descriptive data on program activities and operations)		
• Number of clients services • Category of service provided/ frequency of service by category • Cost of service • Number of volunteers • Hours of volunteer service • Demographic data on clients • Demographic data on volunteers • Source of clients • Source of volunteers • Other (list) ______	➡	• Program records • Interviews with program staff • Survey of clients/volunteers • Special record keeping of activities for specific representative time • Other (list) ______

MEASURE	DATA COLLECTION MECHANISMS (INSTRUMENTATION)		MEASURE	DATA COLLECTION MECHANISMS (INSTRUMENTATION)
Impact Measures*				
Knowledge	• Standardized Exams • Interviews • Other (list) ______	➡	*Attitudes*	• Observation • Interview • Test • Other (list) ______
Skills	• Standardized Exams • Interviews • Other (list) ______	➡	*Behavior*	• Record of activities • Observation • Interview • Other (list) ______

** There are only measures of four vehicles for obtaining information which may indicate impact. Whether or not you can obtain evidence that the change in the measure may be attributed to the programs will depend on your research design.*

Section 3

Developing An Evaluation Plan

Now that you have prepared for your evaluation by determining:

- Program goals and objectives
- Reasons for evaluation
- Types of information needed,

it is time to develop an evaluation plan. Appendix A contains a worksheet to help you develop your plan.

This section will explain some research designs you can use and identify criteria to help in choosing an appropriate design.

BASIC RESEARCH DESIGNS

The three basic research designs discussed in this section are:

- Comparing planned accomplishments with actual accomplishments
- Comparing an individual or program at two points in time (before and after)
- Comparing those involved in the program with others who were similarly situated but not involved with the program.

Planned vs. Actual Accomplishments Design

The Planned versus Actual Accomplishments Design involves comparing actual accomplishments with the objectives set for your program. This is one of the easiest designs to use because you only have to collect data showing exactly what your program has done. But the design requires your having stated very specific program objectives before the time of evaluation.

This design is useful in doing program analysis studies and in describing what happened to the clients or volunteers involved in your program. It does not, however, enable you to show that the program caused the changes in the volunteers or clients.

Before and After Design

The basis of the Before and After Design is to compare the state of an individual or organization at two points in time. Although it is called "Before and After," it can be applied at any two points in the program. The length of time between comparisons can vary depending on the purpose of the program, but for most student volunteer programs, it would be useful to measure changes that occur during one semester or one school year.

To use this design you must get baseline data against which to measure changes. The data can be a level of performance, attitude, skill, knowledge, or whatever else the program is attempting to influence. Baseline measures can be taken at any point but the earlier in a program the measure is taken the better off you are, especially where you are trying to measure changes in individuals. One way to get baseline data is to develop a questionnaire or test to give to each volunteer or client as they enter the program. Then retest or survey them at different points in time to see what changes occurred.

The Before and After Design is also relatively simple, inexpensive, and manageable. Its weakness, like that of the Planned versus Actual Accomplishments, is that you do not know if the change in level or accomplishment between the first and the second test is caused by the volunteer program alone or by other factors. In a tutoring project, for example, there may be a considerable improvement in the reading test scores of the children from September to March. It would, however, be an exaggeration to attribute all the improvement in reading ability to the weekly tutoring sessions, since the children are also attending school where they have daily reading classes. One way to get around this problem is to ask persons how they perceive the impact of the program. Although this is not statistically acceptable proof, it may be sufficient for the purpose of your evaluation.

Contrast Group Design

In the Contrast Group Design you compare some aspect of the group you are studying (e.g., clients, volunteers) with another group which has the same characteristics but has not been exposed to your program (e.g., students in the same Spanish class as the student volunteers but who have not been tutoring). The group you choose to contrast with the experimental group could be a group of subjects with no exposure to the program, or a group with a similar program. The group you choose will depend on what is available and the purpose of your evaluation. In this fashion, you will be able to get an idea of the impact of the volunteer experience on the volunteer or client.

The Contrast Group Design may be more difficult to use and more expensive because it requires the cooperation of persons not a part of your program.

Other Designs

If you want information on other research designs or more detail on those we have discussed, look in Appendix C. The material listed is readily available and easily understandable.

FACTORS IN CHOOSING A DESIGN

In deciding which designs to use, there are several things you should consider including:

- Feasibility
- Utility
- Cost.

Feasibility

Can it be done? The availability of data and resources will affect your choice of design. Obviously, if objectives have not been identified, the Planned versus Actual Accomplishments Design will be impossible to implement. Similarly, if measures have not been taken on the participants at a previous point in time, you will have to rely on a contract design, or on a survey which basically gathers information on opinions and perceptions, or on a combination of these. You could then use this information to establish baseline information for future evaluation.

Utility

Can the design tell me what I want to know? As suggested above, the designs described provide three different types of information:

- Planned versus Actual Accomplishments can tell you how well the program is doing in comparison with its planned objectives
- Before and After can tell you how the program is doing compared to some previous time
- Contrast Groups can tell you the effectiveness of your program compared with the effectiveness of some other program, or no program.

Cost

While all three designs are relatively inexpensive to carry out, the Planned versus Actual Design is probably the cheapest. The others require more time, staff, and resources.

One way to reduce costs and save time is to base your evaluation on a study of a relatively small group of volunteers, clients or program records. The group to be studied should be selected by taking a sample of your entire population. Sampling allows you to secure information from a small number of people and make accurate generalizations about the entire group. If the study of a relatively small number of subjects can help the evaluation make assertions about a whole population, it is unnecessary to put time, money, and effort into collecting data from all the student volunteers or clients.

A detailed explanation of various methods of defining a "sample," including a Random Number Chart, can be found in Appendix B.

IDENTIFICATION OF MANAGEMENT TASKS

A final -- but critical -- aspect of designing an evaluation plan relates to the management aspect. All evaluations require time, resources and careful management. The specific management tasks required will depend upon the nature of your program and the evaluation you are conducting. However, you will need the cooperation of the staff, volunteers, agency, faculty, and clients involved in the effort. It is necessary for:

- All those participating in the evaluation to understand its purpose
- Data collection instruments to be carefully tested
- Someone to be responsible for coordinating each phase of the data collection and analysis, including training the individuals who will be collecting and compiling the information
- Arrangements to be made to analyze the data and write the necessary reports
- A time table to be made listing key tasks, start and complete dates, and personnel required to complete tasks.

The chart below, summarizing the contents of an evaluation plan, can be used as a checklist when you design the evaluation for your program.

CONSTRUCTING AN EVALUATION PLAN: A SUMMARY

<u>Your evaluation plan should contain descriptions of</u>:

- The purpose of your evaluation
- The items you will be measuring
- The information you need
- The instruments you will use to collect the data
- The procedures you will use to select records to be reviewed and volunteers, clients, others to be contacted
- The types of analyses you will undertake
- The evaluation timetable and staffing plan
- Your plans for using your evaluation results.

<u>In preparing this plan, remember that you need to know</u>:

- What information you have (e.g., type of program records, measurements of client/volunteer attitude, skill knowledge) and the format in which it exists
- What information you need and the format in which you will need it
- How you can go about getting the information (e.g., interviews, self-administered questionnaires, observation tests, records, physical evidence)
- Who might be able to help you get what you need (e.g., the agency using volunteers, the faculty members giving credit, school administrators, program staff members, the volunteers themselves)
- Who will do what and when.

Section 4

Designing Data Collection Instruments And Gathering Information

DATA SOURCES

Data for your evaluation can come from a variety of sources and can be collected by a variety of methods. The most commonly used sources include:

- Existing records from
  - Your program
  - The agency using volunteers or providing clients
  - Your own school
  - Other groups or institutions in your community
- Program participants
  - Program volunteers
  - Clients
  - Potential volunteers
  - Potential clients
  - Staff
  - Agency liaison personnel
- Experts who can rate, "test," or observe volunteers or users.

Existing Records

Existing records from your agency can provide descriptive data on volunteers, clients, services, operations, and perhaps volunteer and client performance. The agencies you work with may also have data on volunteer activities or clients which can help you measure impact. Depending on the nature of your data needs, an agency such as a school may only be willing to provide you with aggregate data (e.g., average range, or absolute changes of standardized test scores) because of confidentiality rules. Alternatively, they might be willing to do the analysis for you.

Program Participants

Information provided directly by <u>program participants</u> can provide you with evaluative data -- information which can relate to objective and subjective measures of program impact. Vehicles for gathering such data include:

- Personal and telephone interviews
- Self-administered questionnaires
- Small group discussions
- Tests of knowledge, skills, etc.
- Observations made by staff, volunteers, agencies, clients.

Experts

<u>Experts</u> can be brought in to observe, administer tests, and interpret information you have collected. Such experts might include university professors (and/or students) in sociology, psychology, statistics, or education. There may be people working for other volunteer programs who would "volunteer" their professional expertise for planning your evaluation. However, this manual's focus is on helping student volunteer groups prepare and implement evaluations of their programs without great costs in time, staff, and money.

* * * * *

The remainder of this section will focus on mechanisms of keeping program records and designing effective questionnaire and interview questions; observing as an effective form of data collecting; and using rating systems. Section 5 focuses on compiling and analyzing information.

PROGRAM RECORDS

You are probably already keeping some form of <u>program records</u>. For example, you should know whom your volunteers are, where they are working and roughly how much time they are devoting to the project. What you may need to do is to develop a way of keeping the records so that the data is easily retrievable. As you begin to develop a formal system, keep in mind that you will probably need data on the:

- Program itself
- Volunteer

- Specific service provided
- Client.

Some of this data you can get directly, and some, such as that on the client, must be obtained from the agency receiving the service. The bibliography in Appendix C contains some references on record keeping for those who want to start or improve a system.

INTERVIEW AND QUESTIONNAIRE DESIGN

There are five major issues to be addressed in designing questionnaires. They are:

1. Type of question
2. Way the question is written
3. Way the response is structured
4. Physical format of the questionnaire
5. Instructions given to the respondent.

The first issue to consider in writing questionnaires is whether to use structured or unstructured questions.

Closed-Ended Questions

In structured, or closed-ended questions, respondents must select predetermined choices for responses. For example:

- In which areas did you assist your student?

  1. Math
  2. Reading English
  3. Spelling
  4. Writing English
  5. Oral Comprehension
  6. Other ____________ ____________ (specify)

Open-Ended Questions

In contrast, unstructured or open-ended questions have no fixed responses. The respondent is free to reply in any style and at any length. The result will be a great variety in the content and form of the responses. For example:

- In which areas did you assist your student?

  Response 1: I helped him do any homework he had trouble with.

Response 2: I helped him in math.

While both types of questions can be used in either a self-administered questionnaire or an interview, structured questions lend themselves to written questionnaires and unstructured questions lend themselves to personal interviews. In many evaluations, the questionnaire or interview instrument contains both closed and open-ended questions. The extent to which one type of question is favored is based on the problem under study and practical constraints of time and resources.

Pros and Cons

There are pros and cons to both types of questions. Although some sensitivity and depth is gained through the use of open-ended questions, it is hard to categorize and quantify the responses. It may, however, be a good idea to include one or two general, open-ended questions so that you will get a sense of other issues that are important to the respondents that may have been overlooked in the questionnaire. If you plan to use a computer to help you in your analysis, you must use closed-ended questions or categorize the open-ended questions after getting responses.

Writing Questions

Questions must be carefully written and their meaning must be clear if they are to be useful.

No matter whom your group of respondents, remember to:

- Use simple sentences
- Use clear, familiar vocabulary
- Use adjectives and adverbs sparingly
- Avoid negative phrasing
- Cover only one idea in each question.

Try to express your question in as few words as possible. The more words you use, the greater the chances of obscuring your thought.

Avoid technical terminology, jargon and abbreviations. For example, if you are asking a question about the rise in reading level of a child, do not ask, "Did your tutee's R.L. increase from 1.1. to 2.1?" Ask instead, "Did your child's reading level advance from grade one/first month to grade two/first month?"

On the other hand, in your effort to use familiar words, avoid colloquialisms. Do not try to use slang, street talk, or ethnic expressions unless you are sure that they are understood by all the respondents.

Consider the meanings of each word contained in the questions and responses to make sure they are clear. The following example illustrates ambiguous wording:

. Do the members of your tutee's family speak English? (Circle the best answer.)

1. None 2. Some 3. All

"Family" is an ambiguous word. Do you mean the child's parents and siblings? Do you mean the extended family? Or are you interested in whether the people living in the child's home speak English and can help the child practice it? In addition, some respondents may take "speak English" to mean speaking a few words and others may take it to mean complete fluency without an accent. A better question would be:

. "Is English the primary language spoken in the tutee's home?"

Phrase your questions positively whenever possible since negative questions can cause confusion in interpretation of the answers. Suppose your question were worded like this:

. I do not think that the textbooks for tutoring reading contain enough illustrations.

1. Yes 2. No

If your respondent answers "yes," does he mean "yes he thinks there are enough illustrations" or "no he does not think there are enough?" When the question is stated positively, both your meaning and the respondent's meaning will be clear:

. I think the textbooks for tutoring reading contain enough illustrations.

1. Yes 2. No

Be sure that you are asking for a response to one question at a time. Do not group several concepts together and expect to be able to interpret the response. For example:

. Is the number of meetings held with children and the number of supervisory sessions with their teachers adequate?

_______________ Very adequate

_______________ Adequate

_______________ Inadequate

If the respondents indicate "inadequate," will this mean that the number of meetings with the children is inadequate, the number of supervisory sessions with the teachers is inadequate, or both? As a general rule, whenever the word "and" appears in a question, you should check to see if you really aren't asking more than one question.

Structuring Responses

When using closed-ended questions, you must put a great deal of effort into planning good responses.

There are several response formats that can be used for structured questions. The format appropriate for each item will be suggested by the content of the question. The five principal formats are:

. Numerical, Fill in the Blank

. Two Response, Yes/No

. Verbal or Numerical Scale

. Checklists

. Rank Ordering.

The following examples illustrate five common response types:

Numerical

. How many hours a week do you spend with the child you tutor, on the average?

_______ hours per week

Yes/No

. Before working as a tutor with Project Amistad, had you ever worked as a tutor? (Circle one answer.)

1. Yes 2. No

Scale

. How would you characterize the level of interest of the child you tutor in the work you help with in your meetings?

1 2 3 4 5 6 7
not interested — very interested

Checklist

. Is the amount of time you spend working with your child adequate for meeting his academic needs? (Check the one best answer.)

_____ We have too much time; there is not enough to do

_____ We have a little extra time to do things not related to homework

_____ The time period is about enough to finish the homework

_____ We could use a little more time

_____ We need a lot more time.

. What aspect(s) of the tutoring program need improvement? (Check as many as apply.)

_____ Tutors need more training in teaching English

_____ More resource materials

_____ More meetings with child's teacher(s)

_____ Longer time

_____ Transportation from campus to center

_____ More group activities

_____ Other _______________ (please specify)

Rank Ordering

. The following is a list of some of the problems that tutors encounter. Please rank their importance according to your experience. Place a 1 by the most important problem, a 2 by the next most important problem, a 3 by the next most important problem, and so on.

______ Lack of resources
______ Infrequent contact with child's school teacher
______ Insufficient time
______ Lack of non-tutoring activities
______ Problems with Spanish
______ Other ______________________
(please specify)

Selection of Question and Response Structures

The type of question and response structure you choose should be governed by the nature of the information you are seeking and the ways you plan to analyze and use the information. For example, a problem that is frequently encountered in structured responses to attitudinal questions is that everyone answers the same way. Take the following question:

- Do you feel that you are learning anything about speaking Spanish as a result of your volunteer work?

  1. Yes 2. No

In this case, you may find that 99 percent of your respondents answer "yes." Although this may be very gratifying to the program administrator, it is not very helpful to the evaluator because the question has not really measured anything; it cannot distinguish among volunteers. As a result, it is impossible to know which volunteers felt more positively about their experiences.

A question which enables an evaluator to determine the volunteers who feel most positively about the program is:

- As compared with one hour spent in Spanish class, how would you describe what you learned about speaking Spanish from one hour of tutoring Spanish-speaking children?

  1. I learn much more in the classroom
  2. I learn a little more in the classroom
  3. I learn about the same amount both ways
  4. I learn a little more from tutoring
  5. I learn much more from tutoring.

Pretesting

It is advisable to pretest your questionnaire by administering it to a small number of potential respondents regardless of the type of questions and response structures you select. This pretest will enable you to determine if questions are clear and answer choices appropriate.

Format Presentation

The physical layout of your questionnaire is almost as important as the questions you ask. First, the potential respondent often decides whether or not to cooperate by looking at the questionnaire to see how hard it is to fill out. Second, the risk of misrecorded responses is reduced by having a clean-looking instrument. Finally, don't forget someone has to take the data off the questionnaire as part of the data compilation process. The fewer subjective judgments which have to be made about an answer and the easier the form is to read, the faster and more efficiently the job will get done.

Instructions

Every questionnaire, whether it is to be self-administered or administered by an interviewer, should contain general instructions and introductory comments. A short statement about the purpose of the evaluation will help the respondent understand the purpose of the questionnaire and to focus attention on the relevant topics.

In addition to general instructions that tell the respondent how to indicate the appropriate response, some questions may require special instructions or definitions to facilitate proper answering.

INTERVIEWING

If you use interviews, you will need to train the interviewers in interviewing techniques and in the use of the questionnaire. Let them practice interviewing. Appendix B contains additional information on interviewing techniques.

OBSERVATION AND RATING SYSTEMS

Observation systems are particularly useful in measuring behavioral changes in program volunteers and clients.

Observation

For example, if you want to know whether providing home-bound elderly with meals had any effect on their behavior, you could have the volunteers who delivered the food do the following:

- Make a few observations about the client each time a meal is delivered
- Record their observations in a notebook
- Summarize, perhaps on a scale, the changes noted.

How the client's eating habits changed over time could be measured by percent of delivered meal eaten.

Other scales could be created to measure such aspects of the condition of the clients as talkativeness, mobility, and memory.

If possible, notebooks containing observation data should be begun with the very first visit to a client. The names of the clients should not be kept in the notebook, and there should be no identifying information connected with any of the information collected. Section 5 presents ways to summarize and analyze data so that conclusions can be drawn about program effects.

Rating Systems

Ratings are a useful way of measuring learning in clients or volunteers. For example, suppose you were seeking to determine a "volunteer's ability to understand and explain learning difficulties from the child's point of view." One way to rate that ability would be to have each volunteer keep a report on experiences related to that objective, and to have the report rated according to a scale such as the following:

	Score
1. Understanding of cognitive ability of child of this age (0-5 points)	____
2. Understanding of language difficulties faced by the child (0-5 points)	____
3. Understanding of cultural factors which may have affected child's behavior in the situation (0-5 points)	____
4. Awareness of emotional problems which the child could have (0-5 points)	____
TOTAL SCORE (20 points maximum)	____

In preparation, the volunteers must be told that they or their reports will be rated and should be given the specific criteria which the evaluators will use.

The ratings themselves should be done independently by two raters. If the standard procedures are followed and the two raters generally agree, the conclusions from the study, such as "volunteers from academic program A do better on this objective than do volunteers from academic program B," are far more reliable.

To make the process of gathering information more efficient, review your plan with the checklist on page 34.

CHECKLIST ON GATHERING INFORMATION

To make the process of gathering information more efficient and effective, make sure you:

- ☐ Know what information you need and where you can get it.
- ☐ Develop an analysis plan before you collect your information.
- ☐ Consider using a variety of data collection vehicles:
  - Record reviews
  - Interviews
  - Observations
  - Ratings
  - Self-administered questionnaires
  - Other (list). ______________________________

    ____
- ☐ Select the most appropriate mechanism based on:
  - The extent it is likely to give you the information you need
  - Your ability to use it.
- ☐ Develop data collection forms which make obtaining, recording, and analyzing this information easy.
- ☐ Pretest all data collection instruments.
- ☐ Make sure -- when data are beinq collected from individuals -- that they know why they are being asked various types of questions.
- ☐ Protect the confidentiality of individual responses.

Section 5

Compiling And Analyzing Information

The final step in conducting your evaluation is to compile and analyze all the data you have collected, and thus obtain answers to your study questions.

This section shows you how to make the calculations necessary to:

- Obtain information which is basically descriptive (e.g., characteristics of volunteers and clients, levels of achievement of volunteers and clients as measured by a standard procedure)

- Determine the relationship between different program, volunteer, and client variables.

It is written primarily for persons who must compile data by hand rather than computerized data systems. If you have access to a computer you can save hours of work and do more sophisticated analyses. But remember to consult with computer experts before you design forms and structure responses, because the data must be coded and transferred to computer cards, and programs appropriate for keypunching will have to be designed.

The descriptive data you collect about your project will probably be in two forms -- numbers and categories. Each form must be handled somewhat differently.

SUMMARIZE NUMERICAL DATA

Numerical data are a set of figures for such things as the number of volunteer hours contributed each month for one year, or the ages of the children being tutored.

To summarize, first develop a form which will enable you to list the specific information needed for each member of the population under study. Next, physically assemble the data and record it on the worksheet. A worksheet such as the one illustrated on the next page can help you abstract the needed information .

WORKSHEET FOR CALCULATING AVERAGE AND RANGE OF AGES OF TUTORS

Questionnaire Number	Age of Tutor	Questionnaire Number	Age of Tutor
1	18	11	19
2	20	12	20
3	19	13	21
4	21	14	18
5	18	15	18
6	18	16	20
7	21	17	19
8	NR	18	20
9	19	19	18
10	19	20	19
		21	20

The two abstractions most useful in describing the data collected are the average of the entire set of numbers and the range that the data spans.

Using Averages (Means)

An average is calculated by taking the sum of the measurements and dividing it by the number of measurements. The result is the theoretical "average" value. For example, the average age of tutors computed from the data on the illustrated worksheet is 19.5 years. It was determined as follows:

$$\text{Sum of Ages of Respondents} = \frac{18 + 20 + 19 + \ldots + 19}{20}$$

$$= \frac{385}{20} = 19.5 \text{ years}$$

Note the "No Responses" (NR) are not counted into the averages.

Using Ranges

The range, on the other hand, consists of the difference between the highest and lowest values in your set of numbers. The oldest volunteer responding to the questionnaire was 21 years old, and the youngest was 18 years old. The age range of the volunteers could thus be stated as 18 to 21, inclusive, or as the difference between the two numbers, in this case 4 years.

Usually, the average and the range are used together to give a simple, statistical description of the data such as the following: "The ages of the people in the class ranged from 18 to 21 (4 years) and the average age was 19.5 years."

When you have the same information about two different groups of people available, you can compare the means or the ranges of the two sets of data to see if there are differences (on the average) in some attribute of the groups. This information could then be used to help identify actions your program might want to undertake.

For example, you can compare the average age of this year's volunteers with the average age of last year's, or you can compare the reading scores of Spanish-speaking children with the reading scores of other children in the same classes. If it turns out that the average age of this year's tutors is much older than the average age of last year's, you may decide that something must be done to recruit new volunteers. If you find there is a difference in the reading scores of those receiving tutoring and those not, and if the difference is statistically significant, you can then use the information to help show the effectiveness of the program.

SUMMARIZE CATEGORICAL DATA

Categorical data differentiates a certain population according to attributes such as sex, education levels, and age levels. It is not a set of numbers.

Data Summary Sheet

The primary and most basic way to translate categorical data into a description of some aspect of your program is by means of a simple frequency distribution table. The most efficient method for doing this is to set up a data summary sheet which lists the possible categories (e.g., male, female). Transfer the information about each member of the population to the data summary sheet. Calculate the percentage of total responses (excluding "No Response") for each category of response. Leave enough space beside the response categories to make a tally. A data summary sheet for male/female distribution of tutors and average hours per week spent with each child is shown below.

DATA SUMMARY SHEET

Sex of Tutor	Number of Tutors of Each Sex		Frequency
Male	~~IIII~~ ~~IIII~~ ~~IIII~~	15	15/36 = 42%
Female	~~IIII~~ ~~IIII~~ ~~IIII~~ ~~IIII~~ I	21	21/36 = 58%
No response	III	3	

DATA SUMMARY SHEET

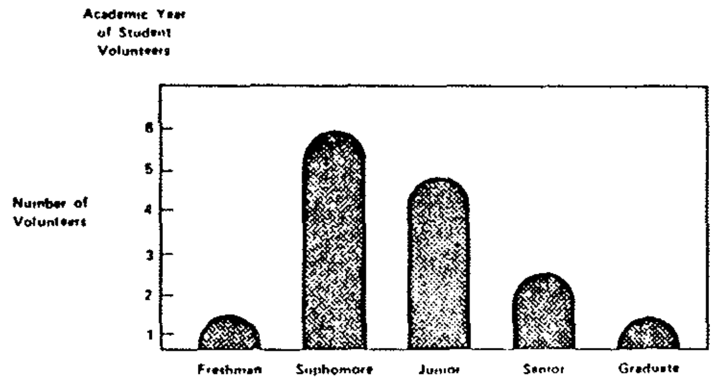
Hours/Week	Number of Tutors Spending Time		Frequency
1 hour	~~IIII~~ ~~IIII~~ ~~IIII~~ ~~IIII~~ II	22	22/40 = 55%
2 hours	~~IIII~~ ~~IIII~~ II	12	12/40 = 30%
3 hours	IIII	4	4/40 = 10%
4 hours or more	II	2	2/40 = 5%
No response	IIII	4	

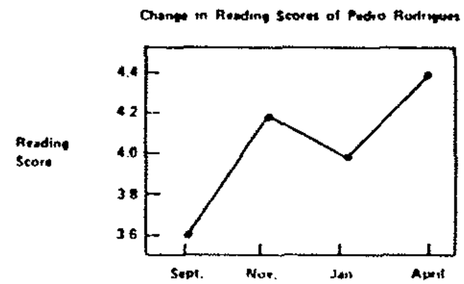
VISUAL DISPLAYS

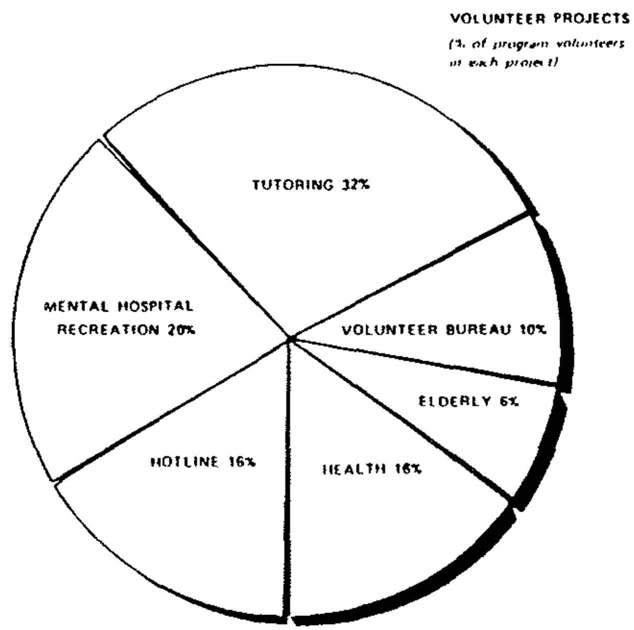
After data have been tabulated, they can be transferred to neat tables or presented visually in bar graphs, line graphs, or pie diagrams for written reports or presentations to groups. Examples of various visual data presentations are shown on page 39.

* * * * *

EXAMPLES OF WAYS TO PRESENT DATA







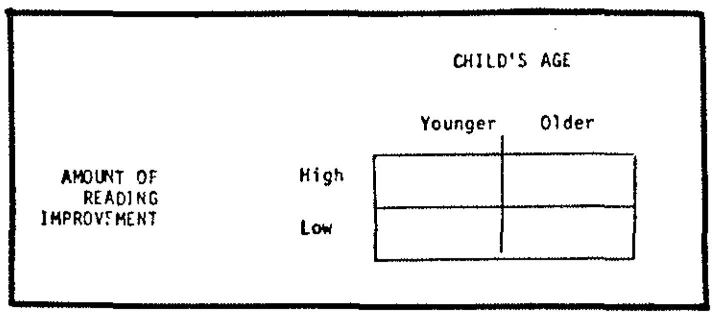
By examining relationships between two variables, you can use your evaluation data to a fuller extent.

RELATIONSHIPS BETWEEN VARIABLES

To determine the <u>relationship between variables</u>:

- First, decide which two variables might have an association that would give meaningful suggestions for the volunteer program. For example, if one of your evaluation questions was, "Do older children benefit from tutoring as much as younger children?" you would want to see if there is a relationship between the age of the client and the client's level of improvement.

- Next, set up a chart on a piece of paper, carefully labeling the categories along the two axes. The chart would look like this:



To determine which persons belong in which category, take your first variable (in this example age), look at the distribution of those in this study and select a point where approximately 50 percent of the group (but no more than 70 percent) falls into each category.

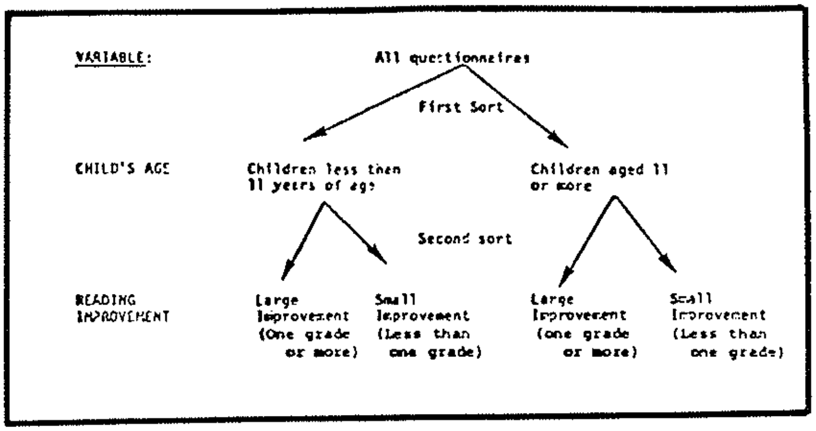
The following sample worksheet illustrates the way students being tutored can be divided into "older" and "younger" categories.

WORKSHEET SHOWING DISTRIBUTION OF AGE
OF STUDENTS BEING TUTORED

Age of Students Being Tutored	Number of Students of That Age	Frequency	Cumulative Percentage
8	9	9/50 = 18%	18%
9	8	8/50 = 16%	34%
10	13	13/50 = 26%	60%
11	4	4/50 = 8%	68%
12	7	7/50 = 14%	82%
13	4	4/50 = 8%	90%
14	3	3/50 = 6%	96%
15	2	2/50 = 4%	100%
Total	50		

The break point is age 10. Note the data are the same as would appear on a frequency distribution table except a fourth column, Cumulative Percentage, has been added.

- Now sort all of the records into one of the four categories formed by the chart. The easiest way to do this is first to sort all your papers into two piles, one for each level of the first variable. Then sort each of these two piles according to the second variable. The following is a diagram of this process:



- You now have four piles. Count the number of cases in each pile. Transfer these numbers to the blank table you have set up. The result will look like this:

		AGE OF CHILDREN	
		Younger 10 or Less	Older Over 10
AMOUNT OF CHILDREN'S READING IMPROVEMENT	Large Improvement (one grade or more)	60% 10 years old or younger (18 children)	20% Over 10 years old (4 children)
	Small Improvement (less than one grade)	40% 10 years old or younger (12 children)	80% Over 10 years old (16 children)

Note the percentages are calculated so that each vertical column adds up to 100 percent. The horizontal columns not need add up to 100. The table can be read as follows: "Among children ages 10 or less, 60 percent showed large improvements in their reading scores over a six-month period, while among children ages over 10, only 20 percent showed large improvements."

At times you may wish to use professional statistical tests for significance. These tests and calculations are technical and somewhat complicated to perform. While references are listed in the bibliography, you may wish to consult an on-campus statistician for advice prior to collecting and analyzing the data to be used in such tests.

Section 6

Using Your Evaluation Results

Large amounts of data were collected during your evaluation. After analysis, these data can help you make decisions about your program's future and perhaps also help you gain resources to support your program. However, using all this information is often a difficult task. It requires that:

FACTORS IN USEFULNESS OF EVALUATION

- Evaluation results are translated and interpreted in a way which stresses the practical implications for your program
- Evaluation results are seriously considered by your program and those agencies and institutions with which you work
- Appropriate results get to the appropriate users
- Evaluation report is presented in time for decision makers and other recipients to use it effectively
- Limits of the evaluation are understood
- Recommendations for future action are either made a part of the evaluation or drawn up by users as they review the report.

MAXIMIZING THE USE OF RESULTS

The following suggestions are ways to help maximize the use of your evaluation results:

- Communicate evaluation results to key people and involve them in meetings designed to make plans for using results. Remember to involve representatives of all the groups working with the program such as volunteers, school administrators, staff members of community agencies, and faculty.
- Prepare a nontechnical summary of the major evaluation issues and findings with in-depth information, including your methodology, statistical and descriptive data in the main

body of the report. Remember the findings you present must be meaningful and relevant to the potential users of the evaluation.

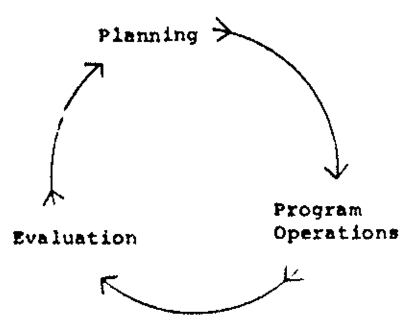
- Translate your results into potential operational terms. Decide which areas need improvement and explore alternative courses of action. It may be appropriate to make specific recommendations to the planners, or it may be more helpful to involve the people responsible for planning in drawing up recommendations.

- Identify findings which are tentative. For example, if you found that the tutoring program was more beneficial to the children who had participated in extra tutoring sessions and activities, you might reasonably recommend that the student volunteers be asked to devote more time to these activities. If your results, however, are based on the reading test scores of only 5 of the 40 children, you should make it clear that your findings are not definitive.

- Form a committee with responsibility to integrate what you learned from your evaluation into your program planning and operation.

It is through evaluation and continual planning that volunteer programs become effective and strong. It is important to be aware of the things we do as part of our programs and of the effects of these actions.

The results of your program evaluation can provide you with the information you will need to plan for changes and/or growth of your program activities. The illustration below shows visually the important and continuous interrelationships of planning, operating and evaluating a program. It is important to remember that students, volunteers, clients and program activities are always changing and therefore continuous informal evaluation is happening. The appropriate and timely uses of both formal and informal evaluations are essential to effective program service delivery.



Section 7

Case Study: Developing, Implementing, and Using An Evaluation

This section presents a case study of the development, implementation and use of an evaluation by a Senior Citizen Victim Assistance Project cosponsored by State University and a local community center.[1] We believe it shows how the previous sections of this manual interrelate in practice, and we hope this case study will give you some ideas on how to conduct your evaluation.

The case description is divided into five parts:

The first presents a general description of the project, its mission and its relationship with the university.

The second identifies the reasons project personnel decided to undertake an evaluation and the resulting general research question.

The third describes the goals and objectives of the project to be used in the evaluation and the ways achievement will be measured.

The fourth looks at the way the project collected information to answer the research questions and presents the data collected.

The fifth examines how the evaluation results were put to use.

1. PROJECT DESCRIPTION

The Senior Citizen Victim Assistance Project (SCVAP) is cosponsored by a not-for-profit community center and local branch of the State University. Its purpose is to provide emergency supportive services to senior citizens who are victims of rape, robbery, burglary, assault, battery, and other crimes which have been reported to the police. It offers:

- Crisis intervention counseling to help the victim psychologically adjust to victimization
- Direct services such as transportation, child care, and emergency food, clothing, or shelter, to help the victim meet immediate emergency needs
- Referral services to help the victim obtain help from other agencies which is not available through the project.

---

[1]SCVAP is a hypothetical project based on a program run by Aid to Victims of Crime, Inc.

The project, which is funded by a Federal grant, is coordinated by the Director of the Community Center and two social workers, both of whom are regular staff of the Center. Services are provided by a volunteer force of 36 undergraduate sociology majors from the State University. The student volunteers, selected by the University Volunteer Bureau and the Sociology Department, must be enrolled in either a Social Institutions, Social Problems, or Criminal Justice Course, and must keep a journal describing the services they provide to each client, and what they learned from their experiences. This journal is a substitute for the required term paper and is periodically reviewed and graded by the professor and the volunteer's supervisor.

Student volunteer activities are supervised by one of the social workers. Initial training is done jointly by the community center and university staffs.

Each student works three hours per week and performs the following tasks:

- Review police records daily to locate elderly victims
- Make initial contact with elderly victims and conduct screening interviews
- Identify the services needed by each victim
- Take steps to arrange for SCVAP to provide the services, and find concrete assistance for victims at other community agencies.

* * * * * *

2. REASONS FOR EVALUATION

SCVAP has been in operation for 10 months. The staff has decided it is time to evaluate the project for two primary reasons:

1. The Federal funding agency requires an assessment of project services be made if it is to be eligible for continued funding
2. The University Sociology Department would like to know the value of the students' volunteer experiences to determine if they should continue to give partial credit for such work.

These two information needs require somewhat different types of evaluations. The funding agency is primarily interested in a program analysis which can provide answers to questions such as the following:

- What services are being provided and by whom?
- Are the senior citizens who are victims of crime being reached by the project?
- Is the project providing clients with appropriate services?
- How are the project services perceived by the client?

The Sociology Department, on the other hand, is primarily concerned with what volunteers are doing and how the volunteer experience is contributing to their education. The Department staff are interested in the answers to the following types of questions:

- Have the volunteers developed an awareness of the problems of senior citizen victims of crime?
- Have the volunteers developed an awareness of community services?
- Is this awareness and knowledge any greater or less than that of other students in the course(s)?
- Have the students learned how to assess client needs?
- Have the students been performing direct service?

A graduate student from the University and a social worker from the Center have been assigned to plan and coordinate the evaluation effort; however, all volunteers and staff will contribute ideas and will help gather the information.

The evaluation will be limited because a computer is not available to assist in compiling and analyzing the data.

The project has access to the following types of information through existing records:

Police Records	-	Names and addresses of all senior citizen victims of crimes reported to the police
Project Records	-	Names and addresses of victims contacted, names and addresses of volunteers, hours worked by volunteers, and action taken on behalf of each client.

3. GOALS IDENTIFIED FOR EVALUATION AND WAYS OF MEASURING ACHIEVEMENT

The evaluation team's first task in preparing for the evaluation was to identify which program goals and objectives relate to the purposes of the evaluation and could be used as yardsticks against which to measure progress.

To do this, they took the following actions:

1. They reviewed the goals and objectives of the Project as expressed in the funding application; they determined that the goals were clear, specific and measurable

2. They reviewed the expectations of the Sociology Department as set forth in a memorandum of understanding between the directors of the Volunteer Bureau and the Community Center. They determined that the general goals were clear but they needed to be made more specific and measurable. This was accomplished through discussions with the professors teaching the courses, the University Volunteer Bureau, project staff, and project volunteers

3. Again working with those involved, they selected the goals to be considered in this multipurpose evaluation effort.

The results of this work are illustrated on the next three pages.

The next step was to select ways to measure achievement toward these goals. To do this, the project decided to review records, interview senior citizen victims of crime, grade and compare student volunteer journals, and test volunteer and nonvolunteer sociology students' knowledge of community resources.

PREPARING FOR AN EVALUATION: REVIEW SCVAP GOALS AND OBJECTIVES AS EXPRESSED IN FUNDING APPLICATIONS

Goal: To provide services and to target resources to victims of crime.

Objectives:

1. SCVAP, through the State University, will recruit and train 40 volunteers to give services to senior citizen victims of rape, robbery, assault, burglary, and family members of homicides.
2. This resource of volunteers and staff will serve 400 victims over the 12-month period beginning January 1, 1976.
3. The volunteers will identify client needs and the clients will receive one or more of the following services, based on needs identified by the volunteers:
   a. Crisis intervention counseling; helping the victim to psychologically adjust to the victimization
   b. Direct services.
4. 250 referrals to various community agencies will be made.
5. SCVAP clients will find the services provided by the volunteer and through the project helpful.

Goal: To sensitize the criminal justice system and the community to the plight of the victims.

Objectives:

1. To make 250 referrals to various community agencies.
2. To provide direct information concerning victimization to 25 community groups and associations.
3. To use the daily newspapers, neighborhood newspapers, TV and radio stations to educate the general public on victimization.
4. To make the criminal justice system aware of the need for victim services.

PREPARING FOR AN EVALUATION
REVIEW SOCIOLOGY DEPARTMENT EXPECTATIONS AND GOALS

Expectations as per Memorandum of Understanding	Expectations Translated into Measurable Goals
1. To provide students with the opportunity to learn about the problem of senior citizen victims of crime while providing service to them.	a. Each volunteer will provide assistance to ten clients during the semester. For each client served, the volunteer will be able to: • Identify what, if any, special problems the client faced as a result of being a victim of crime (i.e., fear to go outside, need to replace resources lost, need for new services, including counseling) • Identify the service needed by the client.
2. To provide students with an opportunity to learn how public and private community service organizations give assistance to those in need.	a. Each volunteer will be able to identify three community service organizations providing help in each of the following areas: • Counseling • Transportation • Food, clothing, shelter • Legal aid • Medical services. b. Each volunteer will be able to list the criteria which clients must meet to get help from the organizations listed above and the procedures which must be followed to obtain service.
3. To provide students with an understanding of the problems involved in getting appropriate resources to persons in need.	Each volunteer will be able to identify problems in trying to get appropriate resources to persons in need.

PREPARING FOR AN EVALUATION

SELECTING GOALS AND OBJECTIVES TO BE USED AS CRITERIA ON EVALUATION

Program Operation and Service

1. SCVAP, through the State University, will recruit and train 40 volunteers to give services to senior citizen victims of rape, robbery, assault, burglary, and family members of homicides.
2. This resource of volunteers and staff will serve 400 victims over the 12-month period beginning September 1, 1976.
3. The volunteers will identify client needs and the clients will receive one or more of the following services, based on needs identified by the volunteers:
    a. Crisis intervention counseling; helping the victim to psychologically adjust to the victimization
    b. Direct services
    c. Referral to various community agencies will be made
4. SCVAP clients will say they find the services provided by the volunteer and through the project helpful.

Volunteer Learning

1. Each volunteer will provide assistance to ten clients during the semester. For each client served, the volunteer will be able to:
    a. Identify what, if any, special problems the client faced as a result of being a victim of crime (e.g., fear to go outside, need to replace resources lost, need for new services, including counseling)
    b. Identify the service needed by the client
2. Each volunteer will be able to identify three community service organizations providing help in each of the following areas:
    a. Counseling
    b. Transportation
    c. Food, clothing, shelter
    d. Legal aid
    e. Medical services
3. Each volunteer will be able to list the criteria which clients must meet to get help from the organizations listed above and the procedures which must be followed to obtain service.
4. Each volunteer will be able to identify problems in trying to get appropriate resources to persons in need.

4. GATHERING INFORMATION AND COMPILING DATA

Information Describing Program Operations and Services

Record Review

The project assigned three student volunteers to review project records and police files. The following information was obtained:

- Number of volunteers: 36
- Number of hours volunteered per week: 3
- Hours of supervision given: 2.5
- Average number of clients serviced by each volunteer: 4 (range 2 to 6)
- Number of senior citizens victimized by crime in target area according to police files: 400
- Number of clients contacted by SCVAP: 323
- Disposition of contacts:
  - Services given: 175
  - No services given: 148
- Breakdown of services given and reasons why no service was given:

Service given (175 or 54%)*		No service given (148 or 46%)	
Direct services to meet physical needs	135 (77%)	Aid not needed (according to victim and volunteer)	32 (22%)
Counseling	70 (40%)	Aid refused by victim	24 (16%)
Referred to other agency for help	120 (69%)	Needed aid not available through project	66 (44%)
Other	24 (14%)	Other	26 (18%)

* Some clients received more than one service.

The interpretation and analysis of these data as related to program goals and the purpose of the evaluation is straightforward:

- The project fell below its goal for the number of volunteers (36 actual/40 goal)
- The project made contact with 80 percent of its target population
- Slightly over half of all victims contacted received services (54 percent). The most frequently used services, in order of frequency were
  - Direct services to meet physical needs
  - Referrals
  - Counseling.
- Of those contacted, a significant proportion did not receive aid from the project, and most of those (44 percent) did not receive aid because appropriate services were not available through the project. This indicates the project may want to expand its services or bring other agencies into the SCVAP network so SCVAP can be more responsive to client needs. Additional information from the survey of persons contacted may help the project in this effort.

Further interpretations of data collected from records will be made possible by combining this information with data collected from persons contacted and volunteers.

Client Interviews

In addition to reviewing records, the project staff and volunteers interviewed senior citizen victims of crime to determine if the project was responsive to victim needs, if clients were satisfied with the services they received, and if clients felt the volunteers did their job well.

Personal interviews were used because a number of persons did not have telephones and many people would probably not respond to a mail survey.

A random sample of 256 (81 percent) of the 323 victims contacted by project volunteers was selected from among those senior citizen victims of crime appearing in project records.* Each volunteer received 4 hours training in interviewing techniques and was asked to interview two or three victims. The volunteers practiced using the questionnaire by interviewing other students.

---

*Because of time and manpower constraints, the project did not attempt to survey the 77 victims never contacted to determine their needs.

All persons being interviewed received a note that a project representative was coming by at a particular hour. There was a number to call to verify the information or to reschedule the meeting. Interviews were conducted during the day or in the early evening.

The questionnaire on the following three pages was used and the total responses received are recorded in *Script*.

Interview No. ____________

Street Address____________

Interviewer____________

Date____________

QUESTIONNAIRE FOR INTERVIEWS OF SENIOR-CITIZEN
CRIME VICTIMS CONTACTED BY SCVAP

Introduction

Hello, I'm ____________ from the State University (show letter of introduction). The University is conducting an evaluation of the Senior-Citizen Victim Assistance Project as part of an effort to improve its operation. You were selected at random from a list of all persons who were victims of crime and contacted by SCVAP. We think you can provide us with important information. May I take 5 minutes of your time to ask you a few questions?

71 Yes 4 No 6 Unable to locate

If *yes*, go to Question 1.

If *no*, would there be a more convenient time? When? ____________

If still *no*, could you tell me why? *Don't want to discuss.* 4

End interview. Thank you.

Question 1. Which of the following crimes were you a victim of during the last 10 months? (Check only one. If more than one, check the most recent.)

28 (39%)	a.	Burglary of home
12 (17%)	b.	Robbery or purse snatching (no physical attack)
16 (23%)	c.	Assault, robbery with physical attack
13 (18%)	d.	Fraud, or someone cheating you out of money
2 (3%)	e.	Other ____________ (specify)

Question 2. Did you need help afterwards? 71 Yes 0 No

If *yes*, what kind? 25 (35%) Money 25 (35%) Counseling

10 (14%) Emergency shelter 20 (28%) Food

10 (14%) Clothing 5 (11%) Transportation

If *no*, go to Question 9.

Question 3. Was help offered to you after the incident by any of the following? (Check as many as appropriate.)

29 (29%)	a.	Police
39 (56%)	b.	Family or friends
57 (81%)	c.	Representative from SCVAP
8 (11%)	d.	Other *All listed churches* (specify)
10 (14%)	e.	NO AID OFFERED. (Probe: *Are you sure?*)

(If SCVAP not mentioned, probe! Respondent may not remember SCVAP, but may remember the student from the University.)

If respondent had no help from SCVAP, go to Question 9.

If respondent had help from SCVAP, continue.

Question 4. In which of the following area(s) did you receive help from SCVAP? (Check as many as apply.)

45 (79%) Service to meet physical needs (specify)

20 (44%) Food 10 (22%) Shelter

10 (22%) Clothing 5 (11%) Transportation

22 (37%) Someone to talk to who helped me get through the bad experience.

36 (63%) Referral to other agency for

10 Medical care

5 Long-term housing needs

10 On-going counseling

11 Other ______ (specify)

10 (17%) Other *repair to home, car, or office* (specify)

Question 5. Please tell us what you thought of each of the services you received from SCVAP (circle the number that best applies).

	Helpful	Somewhat helpful	Not helpful	Did not receive
Services to meet physical needs	1 = 10	2 = 25	3 = 10	4 = 12
Counseling	1 = 14	2 = 6	3 = 2	4 = 35
Referral	1 = 7	2 = 11	3 = 18	4 = 21
Other ________	1 = 3	2 = 2	3 = 5	4 = 47

Question 6. Did you receive all the help you needed from SCVAP?

39 (68%) a. Yes, I received all the help I needed

16 (28%) b. Some, I received some of the help I needed

5 (9%) c. No, I received almost none of the help I needed.

Question 7. If all help needed not provided, did you want (check all that apply):

_____ More counseling

6 More concrete services

_____ More referrals

21 Other *loans, medical assistance, legal aid* (specify)

Question 8. Do you think the SCVAP volunteer(s) was:

35 (61%) a. Good at what he/she did

16 (28%) b. Pretty good at what he/she did

4 (7%) c. Not very good at what he/she did

2 (4%) d. No response

Question 9. If you don't mind, would you tell me about how old you are? Mean = 69.4 years.

Question 10. NOTE: Sex of the respondent was 23 (32%) male
48 (68%) female

Thank you.

The results of the client survey revealed information relating to the service goals of the project and can be used by project personnel to improve operations and services. That information and how it confirms or conflicts with information found in project records is summarized as follows:

- SCVAP offered help to 81 percent of the respondents (all of whom were victims of crime). This confirms figures derived from project records.
- The percentage of persons receiving various SCVAP services was higher than data found in project records.
- Approximately 68 percent of the clients received all the services they felt they needed from SCVAP, 21 percent received some, and 9 received none of the services they needed. Money to meet personal obligations, legal assistance, and medical care were the three types of help respondents felt they needed but did not receive.
- Of those respondents receiving help from SCVAP, counseling services were found to be the most helpful and referrals of the least help. These results are summarized below:

	Helpful	Somewhat helpful	Not helpful
Concrete services	10 (22%)	25 (55%)	10 (22%)
Counseling	14 (63%)	6 (27%)	2 (9%)
Referral	7 (19%)	11 (30%)	18 (50%)
Other ______ (specify)	3 (30%)	2 (20%)	5 (50%)

(Note: Percentages calculated on basis of number of persons in sample receiving the specific type of help. All percentages are approximate.)

This finding needs to be examined by the project so steps can be taken to make needed improvements.

- More than half of the respondents (61 percent) felt the volunteer was good at what he/she did and only 7 percent felt the volunteer was not good.

The numerical analysis of the survey raises many questions, the answers to which can be obtained by looking at the relationship between variables.

- What are the characteristics of those being given help (the 57 of 71 persons who said they received help from SCVAP)? Is there a relationship between getting help from SCVAP and the sex or age of the victim?

- Is there a relationship between whether persons found service helpful and whether they felt the volunteer was doing a good job?
- Is there a relationship between type of crime and type of assistance needed?

Information Relating to Volunteer Learning

The goals for the volunteer learning experience (see page 52) were all met, based upon the results of the student knowledge test, review of the volunteer journal, and volunteer self-administered questionnaire. The following paragraphs describe the information collected by each data method.

The Student Knowledge Test

At the beginning of the year, all students enrolled in three sociology courses providing volunteers took the community resources test shown on the next two pages. The same test was repeated at the end of the semester. The average scores were as follows.

	Test Score	
	Sept.	June
Students Who volunteered	22	60
Students Who Did Not Volunteer	20	28

Highest Score Possible = 66

The volunteers and nonvolunteers started the course with approximately the same level of knowledge. Students who volunteered did significantly better on the second test and showed greater improvement than those who did not volunteer.

EXCERPTS FROM COMMUNITY RESOURCES TEST

Please assume that you are trying to assist someone in need to find necessary services. Many agencies offer a range of services, but most have a purpose or focus making them able to best serve a special group of clients. For the first three items, choose the best answer. Items 4 and 5 are open-ended. Write clear, concise answers.

1. Where would you go if you had a person needing an emergency supply of food? (2 points)
   a. Salvation Army
   b. Child and Family Services
   c. Hospitality House
   d. Independent Foundation

2. What is the primary service offered by the Citizen's Improvement League? (2 points)
   a. Neighborhood improvement
   b. Legal assistance
   c. Consumer education
   d. Early childhood education

3. Someone needing free or very low-cost medical care should be referred to which agency? (2 points)
   a. Community Group Health Foundation
   b. Family Services
   c. Jefferson County Clinic
   d. Hospitality House

EXCERPTS FROM COMMUNITY RESOURCES TEST (Continued)

4. Identify three community services organizations providing help in each of the following: (1 point for each correct organization = 15 points)

   a. Counseling ____________________

   ____________________ ____________________

   b. Legal Aid ____________________

   ____________________ ____________________

   c. Transportation ____________________

   ____________________ ____________________

   d. Medical Care ____________________

   ____________________ ____________________

   e. Food, clothing, shelter ____________________

   ____________________ ____________________

5. For each organization, list the criteria clients must meet to receive services: (Up to 3 points for each answer = 45 points)

   ____________________ ____________________

   ____________________ ____________________

   ____________________ ____________________

   ____________________ ____________________

   ____________________ ____________________

   ____________________ ____________________

   ____

TOTAL POINTS = 66

Student Journal

Reviews of the student journal showed all but three volunteers did better in assessing client needs at the end of the program than at the beginning; all volunteers were able to identify at least eight problems in trying to get appropriate resources to persons in need.

Self-Administered Activity Questionnaire

This questionnaire revealed all but three students put in their required three hours of service and five students put in four hours. It also revealed that on the average less time was spent in locating referrals than on either assessing client needs or providing client service.

It was also found that all volunteers engaged in the same type of activities, although five spent significantly more time than the others on locating community resources.

5. USING EVALUATION RESULTS

The record reviews, client interviews, and data provided by volunteers gave the program the comprehensive descriptive data summarized in the previous section and, with it, they were able to prepare a report which satisfied both the funding agency and the Sociology Department. The report outline appears on page 66.

Preparing that report, however, was just the first step in using the evaluation results.

The evaluation staff convened a 3-hour session of committee of volunteers, staff, and university personnel to discuss the implications of the report and to develop a follow-up action plan. The following list of needs and proposed activities was developed.

Need: To find out what referrals were often perceived as not helpful.

Activity: Project staff would schedule meetings with those agencies to which referrals were usually made for the purpose of

- Sharing evaluation results
- Jointly looking at services provided to referred clients
- Jointly trying to find ways to improve operation by pinpointing problems in referral operation (e.g., were SCVAP volunteers making inappropriate referrals, was more information needed, did client "give up").

Volunteers making referrals would check back with client after 1 week to see if service was provided or if SCVAP could be of any further help.

Need: To find community resources to provide senior-citizen victims of crime with short-term loans, medical aid, and legal assistance.

Activity: The University Volunteer Bureau will attempt to locate such resources.

Need: Additional Volunteers.

Activity: Sociology professors will encourage student participation.

The committee also agreed to meet again in one month to assess program progress in meeting these needs.

EVALUATION OF SENIOR-CITIZEN VOLUNTEER
ASSISTANCE PROJECT

OUTLINE OF FINAL REPORT

I. EXECUTIVE SUMMARY

1. Project Goals and Objectives

2. Purpose of Evaluation

3. Summary of Findings
   a. Program Operation
   b. Client Services
   c. Volunteer Learning

4. Implications for Project

II. DETAILED FINDINGS

1. Program Analyses

2. Client Services

3. Volunteer Learning

4. Analysis of Variables Affecting Service and Learning

III. IMPLICATIONS OF FINDINGS FOR PROJECT

1. Administrative Operations

2. Client Services

3. Volunteers

IV. METHODOLOGY AND INSTRUMENTATION

Appendix A

Evaluation Plan Worksheet

EVALUATION PLAN

WORKSHEET

1. Project program to be evaluated: ______________________________

2. Reason for evaluation (see Section 1 — identify purpose, user, and use to which information will be put):

____

____

____

____

3. Research questions (see Section 2— put the information your evaluation will be seeking in question form):

____

____

____

____

4. Program goals/objectives against which accomplishments will be measured (see Sections 1 and 2 —make sure goals/objectives are clear, specific and measurable):

____

____

____

____

____

5. Attainment measures (see Section 2 — identify exact items you will use to look at program progress, outcome, and effect):

____

____

____

____

6. Research design (see Sections 2 and 3 — identify how you will judge your achievements, e.g., whether you will be measuring actual accomplishments against planned accomplishments, making a before and after comparison of the same group, contrasting accomplishments of those involved in your program with a sample group which was not involved or making comparisons against an external base):

____

____

____

____

7. Data collection methods (see Sections 2 and 4 — identify ways you will obtain data - record review, telephone or mail survey, personal interviews, standardized tests, observation, etc.):

____

____

____

____

8. Data analysis (see Section 5 — identify analysis processes to be used and questions each process will answer):

____

____

____

____

9. Use of results (see Section 6 — identify how implication of results will be identified and taken into account in program operation):

____

____

____

____

10. Identify all key tasks and clearances required, responsibility and time frame:

Task	Time	Responsibility
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Appendix B

Selecting And Using Data Collection And Analysis Mechanisms

Part 1. Selecting Data Collection Mechanisms

Part 2. A Brief Guide to Interviewing

Part 3. Interviewers Code

Part 4. Methods for Selecting Sample Populations

PART 1

SELECTING DATA COLLECTION MECHANISMS

The following chart summarizes some of the advantages and disadvantages or problems generally associated with various data collection mechanisms.

Data Collection Mechanism	Advantages	Disadvantages or Potential Problems
Record Review	• Records, if well kept, provide an accurate picture of program activities • Inexpensive • Easy	• Incomplete records • Inaccurate records • Inconsistent record-keeping system
Mail Survey	• Low manpower requirements • Can reach larger number of people than other survey mechanisms	• Low response rate
Telephone Survey	• Can probe to obtain answers • Probably higher response than mail survey • Less time-consuming than personal interviews	• Can only reach persons with telephones • Questionnaire needs to be short • Some persons reluctant to give out information over telephone
Personal Interviews	• Can get more information from respondent	• Needs comparatively more manpower • Generally smaller number of people can be contacted • Persons reluctant to talk with strangers coming to door

PART 2

A BRIEF GUIDE TO INTERVIEWING

- *Give a clear statement of the purpose of the interview.*

  This will help legitimize your presence and questions and will put the respondent more at ease. He or she will want to know:

  - The purpose of the study
  - The funding source
  - How the community was selected
  - If he or she can see the results before or after publication.

- *Emphasize the confidentiality of the material.*

- *Try not to take notes at the very beginning.*

  Explain the purpose of your questions, lead into the interview, then ask if the respondent minds if you take notes.

- *Record comments or remarks just as they are given. The exact words people use to describe their feelings are important.*

  If the comment is lengthy and you cannot write down every word, make notes that give the sense and the style of the comment. Use abbreviations that are understandable.

  Get specific comments, not vague, meaningless generalities like "I like it because it is good," or "because it is interesting," or "it's okay." Ask why in such cases.

- *Keep talking as you write.*

  Ask the second question as you record the response to the first. Start the respondent thinking about a question. Keep the pencil and questionnaire as inconspicuous as possible. Keep eye contact with the respondent, and do the writing unobtrusively.

- *Focus the respondent's attention on the question.*

  If he wants to talk about something else, politely but firmly start him back to the questions. Smile and say, "That's interesting . . . now what would you say about this question?"

- *Get all the information you are asked to get.*

  That means, ask every question and record every answer — in the correct place. Check over the questionnaire at the end of each interview before you leave the respondent's presence. Say, "Now, let's see if we've got everything," to allow you to look over each question to see that it is answered and the answer recorded correctly.

- *Watch for vague or qualified answers.*

  Vague answers may at first seem to answer the question, but really do not. Never accept a "depends" or a "qualified" answer the first time it is offered as an answer to any question. Respondents will often use phrases such as "well, that depends," "yes, but . . . ," "I really can see both sides of that question," etc. When you receive such answers, *PROBE*.

- *Watch for ambiguous answers.*

  Recognize ambiguity when it occurs and probe as necessary.

- *If necessary, probe for response.*

  Repeating the question is the basic method and the safest and most effective way of probing. Be sure you repeat only the question as stated in the questionnaire.

- *Try to avoid offending the respondent in any way.*

  - Don't offer comments which seem to place a value judgment on the respondent's answers.
  - Keep an even tone — don't let your tone betray your thoughts.
  - Don't cut the person off in mid-answer, even if the answer doesn't seem completely relevant to the question.
  - Avoid superimposing your own view; try to draw the respondent out if the answer is unclear.
  - Be flexible as unexpected problems arise.

PART 4

METHODS FOR SELECTING SAMPLE POPULATIONS

Size of Sample:

The chart below summarizes the acceptable sample size based on the size of the population being studied.

Number in Population being Studied	Percentages of Total Number of Individuals Needed for Sample
Less than 35	100%
35 to 100	75%
100 to 300	50%
More than 300	25%

If, for example, you have a student volunteer program with 146 students working as Spanish tutors in different parts of your city, and you are interested in knowing what the volunteers have learned about teaching, reading and the problems of poverty, you might decide to sample 50 percent (73) of the student volunteers to make assumptions that are very likely to be true of the entire group.

Representative Nature of Sample:

Along with choosing a sufficient number of cases to study, you must be sure the sample you select is representative of the larger group. One way to do this is to select individuals by a random choice where chance or luck alone determines which students, clients or records are included in the sample.

For example, you may use a deck of playing cards. Begin with a complete, accurate list of all persons or records in the group. For each individual on the list, draw a card from the deck. An individual will be selected or not selected for the sample based on the suit of the card drawn. The chart on the next page summarizes the selection rules. After each selection, replace the card in the deck. Shuffle the cards before drawing the card for the next time.

SELECTION SAMPLE BY
PLAYING CARD METHOD

Percentage of Total Number of Individuals Needed for Sample	Selection
100%	All individuals
75%	All suits except hearts included in sample
50%	All red suits (hearts and diamonds) included in sample
25%	Only clubs included in sample

A table of random numbers, which can be found in most statistics books, will accomplish the same task as the playing cards.

To use the random number method, give each person on the list a number. Be sure to number consecutively. Next, arbitrarily identify a place on a "random number chart" to begin selecting your sample (ideally the starting point is identified by a game of chance).

From the chosen point on the chart begin moving in a systematic manner, e.g., down one column, up the next column, or sideways across each row. Note each number and include one individual with that number in your sample. Stop when you have the number needed.

A random number chart appears on the next page.

SAMPLE OF RANDOM NUMBER CHART

05 90 35 89 95	01 61 16 96 94	50 78 13 69 36	37 68 53 37 31	71 26 35 03 71
44 43 80 09 98	46 68 05 14 82	90 78 50 05 62	77 79 13 57 44	59 60 10 39 66
61 81 31 96 82	00 57 25 60 59	46 72 60 18 77	55 66 12 62 11	08 99 55 64 57
42 88 07 10 05	24 98 65 63 21	47 21 61 88 32	27 80 30 21 60	10 92 35 36 12
77 94 30 05 39	28 10 99 00 27	12 73 73 99 12	49 99 57 94 82	96 88 57 17 91
78 83 19 76 16	94 11 68 84 26	23 54 20 86 85	23 86 66 99 07	36 37 34 92 09
87 76 59 61 81	43 63 64 61 61	65 76 36 95 90	18 48 27 45 68	27 23 65 30 72
91 43 05 96 47	55 78 99 95 24	37 55 85 78 78	01 48 41 19 10	35 19 54 07 73
84 97 77 72 73	09 62 06 65 72	87 12 49 03 60	41 15 20 76 27	50 47 02 29 16
87 41 60 76 83	44 88 96 07 80	83 05 83 38 96	73 70 66 81 90	30 56 10 48 59
22 17 68 65 84	68 95 23 92 35	87 02 22 57 51	61 09 43 95 06	58 24 82 03 47
19 36 27 59 46	13 79 93 37 55	39 77 32 77 09	85 52 05 30 62	47 83 51 62 74
16 77 23 02 77	09 61 87 25 21	28 06 24 25 93	16 71 13 59 78	23 05 47 47 25
78 43 76 71 61	20 44 90 32 64	97 67 63 99 61	46 38 03 93 22	09 81 21 99 21
03 28 28 26 08	73 37 32 04 05	69 30 16 09 05	88 69 58 28 99	35 07 44 75 47
93 22 53 64 39	07 10 63 76 35	87 03 04 79 88	08 13 13 85 51	55 34 57 72 69
70 76 58 54 74	92 38 70 96 92	52 06 79 79 45	82 63 18 27 44	69 66 97 19 09
23 68 35 26 00	99 53 93 61 28	52 70 05 48 34	56 65 05 61 86	90 92 10 70 80
15 39 25 70 99	93 86 52 77 65	15 33 59 05 28	22 87 26 07 47	86 96 98 29 06
58 71 96 30 24	18 46 23 34 27	85 13 99 24 44	49 18 09 79 49	74 16 32 23 02
57 35 27 33 72	24 53 63 94 09	41 10 76 47 91	44 04 95 49 66	39 60 04 59 81
48 50 66 54 48	22 06 34 72 52	82 21 15 65 20	33 29 94 71 11	15 91 29 12 03
61 96 48 95 03	07 16 39 33 66	98 56 10 56 79	77 21 30 27 12	20 49 22 23 62
36 93 89 41 26	29 70 83 63 51	99 74 20 52 36	87 09 41 15 09	58 60 16 03 03
18 87 00 42 31	57 90 12 02 07	23 47 37 17 31	54 08 01 88 63	39 41 88 92 10
88 56 53 27 59	33 35 72 67 47	77 34 55 45 70	08 18 27 38 90	16 95 86 70 75
09 72 95 84 29	49 41 31 06 70	42 38 06 45 18	54 84 73 31 65	52 53 37 97 15
12 96 08 17 31	65 19 69 02 83	60 75 86 90 68	24 64 19 35 51	56 61 87 39 12
85 94 57 24 16	92 09 84 38 76	22 00 27 69 85	29 81 94 78 70	21 94 47 90 12
36 64 43 59 96	98 77 87 68 07	91 51 67 62 44	40 98 05 93 78	23 32 65 41 18
53 44 09 42 72	00 41 86 79 79	68 47 22 00 20	35 55 31 51 51	00 83 63 22 55
40 76 66 26 84	57 99 99 90 37	36 63 32 08 58	37 40 13 68 97	87 64 81 07 83
02 17 79 18 05	12 59 52 57 02	22 07 90 47 03	28 14 11 30 79	20 69 22 40 98
95 17 82 05 53	31 51 10 96 46	92 06 88 07 77	56 11 50 81 69	40 23 72 51 39
35 76 22 42 92	96 11 83 44 80	34 68 35 48 77	33 42 40 90 60	73 96 53 97 86
26 29 13 56 41	85 47 04 66 08	34 72 57 59 13	82 43 80 46 15	38 26 61 70 04
77 80 20 75 82	72 82 22 99 90	63 95 73 76 63	89 73 44 99 05	48 67 26 43 18
46 40 66 44 52	91 36 74 43 53	30 82 13 54 00	78 45 63 98 35	55 03 36 67 68
57 56 08 18 09	77 53 04 46 47	31 91 18 95 58	24 16 74 11 53	44 10 13 85 57
61 65 61 68 66	37 27 47 39 19	84 83 70 07 46	53 21 40 06 71	95 06 79 88 54
83 43 69 64 07	34 18 04 52 35	56 27 09 24 86	61 85 53 83 45	19 90 70 99 00
21 96 60 12 99	11 20 99 45 18	48 13 93 55 34	18 37 79 49 90	65 97 38 20 46
95 20 47 97 97	27 37 83 28 71	00 06 41 41 74	45 89 09 39 84	51 67 11 52 49
97 86 21 78 73	10 65 81 92 59	58 76 17 14 97	04 76 62 16 17	17 95 70 45 80
69 92 06 34 13	59 71 74 17 32	27 55 10 24 19	23 71 82 13 74	63 52 52 01 41

Appendix C

Bibliography And Glossary

GLOSSARY

GOAL	General statement of why you are in business, whom you serve, and what you hope to accomplish.
OBJECTIVE	Specific statement of what you plan to achieve, under what conditions, over what period of time, and what criteria you will use to assess achievement.
EVALUATION	Process of measuring program outcomes against program objectives in order to provide specific information which can be used in problem solving, decision making and future programming.
MEASURES	Indicators and criteria used to assess achievement.
EVALUATION PLAN	Detailed statement of what you will assess, how you will do it, and how you will use the results of your assessment.
ANALYSIS STUDIES	Evaluations which focus on providing a descriptive account of what a program is doing, how it is doing it and the extent to which it is doing it.
IMPACT STUDIES	Evaluations which assess the effects of a program on clients being served and/or those providing service.
VARIABLE	A factor in the program which is changeable; a characteristic which varies from individual to individual or setting to setting.
POPULATION	The universe or group of persons or programs of interest to the evaluator.
INSTRUMENT	Tool used to collect and/or record data.
OPEN-ENDED QUESTION	Question which allows respondent to reply in style and using words he/she feels is appropriate.
CLOSED-ENDED QUESTION	Question which requires respondent to select an answer from a predetermined set of choices.

AVERAGE	That which is most typical or which best describes a group; a single number which best describes a series of numbers.
RANGE	The span of variations; the difference between the least and greatest values in a given set.
FREQUENCY DISTRIBUTION TABLE	A chart showing the number of times individuals or activities fall within a certain class.