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ABSTRACT

This handbook is designed to help beginning evaluators of teacher recruitment programs. It addresses the information and assessment needs of teacher recruitment programs. It takes a hands-on approach and includes worksheets and instructions for using them. After presenting tips for getting started, the handbook offers eight steps to successful program evaluation, which include: (1) understanding the purpose of program evaluation; (2) identifying audiences for the evaluation; (3) planning for evaluation resources and costs; (4) identifying evaluation questions; (5) selecting methods for data collection/sample surveys; (6) analyzing and interpreting the data; (7) drawing conclusions and making recommendations; and (8) reporting the evaluation results. The handbook also includes mini-case studies of program evaluation. Four appendixes offer: more tips from practitioners, a glossary of terms, resources for program evaluation, and a reader response form. (SM)

Measured Steps

An Evaluation Handbook for Improving Teacher Recruitment Programs

Prepared by
Recruiting New Teachers, Inc.
RNT

About Recruiting New Teachers, Inc.

Recruiting New Teachers, Inc. (RNT), is a national non-profit organization formed in 1986 to raise esteem for teaching, expand the pool of prospective teachers, and improve the nation's teacher recruitment, development, and diversity policies and practices. RNT's programs and services include:

- Conducting public outreach and awareness efforts to raise esteem for the teaching profession;
- Offering counsel and information to prospective teachers;
- Convening national conferences focusing on teacher recruitment, development and diversity issues;
- Providing technical assistance to states and school districts;
- Publishing guides, studies, and reports; and
- Serving as an information clearinghouse on teacher recruitment issues.

For more information about RNT's services and publications, and to order additional copies of *Measured Steps,* please contact us at:

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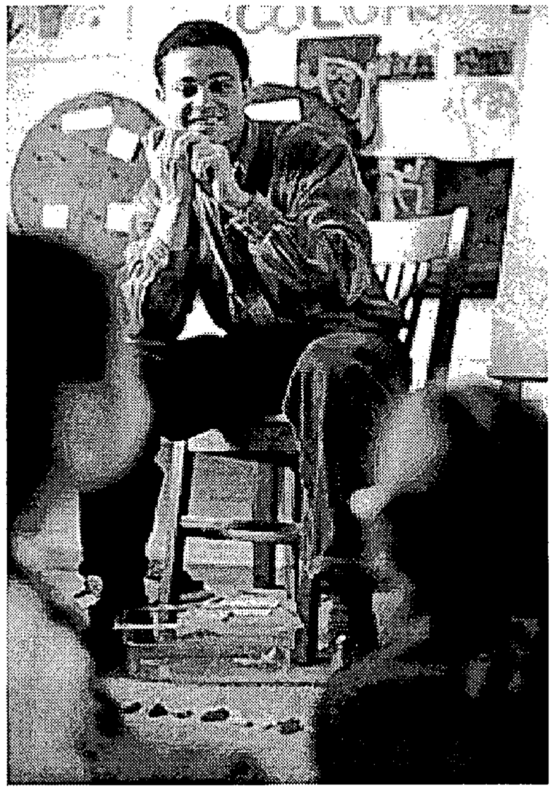

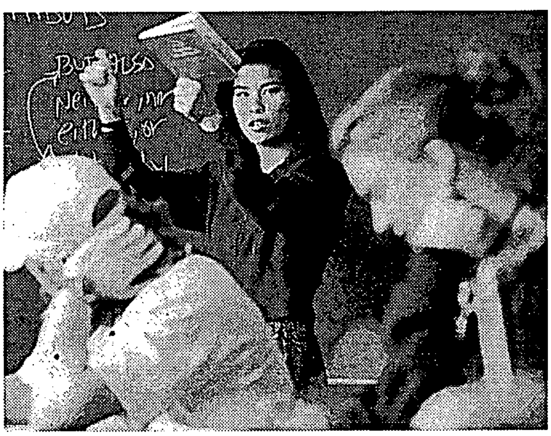

By
Recruiting New Teachers, Inc.
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RNT

Acknowledgments

RNT developed this handbook in close collaboration with several highly experienced educators who are responsible for precollegiate teacher recruitment programs across the country—Dr. Joseph Braun, professor at California State University/Dominguez Hills and (former) director of the Consortium for Minorities in Teaching Careers; Dr. Victoria Davis, (former) director, Golden Apple Scholars; Brenda Haynes, administrator at Morgan State University and (former) director of Programs to Recruit and Inspire Minorities in Education; Dr. Janice Poda, director of the South Carolina Center for Teacher Recruitment; Dr. Anne Rothstein, associate provost, Lehman College and director of the Walton-Lehman Pre-Teaching Academy—and with assistance from Dr. Shannon Cahill, a consultant and program evaluation specialist from Human Capital Research Corporation in Chicago. We are enormously indebted to all of them for their important contributions to this publication, as well as their continued commitment to and enthusiasm for the entire program evaluation project, of which the handbook is a most welcome start.

Several RNT staff members teamed up to make the handbook a reality. Four who deserve special mention are: Dr. Elizabeth Fideler, Vice President for Policy and Research, who led the project; Segun Eubanks, Vice President for Recruitment Programs and Services; Naomi Housman, Program Associate; and Beth Gross, Policy and Research Assistant.

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Contents

List of Worksheets

Surveys

How and Why This Program Evaluation Handbook Was Developed

Recruiting New Teachers, Inc. (RNT) embarked on the program evaluation handbook project in 1996 in response to numerous requests for help from precollegiate teacher recruitment program coordinators. Our pathbreaking research into precollegiate teacher recruitment programs in 1992 and again in 1994 had led to the publication of two definitive reports, *Teaching's Next Generation* and *Teaching's Next Generation: Five Years On and Growing*, and the establishment of a clearinghouse at RNT called the National Center on Precollegiate Teacher Recruitment. Under the Center's auspices, we learned via national surveys, conferences and calls for technical assistance that program coordinators were highly dissatisfied with their ability to evaluate program outcomes and effectiveness. Many recognized the need for more systematic means of formative evaluation to drive continuous program improvement. Coordinators decried the absence of practical, reliable evaluation tools and the lack of time, resources, and wider institutional support that made it almost impossible to track program graduates along pathways into teaching careers. Most recognized that careful evaluation is essential to inform decision making and justify continued investment in and support for their programs.

Twice we convened focus groups of practitioners representing a variety of teacher recruitment program models—statewide, inner-city, and national in scope—who had all commissioned external evaluation and tracking studies. Three program evaluation experts—Dr. Barnett Berry, Dr. Beatriz Chu Clewell, and Dr. Shannon Cahill—also participated actively in our discussions and planning. All agreed that recruitment program coordinators have a critical need for step-by-step guidance on examining the effectiveness of program activities and strategies and on tracking program participants' progress after graduation.

The end product, *Measured Steps: An Evaluation Handbook for Improving Teacher Recruitment Programs*, has been designed for the beginning evaluator. We deleted "precollegiate" from the title because feedback on our first draft convinced us of the handbook's relevance and potential benefits to all teacher recruitment program directors.

Taking a "hands-on" approach, we have included many worksheets and instructions for using them. While a few other practical and user-friendly guides to program evaluation are available (see the *Resources* section on page 97), this one is unique in addressing the information and assessment needs of teacher recruitment programs. We recommend starting at the beginning where we provide an overview of the sections comprising the handbook and important tips for getting started. Then, simply proceed step-by-step, section-by-section until you have acquired the basic tools and know-how for evaluating your program. Good luck!

A final note: In order to evaluate the handbook's effectiveness and usefulness, we urge readers to complete, tear out, and return the Reader Response Form provided at the back. Please let us know whether the handbook meets your needs, what features are most/least helpful, and what, if anything, is lacking, so we can make revisions in the future. We also invite your inquiries or comments by telephone (617) 489-6000 or e-mail: rnt@rnt.org.

Overview of the Handbook

In designing and conducting an evaluation, you'll find that each step builds on the prior ones. For example, if you don't understand why you are evaluating, your guiding research questions won't make sense. Similarly, if you haven't clearly identified logical research questions based on the purpose of the evaluation, there's a good chance you won't select the most appropriate methods for collecting data to address each question. Each section of this handbook builds on the previous ones and allows you to create and carry out an evaluation design for your teacher recruitment program. An overview of the sections comprising this handbook is illustrated below. We suggest that you follow each of these steps in logical order to maximize your understanding of evaluation as well as the quality of your evaluation design and its results.

In addition to core sections on designing and conducting an evaluation, seven mini-cases, a glossary of common research and evaluation terms, and additional tips from practitioners are also provided. For those of you with a desire to learn more about evaluation beyond the scope of this handbook, a final section provides supplemental references to other textbooks, handbooks, organizations and resources.

STEP 8 Reporting Your Evaluation Results

STEP 7 Drawing Conclusions and Making Recommendations

STEP 6 Analyzing and Interpreting the Data

STEP 5 Selecting Methods for Data Collection/Sample Surveys

STEP 4 Identifying Evaluation Questions

STEP 3 Planning for Evaluation Resources and Costs

STEP 2 Identifying Audiences for the Evaluation

STEP 1 Understanding the Purpose of Program Evaluation

Tips For Getting Started

You should now have an understanding of the purpose of this handbook and an overview of its contents. Before you read any further, please review and follow four basic tips for getting started in using this handbook.

1. Bring together your "evaluation team."

While *you* may be the one who will conduct the evaluation of your teacher recruitment program, it may be useful to bring together others involved in the program (e.g., program staff and a member of the advisory board) who can lend insight and assist in carrying out the evaluation steps contained within this handbook. This will not only be a learning process for you, it will also help other program staff gain an understanding of evaluation—how to conduct one, how to use resulting information to better conceptualize the program, as well as ways to improve it. In identifying members of the evaluation team, make sure they know what it will entail in terms of time demands, timeline, their role, etc. and secure a commitment from all members before starting the process.

2. Review the chapters of the handbook with the team.

Before attempting to design and carry out an evaluation, you and other evaluation team members should spend some time reviewing the steps outlined in each chapter of this handbook as well as the accompanying worksheets. By doing so, you will have a clearer understanding about evaluation's purpose and how it relates to your needs. Also, working through this handbook will take some dedicated time (and energy). We recommend that you build a realistic schedule for conducting the various parts of your evaluation. Even if you have developed an excellent evaluation plan, you may be disappointed with the results if you do not leave yourself sufficient time to execute the plan.

3. Create a realistic timeline for conducting the evaluation.

It is a good idea to have an understanding of the most appropriate and effective time for conducting the program evaluation. Part of this planning depends on why you need to evaluate and how you will use the information. For example, if you are seeking evaluation information that you can incorporate into a grant proposal due in six months, you will have to determine not only the type of information you require from the evaluation, but the scope of the evaluation itself. In other words, you need to make sure that you can design and implement an evaluation plan that collects the right type of information within that period of time.

4. Procure all "go-ahead" and permissions.

If you believe that you need approval from specific people or organizations before starting the evaluation (e.g., from school administrators, school board, funding agency, etc.), it is wise to secure their permission now so as not to get bogged down with "red tape" later in the process.

Eight Steps to Successful Program Evaluation

STEP 1 Understanding the Purpose of Program Evaluation

What *is* This Thing Called Evaluation?

The term **evaluation** takes on many meanings depending on the context in which it is used. No one definition describes adequately the process of evaluation. A commonly accepted definition of **evaluation**, however, is:

> "The formal examination of the *quality, effectiveness*, or *value* of a program, product, project, process, objective, or curriculum." (Worthen & Sanders, 1988; see *Resources* section)

No matter how evaluation is defined, an important first step in using this handbook is to put aside any notions you might have about evaluation being "bad." There is quite a difference between the traditional image of *being* evaluated and the actual process of *conducting* evaluation for self-reflection and program improvement. This handbook provides you with the basic methods for designing and implementing an evaluation plan. Using the evaluation information you have collected, you will not only have the capacity to identify and measure indicators of program success, you will also be better equipped to uncover programmatic needs and gaps and to implement strategies for addressing them. In essence, you and your staff will become empowered to incorporate evaluation skills into all aspects of your program environment and to become reflective self-evaluators.

Whether you know it or not (and whether you like it or not!) you are already evaluators of your teacher recruitment program. You are evaluators because you are in the *process* of evaluating when you ask the following types of everyday questions about your program:

- What is the *issue* we are trying to address?
- What are we *doing* to address this issue?
- Are we doing what we *said* we would do?
- Are we doing these things *well?*
- How should we *improve* what we do?
- What *difference* have we made?

More specifically, you may wonder:

- Is our teacher recruitment program *really helping* to prepare participants for a career in teaching?
- Are we *reaching* potential program participants?
- Should we consider *eliminating* or *changing* certain components of the program?
- How can we *reach more* students/ participants?
- How many of our program participants *succeed* in the program?
- *What happens* to program participants when they complete the program?
- How can we be more *efficient* in operating this program?
- Can this program serve as a *model?* What would other people need to know about it in order to adapt it?

These questions focus on a teacher recruitment program that is in place, where resources have been dedicated and program activities have been designed and implemented. You are now at a point in your program's life where you'll want to examine the **processes** of your program (e.g., the activities and specific components) and assess **impact** (or outcomes). Even if your program is in the early stages of implementation, it is never too early to assess the effectiveness of activities and track outcomes, because it is likely that at some point, someone or some group will ask, "How did your program make a difference in the lives of its participants?"

Before we delve into **how** to evaluate, you need to determine exactly what you intend to evaluate.

TIP

Within the world of evaluating, there exist different types and levels of evaluation, depending on its purpose. Examples include: program, project and planning evaluations, formative and summative evaluations, and implementation and progress evaluations. *Program evaluation* looks at educational activities provided on a continuing basis and *project evaluation* looks at educational activities provided for a defined period of time (Sanders, 1994). See *Glossary* for more information on different evaluation types.

Describing and Prioritizing What is to be Evaluated

Describing the object of evaluation—in your case, your teacher recruitment program—is the critical first step to any evaluation design. In working so closely with a program, it is easy to lose perspective on exactly what you are doing and why. Furthermore, different people involved with the program (e.g., program director, program staff, participants) may view it differently depending on their own unique perspectives. Before delving into the evaluation design, it is important to understand the program from these multiple perspectives. In other words, this first step allows you to pause and simply describe what it is you will be evaluating.

There are five simple elements to the program description:

- WHO: Who's involved? Who are the key decision makers and leaders, the funders, the personnel implementing the program, and those served by the program? Who are the advocates and adversaries, partner organizations, or other interested groups?
- WHY: Why does this program exist? What are the goals and objectives of the program? What needs are being addressed?
- WHAT: Is there a model or description of the program? What and how many separate components are included? What kinds of activities are included? What services are provided? What are the potential benefits and opportunities? Generally, what appear to be the biggest issues or problems in the eyes of program personnel and other stakeholders?
- WHEN: How long has the program been around? What does its history look like and what kind of future is it anticipating? How long does it have to accomplish short- and long-range goals?
- WHERE: What is the setting of the program? Where does it fit into the larger organization?

Worksheet #1A

Program Evaluation Design

Make a copy of Worksheet #1A for each member of the evaluation design team. Have each person *individually* describe the program to be evaluated from his or her perspective. Once everyone has completed the worksheet, review the comments as a group. Use this time to discuss, brainstorm, and build consensus on what is to be evaluated.

Again, Why Evaluate?

Based on the information you've collected for Worksheet #1A, you now know what you are evaluating. Before you put the time and energy into designing an evaluation plan for your program, however, you need to ask: "*Why* evaluate this program?"

Whether the program is new and still under development or one that has been around for years, depending on your information and decision-making needs, there are several reasons for conducting an evaluation:

LOOK AT...	IN ORDER TO...
A. Goals or Needs Identification	Determine whether goals and needs have been met
B. Program Design	Determine the adequacy of the program design that was used; compare the design to alternatives
C. Process or Implementation	Determine whether it was implemented as planned; describe problems that developed; examine what happened vs. what was expected
D. Results/Outcomes/ Impact	Assess the quality of outcomes; determine the outcomes achieved; determine if it was worthwhile
E. Decisions about Continuing	Determine if it was worth the resources it consumed

Worksheet #1A: Describing What is to be Evaluated

Describing the Program *(Defining What You'll Evaluate)*

Directions: Describe the program you will evaluate in the space below. You may want to write a narrative description and/or pictorial representation to answer the questions.

LIST **Who** is involved in the program?

NOTE **Why** does it exist? What are its goals, objectives?

DESCRIBE OR LIST **What** are its sub-parts and pieces? What are the functional elements of the program?

EXPLAIN **How long** has the program been around? What does its history look like and what kind of future is it anticipating? How long does it have to accomplish short- and long-range goals?

DESCRIBE **Where** does it exist? (as a single entity and in relation to the whole organization?)

While these are all important reasons for engaging in evaluation, this handbook will focus on parts C & D—processes and outcomes. Why focus on the evaluation of processes/implementation and the measurement of impact? As mentioned earlier, if you are using this handbook, you are probably at a point where your teacher recruitment program is in place, where resources have been dedicated to running the program and program activities have been designed and implemented. It is inevitable that someone or some group with a stake in your program (e.g., a funder, a recipient, a supporter, etc.) will want to know if all the time and resources dedicated to the program really make a difference. In other words, you are or will be accountable for talking about the impact of your program; and to measure impact you must be familiar with the processes, including the activities and other components of your program.

Accountability is an important reason for examining the processes and outcomes of your program, but it is not the only reason. An even more important reason for examining processes and measuring outcomes is to help you to make decisions about program improvement. The ongoing process of assessing implementation and measuring outcomes will provide you with important feedback about program processes that will allow you to identify gaps and make "mid-course" strategic changes to your program. In so doing, you will become more effective and efficient in carrying out program objectives and in meeting the needs of participants. Other benefits may include: promoting the program to potential participants, enhancing the program's public image, and retaining and increasing funding and other types of support.

Identifying Processes and Impact

Identifying program processes and impact (or outcomes) will literally guide each subsequent step of your evaluation, from identifying research questions to designing the appropriate data collection instruments and making recommendations based on findings.

> **Challenge!**
>
> **CHALLENGE** Measuring the long-term impact of your program is perhaps the most elusive evaluation issue and critical challenge you will face in the evaluation process. The ultimate goal for any teacher recruitment program is that a good number of program participants go on to become successful teachers. Yet this is a most difficult goal to measure, as it takes years for a high school, middle school, or even a college student to traverse the pipeline into a teaching position. What's more, even if program participants could be tracked over time, determining the *direct* impact of the teacher recruitment program on the participant is yet another challenge.
>
> **SOLUTION** Identify interim goals that will indicate *progress toward teaching*. For example, you can measure participants' progress in school, retention in your program from year to year, college acceptance and/or entrance rates, attitudes toward teaching and career goals over time, etc. All of these measures, in the aggregate and tracked over time, provide a solid profile from which to draw conclusions about program impact.

Program processes relate to the specific aspects of program components and the implementation of those components. In assessing processes, you might look at:

- Attendance at program activities
- Participant satisfaction with program activities/support structures/etc.
- Retention or participation in the program

Program impact (or outcomes) relates to what happens to the participants as a result of being in the program and being exposed to the various program components. Program impact may relate to changes in knowledge, skills, attitudes, values or behaviors. In assessing program impact, you might look at:

- Attitudes about teaching as a career
- Grades or academic performance of program participants

- Participant confidence and self-esteem
- College matriculation rates of program participants
- Numbers of participants who eventually enter the teaching field

While the ultimate outcome of your program is its impact in terms of the number of participants entering careers in teaching, you may have to measure interim (short-term) outcomes over a period of time (see **Challenge & Solution** box on the previous page) to collect the kinds of data that will help you to hypothesize about the long-term impact of your program.

However, as your program matures and as participants complete the program and continue on with their educational and professional plans, you (and the various other stakeholders) may want to know what happens to participants *after* they leave the program. In this case, you should consider alumni or follow-up studies.

Follow-up studies involve *tracking* and collecting information from your participants over time. For example, many high schools and college engage in follow-up studies of their graduates that entail surveying them one, two, five, ten or more years after graduation. The focus of the follow-up surveys is not only on the current endeavors of alumni but also how the program (or school, educational program, etc.) impacted what they are currently doing and what they plan to do. Schools then use this information for such things as advocacy building, public relations, program improvement, fund-raising and so forth.

Worksheet #1B

Identifying Program Processes and Impacts

Make a copy of Worksheet #1B for each member of the evaluation design team. Individually or as a group list the process and impact outcomes for your evaluation and then have each person individually rank each outcome in order of importance. Use this ranking as a point of discussion for deciding priorities for evaluating. You may not be able to do everything now, but ranking will help you to decide where best to place your focus and resources in order to meet your immediate evaluation needs.

16

Worksheet

Worksheet #1B: Identifying Program Processes and Impacts

(Deciding and Prioritizing What You Want to Measure)

Directions: In the matrix below, identify the processes and impacts that would be important to evaluate. Then rank each in terms of its priority given your focus and immediate evaluation needs.

Program Processes (e.g., specific program activities, components, support structures, activity attendance, program retention, etc.)	**Rank** Use a number to rank each one (if more than one)
Program Impacts (e.g., changes in participants' attitudes, knowledge, behaviors, goals, etc. as a result of participation in the program)	**Rank** Use a number to rank each one (if more than one)

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17

18

STEP 2

Identifying Audiences for the Evaluation

Who's Interested in This Anyway?

So, now you want to know who else could *possibly* be interested in an evaluation of *your* program. Well, you'd be surprised by the number and types of stakeholders out there!

A stakeholder is any person or group of persons who can impact or be impacted by your program, directly or indirectly. Who are these people? They include audiences who:

- make decisions based on the evaluation findings;
- are involved in planning or modifying the program being evaluated;
- might be affected by the evaluation results;
- have legal rights to know about the evaluation;
- sponsor, commission or pay for the evaluation;
- advocate or criticize the program being evaluated;
- provide information for the evaluation;
- run the program being evaluated.

Roles of persons or groups who might be audiences for your teacher program include:

- principals/superintendents
- foundations
- boards of education
- legislators
- taxpayers
- funding agencies
- teachers
- community groups
- parents
- adversaries
- friends/advocates
- unions
- news media
- project directors/staff
- students/program recipients
- higher education administrators/faculty

Although all of these audiences may not be involved directly with the evaluation, it is important for the evaluation design team to identify (within reason) all audiences or stakeholders who *could* have an interest in the evaluation and its results.

There are many ways to identify these multiple interests. For example, you could:

- have conversations with key program staff;
- consult the program advisory board;
- have conversations with groups outside the program;
- make observations of key program activities and players;
- review documents that define audiences;
- consult program funders.

Worksheet #2

Identifying and Analyzing Audiences/Stakeholders

Make a copy of Worksheet #2 for each member of the evaluation design team. Individually or as a group list the audiences/stakeholders for your evaluation and describe the particular values, interests, or expectations these individuals may hold which are important to consider as you undertake your evaluation.

19

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Worksheet #2: Identifying and Analyzing Audiences/Stakeholders

List the audiences/stakeholder groups for your evaluation	Identify persons/spokespersons for each audience	What kind of information will be relevant and persuasive to this audience?
20	BEST COPY AVAILABLE	21

STEP 3

Planning for Evaluation Resources and Costs

How Much is This Going to Cost?

People are more likely to dread the cost of conducting an evaluation than to recognize the cost of NOT evaluating their programs or to understand the potential cost-benefit of conducting evaluation. Evaluations that focus on *program improvement*, for example, can result in cost savings and quality gains by indicating ways to improve program processes without increasing program costs. Evaluations that focus on *program outcomes* can be used to promote the program and rally support from a range of stakeholders, which could result in continued funding and other forms of support.

It is difficult to predict the *exact* amount it will cost you to design and conduct an evaluation for your teacher recruitment program. This is because the cost of conducting evaluation depends on a combination of factors, including the size of your program, the scope of the evaluation and the methodologies used, and decisions about who will conduct the evaluation. What is provided here are some issues for you to consider when analyzing the resources and capabilities that can be committed to your program's evaluation.

What Makes Up the Cost of Conducting an Evaluation?

Your evaluation budget depends on the scope of the evaluation and the type of information you wish to collect. The costs associated with conducting an evaluation often revolve around the following resources:

- Personnel—includes the people who will conduct the evaluation and support evaluation activities;
- Technology Support—includes equipment (e.g., computers, Scantron machine and forms), software, training, maintenance;
- Material—includes supplies, photocopying, production of evaluation reports, etc.;
- Communication—telephone charges for phone interviews and survey follow-up and postage for mailing questionnaires;
- Travel—includes mileage or airfare for traveling to program sites;
- Meeting Expenses—includes meeting facilities, refreshments, etc. for interviews or focus groups; presentation of evaluation results, etc.

Obviously, the amount expended on any of these resources depends on these factors:

- The size of the program and the scope of the evaluation;
- The types of evaluation methodologies used (e.g., surveys, interviews, focus groups, case studies);
- Decisions regarding who will conduct the evaluation (internal vs. external);
- The types and amount of resources that may be acquired as "in-kind" support from funders, staff, or other sources.

Challenge

CHALLENGE A frequently cited evaluation challenge related to resources is *time* — as in, not enough of it! In general, teacher recruitment programs do not have large staffs, which makes it difficult to find time to plan for and implement program activities, let alone collect data for evaluation!

SOLUTION Viewing evaluation as an integral part of your program and incorporating evaluation activities into program operations can be an efficient and effective way of collecting data. For example, distribute participant satisfaction questionnaires at key points throughout the year and use information gathered from these forms to design an end-of-year (or end-of-program) questionnaire. In lieu of a questionnaire, you might consider reviewing participant journals, which are not only a very valuable program activity and learning tool, but also a potentially excellent source of evaluation information.

Identifying Other Low Cost/No Cost Resources

Examples of other resources that may be available to you at little or no cost include:

- **The availability of existing data.** The more *primary* data that need to be collected, the more costly the evaluation. Any existing files, participant records, previous evaluation information, etc. that could inform your evaluation should be identified and considered. (Also see the **Challenge & Solution** box on the previous page.)
- **The availability of existing data collection instruments.** Existing tests, questionnaires, interview protocols, and the like are resources that will cost you little or no money, but should be used *only if* they fit the scope of the evaluation.
- **The availability of existing support services.** Depending on where your program operates, you may have several support services (such as computer programming and database support, duplication and printing services, Scantron machines, etc.) available to you at little or no cost. These services should be considered in the implementation of the evaluation design.
- **The availability of evaluation staff.** You may be able to make use of qualified personnel on-site for carrying out your evaluation activities. Examples include using teachers to collect data or secretaries to type and enter data into databases and spreadsheets. In addition, graduate students seeking internships or data collection opportunities for dissertations can serve as evaluation staff at little or no cost. Graduate students in the social sciences are often skilled in data collection instrument development (such as surveys or interview protocols), conducting interviews and focus groups, data entry and statistical analysis, and data interpretation. Contacting a college or university in your area is a good place to start.

A Final Tip... What You Should Know about Hiring an Outside Evaluator

While this handbook assumes you will be conducting the evaluation *internally*, it is nonetheless important to have a general idea about identifying and hiring an external evaluator in case you choose that route at some point in the future. A reliable and expert *external* evaluator is a good choice if you are interested in knowing about program outcomes or impact (e.g., "What difference has this program made?" "Should it be continued?"). An expert from the outside provides an element of credibility to the evaluation and reduces the threat of bias or conflict of interest that comes with evaluating one's own program. Using an external evaluator also adds an outside perspective and allows you to view the program through a different lens and see things that may otherwise be missed by someone working closely with the program on a daily basis.

External evaluators who possess *formal academic preparation*, *evaluation experience*, and a *strong track record* for conducting evaluation also bring with them the technical and professional expertise necessary to ensure the collection of valid and reliable data and the effective communication of evaluation results. Note: Be sure to check the references of any external evaluator you are considering.

An external evaluator will undoubtedly be more expensive because of the associated professional costs and the usual added communication and travel costs. It is up to you to weigh the benefits and costs of using external evaluators based on your program needs and resources.

TIP

If you do decide to use an external evaluator, be sure to communicate your budgetary limits and concerns, so that together you can determine a realistic plan in relation to your resources. Also, ask your evaluator to present a "menu" of evaluation options within your budget, so that you can pick and choose the plan most suited to your decision-making needs.

Worksheet #3

Identifying Evaluation Resources

Make a copy of this worksheet for each member of the evaluation design team. As a group, use Worksheet #3 to identify possible resources for carrying out your evaluation, including funding, personnel, support services, and in-kind contributions.

Worksheet #3: Identifying Evaluation Resources

Directions: For each of the resources below, identify the availability for the evaluation of your program.

Program Budget	Existing Data (participant records, evaluation data, etc.)	Existing Data Collection Instruments
$________________ Percent dedicated to evaluation: ______%		
Possible In-Kind Contributions	**Existing Support Services**	**Potential Evaluation Staff**

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24 25

STEP 4

Identifying Evaluation Questions

The Question Is: What Questions Need to Be Asked?

The evaluation questions are the guide to good evaluation design and activities. Without sound evaluation questions, the evaluation will lack focus and evaluation results will be disjointed and ambiguous. Furthermore, along the way you will have wasted time and resources, misdirected future efforts, and lost credibility with your audiences and/or stakeholders.

Identifying the questions and issues that will guide your study takes time, reflection, and the involvement of key stakeholders. In identifying evaluation questions, it is best to brainstorm a range of questions rather than to place limits on the number and type of questions to be included. Questions included in your evaluation design should be guided by the processes and impacts you want to measure. The following matrix provides you with basic evaluation questions based on some examples of program processes and impacts.

Processes & Impacts	Typical Evaluation Questions
Retention in the program **(Process)**	What are the characteristics of participants? Who leaves the program and why? How has retention changed over time? Why?
Quality and relevance of program activities/components **(Process)**	What activities are most/least effective and why? What mid-course directional changes have been taken and why? What was the result? Are there sufficient resources to implement the activities?
Academic achievement of program participants **(Impact)**	What are the academic outcomes of this program in terms of participants' grades? How prepared are participants to attend college? How many intend to go to college and how has that changed over time?
Changes in participants' attitudes, confidence and self-esteem **(Impact)**	How has the program helped participants to identify goals and ways of reaching the goals? How has the program provided support to participants in reaching their goals? How has participants' motivation and confidence to attain goals changed over time?
Participants' career plans **(Impact)**	What percent of participants plan to teach upon entering and leaving the program and how has that percent changed over time? How have participants' attitudes about teaching changed over time?
Participants entering the field of teaching **(Impact)**	What is the number of participants that enter/graduate from a teacher preparation program? What is the number of participants who enter the classroom to teach? How does that number change over time?

Once you have drafted a thorough list of evaluation questions for each of the outcomes you want to measure, use a set of criteria to determine which evaluation questions should be investigated in more detail and serve as the foundation of your evaluation design.

A well-known set of criteria (Cronbach, 1982) for establishing a final set of evaluation questions includes:

1. Who would use this information? Who wants to know? Would an important audience suffer if this question were deleted?
2. Would an answer to the question provide information that is not currently available?
3. Would the answer to this question yield important information about the program (i.e., "need to know" versus "nice to know")?
4. Is this question of passing interest to someone, or does it focus on critical dimensions of continued interest?
5. Would the scope of the evaluation be seriously limited if this question were dropped?
6. Would the answer to this question have an impact on the course of events?
7. Is it feasible to answer this question given available financial and human resources, time, methods, and technology?

Worksheets #4A, 4B, 4C

Identifying Evaluation Questions

Make a copy of these worksheets for each member of the evaluation design team. As a group, use Worksheet #4A to draft your original set of evaluation questions using the matrix on the previous page, as well as the information you gathered in Worksheet #1B: Identifying Program Processes and Impact as guides. Then use the matrix in Worksheet #4B to rank these questions based on the set of criteria provided by Cronbach (see above) and add your own criteria, if necessary. When you have completed ranking your questions, use Worksheet #4C to list a final set of evaluation questions that will guide the study.

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27

Worksheet #4A: Brainstorming and Drafting Questions

(Deciding What You Want to Know)

Directions: Based on the process and impact outcomes identified in Worksheet #1B, brainstorm and draft potential evaluation questions.

Assessing Program Processes and Impacts (BASED ON WORKSHEET #1B)	Potential Evaluation Questions
BEST COPY AVAILABLE 28	29

Worksheet #4B: Ranking Questions Based on Criteria

Directions: Number each evaluation question from Worksheet #4A. Use the matrix below to rank each question based on the established criteria and any other criteria you may wish to add. In terms of ranking, you may want to simply ✔those criteria which the question meets. Then add the total number of ✔ for each question at the bottom and rank them accordingly. If you have more than 20 questions, copy this worksheet to accommodate the total number of questions.

Would the question...	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1. Be of interest to key audience(s)?																				
2. Provide information not readily available?																				
3. Yield important information?																				
4. Be of continuing (not fleeting) interest?																				
5. Be critical to the study's scope and comprehensiveness?																				
6. Have an impact on the course of events?																				
7a. Be answerable in terms of financial and human resources?																				
7b. Be answerable in terms of time?																				
7c. Be answerable in terms of available methods and technology?																				
8.																				
9.																				
10.																				
Total ✔ for this question																				

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Worksheet #4C: Finalizing a Set of Evaluation Questions

Directions: From the questions ranked in Worksheet #4B, select those questions which have the highest ranking (e.g., meet 7 of the 10 criteria) and write them in the space below. Verify again why each question is important and the information it will provide.

Evaluation Questions	Why is the question important? What information will it provide?

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STEP 5

Selecting Methods for Data Collection/ Sample Surveys

Identifying Indicators and Collecting Information to Measure Outcomes

Indicators provide specific information that allows you to gauge a program's attainment of desired outcomes. They describe observable, measurable characteristics or changes that together represent achievement of an outcome. For example, a program with a desired outcome of preparing participants to pursue a career in teaching could define "prepared" as maintaining the grades necessary to enter college; demonstrating knowledge about the process of getting into college (e.g., selection, application, financial aid, class scheduling, etc.); demonstrating a desire/intention to teach; demonstrating a positive attitude toward learning and education, etc. The number and percent of program participants who demonstrate these behaviors then is an *indicator* of how well the program is doing with respect to the outcome of being "prepared" to teach.

Here are some examples of indicators based on some process and impact research questions:

Desired Outcome	Research Questions	Some Indicators
Program components adequately meet the goals of the program.	**(Process Research Question)** What activities were most/ least effective?	• *Number* of participants attending • High vs. low *ratings* on activity follow-up questionnaire • Examples of information *usage*
Participants are prepared to pursue a teaching career.	**(Impact Research Question)** Are participants well prepared to eventually become teachers?	• *Evidence* of intentions to teach • *Number* of participants that graduate from high school and enter college • *Changes* in participants' *knowledge* about what it takes to be a teacher • *Changes* in participants' *attitudes* about teaching and learning

34

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Collecting Data on the Indicators

As an evaluator, you have several options for choosing the methods you will use to collect information based on the indicators you have selected for each outcome. The challenge in data collection comes with selecting data collection methods that allow you to maximize the information you receive while minimizing the time it takes to collect the information. This includes the time it takes to develop the data collection instrument, the time it takes for the participants/respondents to provide the information, and the time it takes to get all of the data together for analysis. Typical evaluation data collection methods include: written or phone surveys and questionnaires, one-on-one or group interviews (focus groups), in-depth case studies and observations, and tests. While the indicators you identify and the ultimate outcomes you hope to examine will drive the data collection methods you use, other factors will also play a role. For example, in choosing an evaluation method for data collection, you should consider: the cost and resources for using it (e.g., a case study can be costly in terms of the evaluator's time); the precision and reliability of the survey instrument; efficiency; and acceptability to various audiences. Some examples of data collection methods based on the type of information you want to collect include the following:

Information Desired →	Quantity & Quality of Program Activities and Processes	Knowledge & Skills	Behaviors	Attitudes/Values
Evaluation Methods and Tools →	Participant reports of satisfaction/ adequacy/ relevance/use through surveys/ rating scales, interviews, and focus groups An analysis of existing records (attendance data, retention rates, number of participants attending, number of activities, number of hours of service)	Tests or other assessments (pre/post) Grades Participant reports of knowledge gained (surveys, interviews)	Records (attendance in school, attendance in program) Changes in participants' behaviors Others' report of behavior (e.g., parent or teacher survey/interview) Observations	Participant changes in attitudes/values (survey/rating scales, focus group, interviews) Others' report of changed attitudes Observations

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35

Challenge

CHALLENGE There are many ways that you could be blocked from collecting essential information. For example, authorities (e.g., school administrators) might not allow certain information (student attendance, parent information) to be collected. Participants who mistrust you and what you are collecting could give misleading or false information if they think it will be used against them. Or respondents could misunderstand directions and consequently respond inappropriately.

SOLUTION While there is no guaranteed way to avoid such problems with data collection, there are certain things you can do along the way to head-off such problems. With respect to data access, make sure that your data collection methods are approved by the proper authorities. In schools, this may be the school principal, the school board, the teachers, and/or students' parents. Obtaining permission and cooperation requires that you clearly communicate the purpose of the evaluation, how information will be used, and how the evaluation will serve the participants' best interests. To gain the trust and cooperation of participants and other respondents, stress the importance of the study and how the information they provide will help to improve the program. Always indicate that their names or other private information will not be shared with others and that you will only report on "group" responses. In other words, their name, and individual responses will be kept *confidential.*

Note: Before proceeding, you may want to refer to the Family Educational Rights and Privacy Act of 1974, commonly called the Buckley Amendment, which spells out students' rights with respect to their educational records.

A Quick Overview of Some Common Evaluation Methods

As the matrix on the previous page shows, there are many useful methods of information collection an evaluator could use. An evaluation method should be used only after careful thought has been given to the information required. If you are limited in your evaluation resources and expertise, it is best to stick to the basic or "core" methods. For this reason, the focus of this handbook is on Survey Questionnaires, Interviews, and Observations.

Survey Questionnaires The development of the questionnaire (including the format and questions) is the most critical aspect of conducting survey research. Unless the questionnaire undergoes careful development and input before it goes to the respondent, it may yield little usable information.

In developing your survey questionnaire, you need to focus on: (1) asking the right questions; (2) question construction; and (3) format.

1. Asking the Right Questions

The key to a successful questionnaire is in the art of *asking the right questions.* No matter what questions you decide to ask, the following hints will aid you in designing questions that are most relevant to demonstrating impact and are tailored to meet the characteristics of program participants and other respondents.

- **State questions precisely** Use language that respondents will understand; eliminate extra words; keep the questions simple, clear and direct.
- **Avoid attitude questions that refer to the past** rather than the present. Try not to ask questions about attitudes or feelings that involve recall of the distant past because respondents may not remember that far back and could provide inaccurate information.
- **Avoid questions that could be interpreted in more than one way.**
- **Ask questions that are relevant** only to information you need to answer your research questions. In other words, don't overburden your respondents with nonessential questions.
- **Avoid questions to which you think ALL respondents** will respond alike. Ask questions that will help you to distinguish among respondents.
- **Express only one complete thought per question.** For example, don't ask, "Did you like it and did it improve your skills?" in one statement.

- **Keep the sequence and grouping of questions logical.** Don't "jump around" in the sequence of questions; allow respondents to maintain a logical train of thought.
- **Avoid questions where you think the respondent may have to "guess" at a response.** Don't ask questions that assume too much knowledge on the part of the respondent. For example, don't ask students to give family income and don't ask parents to indicate what they *think* their child feels about something.
- **Avoid technical terms, jargon, slang, or words with double meanings.**
- **Make sure each question can be answered within a reasonable time period.**
- **Avoid using open-ended questions** on a survey if you can get the same type of information from closed-end questions. (See *Glossary* for definitions of open-ended and closed-ended questions.)

2. Question Construction

In the construction of questionnaire terms, there are basically two types of questions: open-ended and closed-ended questions.

You can ask **open-ended** questions that ask the respondents are to provide their own answers to the question. For example, respondents might be asked, "What was the most useful activity of the program for you and why?" and be provided with a space to write in their own answers.

In **closed-ended** questions, respondents are asked to select their answer from a list provided by the survey developer. Closed-ended questions are used more frequently with surveys because they provide a greater consistency of responses and are more easily processed. Whereas open-ended questions will require the evaluators to read through each response and develop a coding plan based on responses, closed-ended responses can often be entered into a computing program for analysis directly from the questionnaire.

A drawback to closed-ended questions lies in the structuring of responses. Careful attention to the choice of responses is necessary to ensure that all relevant answers are covered. Earl Babbie (see *Resources*), a well-known survey researcher, offers two guidelines that should be followed in the construction of closed-ended questions:

- The response categories provided should be *exhaustive*, that is, they should provide all possible responses that might be expected. To allow for responses that may have been overlooked, researchers often include a category labeled "Other (please specify)."
- The answer categories must be *mutually exclusive*, that is, the respondents should not feel required to select more than one. You can ensure mutually exclusive answers by carefully considering each combination of responses and asking whether a person could reasonably give both.

In some cases, you may *want* to have more than one response (e.g., "Check all factors that influenced your decision to teach"), in which case you would specifically ask the respondents to "check all that apply." If, however, you are looking for the "most important" or "most influential" factor, then you must ensure that your responses are mutually exclusive.

Another form of closed-ended questions is **contingency questions**. Often in survey research, you will be interested in the responses of certain sub-groups of the respondents. For example, you might ask respondents if they participated in a specific activity and then ask those who did what they thought about it. You might be interested in the influence of certain aspects of the program on males, or you might ask respondents who are currently teaching (i.e., alumni of the program) what specific aspects of the program impacted their decision to teach. These questions are referred to as contingency questions because they are *contingent* upon the first question – group membership. In other words, only those who answer "yes" to the first question (e.g., from the examples above: participants of a specific activity, males, those entering the teaching field) will be asked to continue with the follow-up question. An example of a contingency question follows:

Did you participate in the classroom internship while a participant in the program?

- ❑ No
- ❑ Yes—if Yes, what was *the most* effective feature of the internship activity?
    - ❑ Practical experience in the classroom
    - ❑ Earned school credit
    - ❑ Learning from teachers
    - ❑ Other (specify)________________

Another form of closed-ended questions is the **Likert scale**, which is commonly used if you are interested in determining the *extent* to which respondents hold a particular attitude or perspective. If you are able to summarize the attitude in a fairly brief statement, you will often present that statement and ask respondents whether they agree or disagree with the statement. Include four or five possible responses: "strongly agree," "agree," "disagree," "strongly disagree," and sometimes, "don't know." (Excluding the "don't know" response forces the respondent to make a choice.) You could also use "strongly approve," "approve," and so forth.

In addition to asking the right questions, careful attention to the following questions is essential in survey development:

3. Survey Format

- Is the questionnaire attractive and interesting?
- Does the questionnaire start off with easy, non-threatening questions?
- Are questions with similar content grouped accordingly?
- Are all the major issues covered thoroughly?
- Is the questionnaire easy to answer?
- Is the time required to respond reasonable?
- Is the questionnaire introduced with an explanation of purpose, assurance of confidentiality, etc.?
- Is the respondent told clearly how to record his/her responses?
- Are instructions for return due date and procedures included?
- Have content experts or others involved with the program reviewed the questionnaire and given input?
- If this is a telephone survey, have phone surveyors been trained in the correct use of the questionnaire?

Examples of survey questions and basic questionnaires are provided later in this section. A bibliography on the design, construction, and use of surveys can be found in the *Resources* section.

Interviews An advantage of collecting data through face-to-face or telephone interviews rather than through a questionnaire is that interviews allow for probing and clarification as well as the generation of broad and deep data about the topic of interest. Face-to-face interviews also allow you to build rapport with your participants/audience. A downside to interviews is that they take more resources (e.g., time and staff) to conduct and often require training and practice sessions. In addition, open-ended interviews, which generate a lot of qualitative data, may be more difficult to analyze.

Interview methods are appropriate when you want to increase the breadth of your understanding of what you are evaluating. Even if you want the interview to be open-ended and probing, it is a good idea to go into the interview with some guiding interview questions around the purpose of your evaluation. You will also need to be prepared with a "preamble" that describes such things as the purpose of the evaluation, the purpose of the interview, your credibility and competency to conduct the interviews, as well as the confidentiality of the interviewees' name, statements, and opinions. Here is a sample preamble that addresses these issues:

Hello, my name is:________________. I am the [your role] of [your program name]. We are currently conducting an evaluation of this program *to understand better the participants' experiences while in the program and how the program has helped them in their post-high school activities. I'm here today to ask you general questions about your experiences in this program. I'd like to get your perspective about the various components and activities of this program, and discover what you believe works, what doesn't and why. I'll ask for no more than 30 minutes of your time and promise that, by the end of our 30 minutes, we'll both have a better understanding of how this program benefits participants and what improvements need to be made. Your help will make an important contribution to this evaluation study. It's important for you to know that your name will not be attached directly, or indirectly, to anything you tell me. I will compile the data from all the interviews and pull out themes and generalities. This process does not leave space for discovering "who said what" and if at any point you say anything you're uncomfortable about, let me know and I will take extra care to disguise, or remove, your comment. Do you have any questions about the conversation we are about to have?*

Following are some more helpful hints for conducting interviews:

- As with the survey questionnaire, **provide your respondents with the appropriate background information,** including the purpose of the study, how information will be used, how their involvement will help, etc.
- **Make sure the language is pitched to the level of the respondents.** While specialists may understand technical wording and jargon, the general public needs language that is more commonly understood.
- **Try to choose words that have the same meaning for everyone.**
- **Avoid asking long questions with multiple components.**
- **Do not assume that your respondents have first-hand knowledge,** especially if they are answering about someone else, for example, a mother for a child.
- **Ask questions that are not positively or negatively charged.** In other words, don't lead the respondent; maintain neutrality.
- **Avoid asking questions that can be answered with "yes" or "no."** Interviews are used to gather more in-depth information. If you are interested only in "yes" or "no" responses, then use a survey questionnaire.
- **Keep the interview time appropriate.** Don't impose on your respondents' time.
- **If you audio tape the interview,** MAKE SURE your respondent knows and gives permission to do so.

Observation Methods As a program coordinator, you are in a position to observe key elements of the program and its participants every day. Some advantages of observations include: generating data about *actual* behavior, not just reports of behavior (as in a survey or interview); recognizing problems that may not easily or accurately be described by participants; and, following action at different points in the program. There are, however, some disadvantages as well. For example, data can be skewed by the observer's opinion; data are not easily quantifiable; and the presence of the observer can alter the participants' actions and behaviors. If you plan to observe overtly, it is a good (and ethical!) idea to inform participants of your presence and purpose. Plan a statement for those you observe which includes: the purpose of the evaluation; how long you will be observing; and assurances that you are there to study the processes of the program, not individual performance.

While evaluation observation can involve detailed methods, there are some simple, low-cost observational methods you can employ as a program coordinator that yield important information about your program. Some methods for qualitative observation include the following:

- **Running Notes**: jotting down observations about your program and its participants as they occur

- **Log or Diary**: taking detailed notes about your program on an ongoing basis
- **Notes on Themes**: writing notes on a particular theme or themes about your program and its participants
- **Panels**: making periodic observations of the same participants over time

Qualitative observations, along with other data collection methods such as surveys or interviews, allow for a more complete picture of what is happening in the program. In addition, reviewing your observations and looking for patterns will help to reveal issues or concerns that can be explored further through a survey or interview.

In deciding which methods to use, you will also need to consider at what points in the program you would use each method. For example, if you are interested in examining the change in students' attitudes over time, you will need to consider the appropriate points (e.g., before and after an important intervention, at the beginning and end of the program, etc.) at which you will administer a pre-post survey or pre-post interviews. If you are using observations, then you can track changes though your observational "stories" on an ongoing basis.

Worksheet #5

Developing an Information Collection Plan

Make a copy of this worksheet for each member of the evaluation design team. As a group and based on your Research Questions, use Worksheet #5 to identify potential indicators, information collection approaches, respondents, and a collection schedule. A list of some common methods is provided for your use in the box following Worksheet #5.

Worksheet

Worksheet #5: Developing an Information Collection Plan

(Deciding What Data to Gather and How)

Directions: For each question, list potential indicators, information collection approaches, respondents (e.g., participants, parents, teachers, etc.), and a schedule (e.g., when will you collect the data and how often). Refer to the box following this worksheet for ideas.

Evaluation Questions	Potential Indicators (list a few for each question)	Information Collection Procedures (See box for examples)	Respondents (Who will provide you with this information?)	When will this information be collected?
Example: How successful was the college readiness component of this program in helping participants to understand the steps necessary to enter college? What improvements need to be made?	*1. Program participants know the steps necessary to apply to college* *2. There is an increase in the number of participants who plan to attend college* *3. Program participants know what kinds of courses and grades they need to get into college.*	*Knowledge survey on college readiness components* *Opinion survey about specific components of the college readiness activity (e.g., did it meet participants' needs; what should we do next time)*	*Program Participants* *Program Participants*	*Before and after the college readiness activities (pre/post survey)* *After each activity has been completed*

41

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42

Some Information Collection Procedures

Procedure	What It Measures or Records	Example
Opinion Survey	Opinions and attitudes	Students are asked to rate the quality and relevance of program components and activities.
Survey Questionnaire	Demographic characteristics, self-reported variables	Frequencies of key behaviors and attitudes of students are charted over the course of the program.
Interviews, Group or Individual	Person's responses and views	Program coordinator interviews students about program adequacy.
Observation Checklist	Particular physical and verbal behaviors and actions Environment or context in which program operates	Session observer records how frequently participants use a new skill learned, how they work as a team, how they interact with children, etc.
Case Studies	The experiences and characteristics of selected persons in a program	A few students from the program are visited at school over a period of time. Peers, parents, teachers, etc. are interviewed.
Expert Panels, Hearings	Opinions, interpretations	A panel of classroom teachers reviews program components and give interpretations about relevance, quality, etc.
Records Analysis	Records, files	Student attendance records are analyzed to detect trends before and after program.
Logs	Own behavior and reactions are recorded narratively	Program participants maintain a log of their thoughts about teaching, education, goals, the program, etc.
Knowledge Tests	Knowledge and cognitive skills	Students are tested on knowledge of teaching practice.

43

Give Me Something I Can Use! Sample Survey Instruments

The quality of data collected and the ability to analyze and interpret key information about your program depend on the precise construction of your survey instrument and on each survey question.

Each question must be *clear* and *unambiguous* to the survey respondent. Consideration must be given to the respondent's ability and willingness to provide accurate information. To help facilitate not only a high response rate, but a **high quality** response, it is essential that the survey focus on the most critical "need to know" (vs. "nice to know") questions. As the survey designer, you must understand why you are asking each question, how each question fits with the overall survey, and how the information will be used. Learning the concerns and perceptions of the respondents prior to survey design will provide significant value to the survey design and the ultimate outcomes of your evaluation.

We highly recommend testing the survey items you have developed on a small sample. The clarity of the questions, the length of the instrument, and the nature of the questions (e.g., are they culturally sensitive or too personal?) can all affect whether the responses you get are both complete and accurate. Based on the test run, you can make necessary modifications before launching into full-scale data collection.

While it is important that you start to develop your own survey instruments based on your evaluation needs, we have provided examples of survey instruments to assist you. Feel free to use these instruments in your own evaluations and to modify them to meet your specific evaluation needs. Note that we left blank lines and spaces where we thought you might want to insert your own items, statements, or questions. The first set of surveys is for evaluating specific activities or events that comprise your program. Information collected by these surveys can be used to modify and refine current activities and events and to design and develop new ones. The second set of surveys is for collecting information about program impact on participants.

Sample Surveys for Evaluating Program Activities or Events

Your program undoubtedly is comprised of a series of activities and events which may include field trips, workshops, seminars, observations, visiting speakers, etc. While all of these components can have an impact on participants in the aggregate, it is important to understand what participants think about individual activities and events while, or soon after, they engage in them. It is important to gather information about activities or events when they happen because it is difficult for participants to remember specific aspects of activities or events once too much time has passed, and the information you collect may be erroneous and unreliable. Evaluating individual activities and events not only provides you with information about their impact on participants, but also can serve as a *formative* tool for improvement along the way. In other words, it provides you with information on what worked, what didn't work, how the activity can be improved, etc.

It is probably not necessary or even efficient to evaluate every activity/event. Instead, you should focus on the *primary* events/activities that comprise your program, on new events/activities, on events/activities that you are considering *altering* or *eliminating*, or on events/activities for which you may be seeking funding. You will need to determine the components of your program that should be evaluated based on your program needs, resources, and long-term strategic planning.

Evaluation of an activity or event entails collecting information across four main areas:

- **Instructional Delivery**—including the presenter, the presentation, and participation;
- **Content**—including focus, level, and relevancy;
- **Participant Benefit**—including applications, insights, learning experiences, utility; and,
- **Overall Session**—including organization, logistics, visual aids, expectations.

You can also use open-ended questions to elicit information about participants' needs, including what questions they still have, what further information they would like, and suggestions for improving the activity or event.

We have provided two surveys for use with your own programs: A **Participant Satisfaction Survey** which asks detailed questions about a particular activity or event, and a quick **"3-2-1" Evaluation Form** which is designed to gather quick responses regarding what participants learned from the activity or event and where they still need information and assistance. You may use these survey instruments as is or you may modify them to meet the needs of your own evaluation. Suggestions for the administration of these surveys follow. Also provided is an inventory of evaluation questions. Use this inventory in creating your own survey instruments, but also add to it and share it with others as you think of new survey questions.

Administration of Activity/Event Evaluation Questionnaires

What: The following Participant Satisfaction Survey and "3-2-1" Evaluation Form are designed to gather information about specific activities or components of your program. The Participant Satisfaction Survey collects in-depth information about a particular event, including the quality of instruction, presentation, materials, logistics, etc. The "3-2-1" Evaluation Form collects "quick response" information about what participants learned and what they still want to know.

Who: The surveys should be administered to ALL participants in a particular activity or event.

When: If possible, the surveys should be completed by participants at the end of the event itself.

Where: Try to get all participants to complete the surveys *at the event* before they leave. This will help to ensure a high response rate and will save you the time and frustration of trying to track down participants later.

How: During the event or activity (usually at the start or at wrap-up), tell the participants that you will be asking them to complete an evaluation questionnaire about the event/activity before they leave for the day. Let them know that the information they provide will help you to determine the quality, relevance, and usefulness of the event/activity and that you will use the information to make adjustments to the event/activity and to plan for other such activities. Stress that their input will help to improve the overall program and that it is very important that everyone respond to the survey. Indicate that no names will be used in any reporting, that you and your staff are the only ones to see the data, and that their confidentiality as respondents is ensured. Before distributing the survey, address any questions they may have. Have someone from the staff go around and collect the questionnaires to ensure that they have been completed and that no questionnaires are "floating about."

Participant Satisfaction Survey

ACTIVITY/EVENT ____________________ DATE ____________________

FIRST NAME ____________________ LAST NAME ____________________

Please take the time to complete this survey. It will only take a few minutes and will provide valuable feedback to us in planning future events and activities and in designing a program to meet your needs. Thank you for your cooperation!

I. INSTRUCTIONAL DELIVERY

Indicate which of the following apply to the presenter/instructor of this event: (*check all that apply*)

	YES	NO
A. The presenter was well-prepared	☐	☐
B. The presenter was knowledgeable about the subject	☐	☐
C. The presenter was a dynamic teacher	☐	☐
D. The method of presentation held my attention	☐	☐
E. The presentation was clear and easily understood	☐	☐
F. The presenter answered all questions satisfactorily	☐	☐
G. Audience participation was encouraged	☐	☐
H. There was enough time for questions and discussion	☐	☐

II. CONTENT

Indicate which of the following apply to the content of this event: (*check all that apply*)

	YES	NO
A. The level of content was appropriate	☐	☐
B. The information presented was useful for me	☐	☐
C. The presentation increased my knowledge of the topic	☐	☐
D. The content was interesting to me	☐	☐
E. The content was relevant to my interests	☐	☐

III. BENEFITS

Indicate how this event/activity benefits you: (*check all that apply*)

	YES	NO
A. I learned new skills	☐	☐
B. I can apply what I learned	☐	☐
C. This activity/event was worth my time	☐	☐
D. This activity/event accomplished what it said it would	☐	☐

IV. OVERALL ACTIVITY/EVENT

Indicate which of the following apply to this activity/event: (*check all that apply*)

	YES	NO
A. This activity/event was well organized	❑	❑
B. My expectations for this activity/event were met	❑	❑
C. I would recommend this activity/event to others	❑	❑
D. I would like to participate in other activities/events similar to this one in the future	❑	❑

V. OPEN-ENOEO QUESTIONS

A. How will you use the information and skills you learned today?

B. What did you hope to learn from this activity/event, but did not?

C. If you had one thing to say about this activity/event, it would be:

D. Please list other comments and suggestions for this activity/event:

47

Inventory of "Participant Satisfaction" Survey Questions

INSTRUCTIONAL DELIVERY OR METHODS QUESTIONS

Knowledge

1. The presenter demonstrated mastery of the topic
2. The presenter was knowledgeable
3. The presenter addressed the stated learning objective for the session
4. The presenter was well-prepared

Participation

5. The presenter encouraged me to express my opinion or experiences
6. I had the opportunity to participate in the discussion
7. Audience participation was encouraged
8. I had the opportunity to participate in discussion with my peers
9. There was sufficient interaction among participants

Presentation

10. The presentation was clear
11. The presentation was to the point
12. The method of presentation held my attention
13. The main points of the presentation were clearly understood

Relates to Audience

14. The presenter was responsive to participants
15. The presenter was able to relate to the ability level of the audience
16. The presenter answered questions satisfactorily
17. The presenter maintained the interest of the group
18. The presenter broke down complex topics for easier explanation

Speaking Skills

19. The presenter was enthusiastic about the topic
20. The presenter demonstrated good speaking skills
21. The presenter was a dynamic teacher
22. The presenter initiated fruitful and relevant questions
23. The presenter's handouts, materials, etc. were valuable as learning aids
24. Program handouts/materials enhanced the presentation
25. The instructional materials used in this program were helpful

Organization

26. The presentation was well organized
27. The pace of the program was appropriate
28. The learning environment stimulated idea exchange
29. There was sufficient time to network with others
30. The time provided was sufficient to accommodate the subject
31. There was enough time allotted for questions and discussion

CONTENT QUESTIONS

Focus

32. The content reflected the advertised information
33. The content was consistent with its description
34. The content was current
35. The content had substance
36. The program objectives were clear
37. The program objectives were met

Level

38. The difficulty level was appropriate
39. The content was appropriate
40. The content was too basic
41. The content was too advanced
42. The material presented was of practical use

Relevance

43. The content was interesting to me
44. The content was relevant to my work
45. The topic was relevant to my interests

BENEFIT QUESTIONS

Application

46. I can apply what I learned in my situation
47. I learned new applications
48. The information provided was useful to me
49. I improved my ability to solve problems in my work
50. This activity/event gave me skills directly applicable to my career

Insights

51. I gained new insights relevant to me
52. My understanding of key matters was enhanced
53. My thinking about the topic is more focused

Learning Experience

54. I learned something new
55. The presentation challenged my thinking
56. My knowledge of the subject was enhanced
57. I learned something useful from this presentation
58. I learned a lot from this presentation

Value

59. The activity/event was worth my time
60. My learning objectives were addressed
61. The program accomplished what I thought it would
62. I would recommend this to others
63. This program met my expectations
64. The choice of activity/event suited me
65. This activity expanded my knowledge
66. The activity was a good value for my money

OVERALL SESSION QUESTIONS

67. The activity/event was well organized
68. The topics were relevant to my interests
69. My objectives for this activity/event were met
70. My expectations for this activity/event were met
71. Overall, this activity/event was beneficial
72. Overall, I would rate this activity/event as:

OPEN-ENDED QUESTIONS

73. The best thing about this activity/event was:
74. How did you learn about this activity/event?
75. Why did you attend this activity/event?
76. I need more information on:
77. What part of the program did you find to be of particular benefit?
78. What was the most useful information you learned from this program?
79. What topics needed more time? Less time?
80. What are your suggestions for future topics?
81. What part of this program/activity/event was most useful to you?
82. If someone were to ask you about this program/activity/event, you would say:
83. This program/activity/event could be improved by:
84. If you had one thing to say about this program/activity/event, it would be:
85. With whom will you share the information you collected today? Why?
86. How will you use the information you collected today?

Evaluation 3-2-1

3 things I learned from this activity:

2 things I am still confused about and would like to learn more about:

1 thing I will do or try based on what I learned today:

Name:____

Sample Participant Outcomes Surveys

Ultimately, you want to know if your teacher recruitment program has an impact on its participants. The "outcome" you measure is determined by your evaluation purpose and its research questions. While the surveys on the previous pages help to collect information for addressing "process" research questions about specific program components (e.g., "Which activities were most/least effective?"), the next set of surveys will help you address "impact" research questions (e.g., "Are participants acquiring the skills and knowledge necessary to enter a college teacher education program?" "Did this program have an impact on participants' post-high school plans and goals?").

In assessing the impact of your program on participants, it will be important to collect information that will allow you to examine *change over time* and to determine the influence of your program on participants as they move through school and pursue post-secondary plans, including college and teaching careers. Tracking students over several years is a difficult endeavor, often requiring extensive time, resources and expertise. A *full-scale longitudinal* study of participants through the program and beyond (which might include tracking students annually over several years) would probably require consultation with an external evaluator. There are, however, key data elements that should be collected from students on the survey form that can increase the chances of maintaining contact with them once they graduate or leave the program. These data include: full name, parent or guardian address, and social security number.

Three sample surveys are provided in the next section to assist you: (1) a Participant Tracking Survey, (2) a Non-Returning Participant Survey, and (3) an Alumni Survey. Suggestions for the administration of these surveys follow.

TIP

Remember, surveys are only one way of collecting information to address your research questions and assess impact. Using other methods such as interviews and observations can help to strengthen and enhance the information collected through a survey. The more quality information you have, the stronger your case. Refer to the *Resources* section for books and references on a range of data collection methods.

Administration of Participant Tracking Survey

What: The **Participant Tracking Survey** consists of two forms — Part A to be administered when the participant enters the program and Part B to be administered when the participant completes the program. Coupled with other key information you should collect from participants (including GPA, school and/or program attendance, and standardized test scores), these surveys can be used to make assessments about the impact of the program on participants' post-high school educational and career plans, attitudes about teaching, and preparation for teaching. Because this survey is designed to be used by a range of programs, you'll notice that several of the questions have blanks for you to fill in specific statements based on the unique components or activities of your program.

Who: The surveys should be administered to ALL participants.

When: The surveys should be completed by participants when they enter the program and when they complete the program. *(If a participant does not complete the program, he/she would also complete a "Non-Returning" Participant Survey—see next section.).* If your program is already in operation, you may want to administer Part A to *current* participants as well as to new participants.

Where: All participants should complete the surveys *at the program site.* This will help to ensure a high response rate and will save you the time and frustration of trying to track down participants.

How: When participants enter the program (e.g., first day of the program), tell them that you will be asking them to complete a participant questionnaire now and when they have completed the program. Let them know that the information they provide will help you to determine the quality, relevance, and usefulness of the program and it will help you to understand participants' experiences in the program. Tell them how you plan to use the information. Stress that their input will help to improve the overall program and that it is very important that everyone respond to the survey. Tell them that you will share with them results of the evaluation. Indicate that no names will be used in any reporting, that you and your staff are the only ones to see the data, and that the respondents' confidentiality is ensured. Before distributing the survey, address any questions they may have. You may want to walk through the survey with participants before they complete it to address any questions they may have about specific items.

Participant Tracking Survey– Part A

Participant Tracking Survey for: ____________________

(Write in the name of the program)

Marking Instructions: DO NOT SKIP any questions unless directed to do so.
Pencil or pen can be used to complete this survey.

Social Security Number: __ __ __ - __ __ - __ __ __ __

Last name | First name | Middle Initial

Street | City | Zip Code

Phone # (including area code)

Please give the name of a parent or guardian who lives with you:

Last name | First name

Background Information

1. Are you: ❑ female ❑ male

2. Which best describes your racial/ethnic group?
   - ❑ American Indian
   - ❑ Caucasian
   - ❑ Asian/Pacific Islander
   - ❑ Hispanic
   - ❑ Black/African American
   - ❑ Other________

3. What is your birth date? ____ / ____ / ____
   Month Day Year

4. What is your current grade level? ________

5. How many years have you participated in this program?
   - ❑ This is my FIRST year in the program
   - I have participated in this program for _____years

Lifelong Learning Plans

6. Do you expect to complete a high school education and graduate?
   ❑ Yes ❑ No

7. What are your plans for the **first year** after graduating/leaving high school? (*check all that apply*):
   ❑ *I don't have any plans (skip to #9)*

A. ❑ Apprentice Training Program in (*specify*):

____

B. ❑ Paid employment

What occupation best describes the type of job you will seek your first year after leaving/graduating from high school (*specify*):

____

53

C. ❑ College
❑ Community college
❑ Technical college
❑ Four-year college

What area do you plan to study?
❑ I don't know

❑ I plan to study:________________

D. ❑ Military Service

E. ❑ Other plans (*specify*):________________

____

8. How certain are you about your plans for the first year after high school?
❑ CERTAIN
❑ SOMEWHAT CERTAIN
❑ UNCERTAIN

9. Indicate the people who have provided you with support and encouragement and have helped you with your plans for after high school (*check all that apply*):
❑ Friends
❑ Parent(s)/guardian
❑ Brother(s)/sister(s)
❑ Teacher(s)
❑ My school counselor
❑ Staff from this program
❑ Another adult (coach, instructor, employer, relative)

10. Do you plan eventually to become a teacher?
❑ Yes ➞ How certain are you about wanting to become a teacher?
❑ CERTAIN
❑ SOMEWHAT CERTAIN
❑ UNCERTAIN

❑ No ➞ How certain are you about NOT wanting to become a teacher?
❑ CERTAIN
❑ SOMEWHAT CERTAIN
❑ UNCERTAIN

11. Whether or not you want to become a teacher, what are some things that might keep you from becoming a teacher (*check all that apply*):
❑ I don't have the grades to get into college to become a teacher
❑ I don't have the motivation or desire to teach
❑ I don't have the confidence to teach
❑ I don't have the support from family and friends to become a teacher
❑ I don't have the support from my teachers and counselors to become a teacher
❑ Teacher's salary
❑ Concerns about school discipline
❑ Concerns about school safety
❑

❑

❑ Other (*specify*):________________________

____

Attitudes About Teaching

12. Indicate whether you agree or disagree with the following statements:

	agree	disagree
a. Teaching is a rewarding career	❑	❑
b. Teachers get a lot of respect	❑	❑
c. It is easy to teach	❑	❑
d. I know the steps that need to be taken to become a teacher	❑	❑
e.	❑	❑
f.	❑	❑
g.	❑	❑
h.	❑	❑

Teaching Skills

13. The following is a list of critical skill and ability areas for teaching or any career. Check the box that best describes your current skill or ability level.

Do you have this skill, knowledge or capability to try for your goal?

Critical Skill and Ability Areas	Little or not at all	Some, not enough	Solid base
Brainstorming and problem solving	❒	❒	❒
Interacting and communicating effectively with others	❒	❒	❒
Having a solid knowledge of the core academic areas, including math, science, and English	❒	❒	❒
Being sensitive and relating to people of different backgrounds	❒	❒	❒
Thinking creatively and coming up with new ideas	❒	❒	❒
Contributing and working well in a team or group setting	❒	❒	❒
Managing money, time and other personal resources	❒	❒	❒
Leading and supervising others	❒	❒	❒
Using computers to complete tasks and projects	❒	❒	❒
Identifying goals (personal, career, educational) and steps to reach your goals	❒	❒	❒
Demonstrating self-confidence in yourself and your abilities	❒	❒	❒
	❒	❒	❒
	❒	❒	❒
	❒	❒	❒
	❒	❒	❒

14. What are the top four or five things that you hope to get out of participating in this program?

1.____

2.____

3.____

4.____

5.____

Participant Tracking Survey– Part B

Participant Tracking Survey for:____

(Write in the name of the program)

Marking Instructions:
- ✍ DO NOT SKIP any questions unless directed to do so.
- ✍ Pencil or pen can be used to complete this survey.

Social Security Number: __ __ __-__ __-__ __ __ __

Last name	First name	Middle Initial

Street	City	Zip Code

Phone # (including area code)

Please give the name of a parent or guardian who lives with you:

Last name	First name

Background Information

1. Are you: ❑ female ❑ male

2. Which best describes your racial/ethnic group?
   - ❑ American Indian
   - ❑ Caucasian
   - ❑ Asian/Pacific Islander
   - ❑ Hispanic
   - ❑ Black/African American
   - ❑ Other________

3. What is your birth date?____ / ____ / ____
   Month Day Year

4. What is your current grade level? __________

5. How many years have you participated in this program?
   I have participated in this program for____years

Lifelong Learning Plans

6. Do you expect to complete a high school education and graduate?
   ❑ Yes ❑ No

7. What are your plans for the **first year** after graduating/leaving high school? *(check all that apply)*:
   ❑ *I don't have any plans (skip to #9)*

A. ❑ Apprentice Training Program in (*specify*):

____

B. ❑ Paid employment

What occupation best describes the type of job you will seek your first year after leaving/graduating from high school (specify):

____

C. ❑ College
   - ❑ Community college
   - ❑ Technical college
   - ❑ Four-year college

What area do you plan to study?

❑ I don't know

❑ I plan to study:________________

D. ❑ Military Service

E. ❑ Other plans (*specify*):________________

8. How certain are you about your plans for the first year after high school?
   - ❑ CERTAIN
   - ❑ SOMEWHAT CERTAIN
   - ❑ UNCERTAIN

9. Indicate the people who have provided you with support and encouragement and have helped you with your plans for after high school (*check all that apply*):
   - ❑ Friends
   - ❑ Parent(s)/guardian
   - ❑ Brother(s)/sister(s)
   - ❑ Teacher(s)
   - ❑ My school counselor
   - ❑ Staff from this program
   - ❑ Another adult (coach, instructor, employer, relative)

10. Do you plan eventually to become a teacher?

❑ Yes → How certain are you about wanting to become a teacher?

- ❑ CERTAIN
- ❑ SOMEWHAT CERTAIN
- ❑ UNCERTAIN

❑ No → How certain are you about NOT wanting to become a teacher?

- ❑ CERTAIN
- ❑ SOMEWHAT CERTAIN
- ❑ UNCERTAIN

11. Whether or not you want to become a teacher, what are some things that might keep you from becoming a teacher (*check all that apply*):

❑ I don't have the grades to get into college to become a teacher

❑ I don't have the motivation or desire to teach

❑ I don't have the confidence to teach

❑ I don't have the support from family and friends to become a teacher

❑ I don't have the support from my teachers and counselors to become a teacher

❑ Teacher's salary

❑ Concerns about school discipline

❑ Concerns about school safety

❑ Other (*specify*):____________________

____

Attitudes About Teaching

12. Indicate whether you agree or disagree with the following statements:

	agree	disagree
a. Teaching is a rewarding career	❑	❑
b. Teachers get a lot of respect	❑	❑
c. It is easy to teach	❑	❑
d. I know the steps that need to be taken to become a teacher	❑	❑
e.	❑	❑
f.	❑	❑
g.	❑	❑
h.	❑	❑

57

Teaching Skills

13. The following is a list of critical skill and ability areas for teaching or any career. In Section I, check the box that best describes your skill or ability level. In Section II, check the box that best describes how this program helped to establish or improve each skill.

Critical Skill and Ability Areas	Section I: Do you have this skill, knowledge or capability to try for your goal? Little or not at all	Some, not enough	Solid base	Section II: Extent that this program helped to establish or improve your knowledge and skills: Not at all	Somewhat	Significantly
Brainstorming and problem solving	❐	❐	❐	❐	❐	❐
Interacting and communicating effectively with others	❐	❐	❐	❐	❐	❐
Having a solid knowledge of the core academic areas, including math, science, and English	❐	❐	❐	❐	❐	❐
Being sensitive and relating to people of different backgrounds	❐	❐	❐	❐	❐	❐
Thinking creatively and coming up with new ideas	❐	❐	❐	❐	❐	❐
Contributing and working well in a team or group setting	❐	❐	❐	❐	❐	❐
Managing money, time and other personal resources	❐	❐	❐	❐	❐	❐
Leading and supervising others	❐	❐	❐	❐	❐	❐
Using computers to complete tasks and projects	❐	❐	❐	❐	❐	❐
Identifying goals (personal, career, educational) and steps to reach your goals	❐	❐	❐	❐	❐	❐
Demonstrating self-confidence in yourself and your abilities	❐	❐	❐	❐	❐	❐
	❐	❐	❐	❐	❐	❐
	❐	❐	❐	❐	❐	❐
	❐	❐	❐	❐	❐	❐
	❐	❐	❐	❐	❐	❐

14. For each program component, activity, or attribute listed below, circle the grade you would give, from A to F, based on your overall experience in this program. (A=Highest rating; F=Lowest rating)

Program Components, Activities, and Attributes	What grade would you give this component of the program? (Circle only one grade per statement)				
1.	A	B	C	D	F
2.	A	B	C	D	F
3.	A	B	C	D	F
4.	A	B	C	D	F
5.	A	B	C	D	F
6.	A	B	C	D	F
7.	A	B	C	D	F
8.	A	B	C	D	F
9.	A	B	C	D	F
10.	A	B	C	D	F
11.	A	B	C	D	F
12.	A	B	C	D	F
13.	A	B	C	D	F

15. What are the top four or five things (if any) that you got out of participating in this program and that you will use in pursuing your educational and professional plans and goals?

1.____

2.____

3.____

4.____

5.____

16. What had you hoped to get out of this program (e.g., skills, knowledge, tools, support), but did not (if any)?

1.____

2.____

17. What are the top three things you would change about this program (if any)?

1.____

2.____

3.____

18. Have you recommended this program to other students?

❑ Yes ❑ I have not, but I would if the opportunity arose ❑ I have not, and I would not

Other Comments:

60

Administration of Non-Returning Participant Survey

What: The **Non-Returning Participant Survey** is used to understand why participants leave the program (before completing the program) and provides critical information for issues of recruitment, retention and continued program development. Because this survey is designed to be used by a range of programs, you'll notice that several of the questions have blanks for you to fill in specific statements based on the unique components or activities of your program.

Who: This survey should be administered to ALL participants who leave/don't return to the program.

When: The surveys should be completed by participants shortly after they leave the program and/or at the point you know they will not or did not return to the program.

Where: Ideally, non-returning participants would complete the survey *at the program site* (during an exit interview, for example). If that is not possible, you will need to determine the best way to reach the student. For example, if the student is still at the school, you could work with his/her homeroom teacher to get the survey to the student, or you could mail the survey to the student's home with a cover letter describing the survey and how the information will be used.

How: [See "Where" above] Whatever way you reach non-returning participants, let them know that the information they provide will help you to understand participants' experiences in the program and that this is their opportunity to voice their concerns/issues with the program. Tell them how you plan to use the information (e.g., you will use the information to understand how well the program is working as well as to understand what parts of the program need to be improved). Stress that their input will help to improve the overall program and that it is very important that they respond to the survey. Indicate that no names will be used in any reporting, that you and your staff are the only ones to see the data, and that the respondents' confidentiality is ensured. If it is a mail survey, make sure to provide this information in a cover letter and provide a telephone number where they can reach you with any questions they may have.

Non-Returning Participant Survey

Non-Returning Participant Survey for:______________________________
(Write in the name of the program)

Marking Instructions:
- DO NOT SKIP any questions unless directed to do so.
- Pencil or pen can be used to complete this survey.
- Clearly indicate all marks and changes you make.

Social Security Number: ___ ___ ___–___ ___–___ ___ ___ ___

Last name ____________ First name ____________ Middle Initial ____

Street ____________ City ____________ Zip Code ____

Phone # (including area code) ____________

Background Information

1. Are you: ❑ female ❑ male

2. Which best describes your racial/ethnic group?
   - ❑ American Indian
   - ❑ Caucasian
   - ❑ Asian/Pacific Islander
   - ❑ Hispanic
   - ❑ Black/African American
   - ❑ Other________

3. What is your birth date?____ / ____ / ____
   Month Day Year

4. What is your current grade level? __________

5. How many years have you participated in this program?
   I have participated in this program for____years

6. While in this program, did any of the following interfere with your progress or experiences, (e.g., missed activities; could not complete assignments, etc.? (*check all that apply*):
   - ❑ No–*skip to #9*
   - ❑ Personal motivation/self-discipline
   - ❑ Academically under-prepared
   - ❑ Physical disability/health problems
   - ❑ Depression/psychological problems
   - ❑ Family-related problems
   - ❑ Other (*specify*):____________________

7. Do you feel you are back on course and have either resolved or adapted to these issues?
   ❑ No ❑ Yes

8. Did you seek assistance from any program staff in working to resolve these issues?
   ❑ No ❑ Yes

9. Why did you decide not to return to this program? (*check all that apply*)
   - ❑ I decided I didn't want to become a teacher
   - ❑ The time and/or location of the program activities were not convenient for me
   - ❑ I had too many other obligations (e.g., my studies, a job, extracurricular activities)
   - ❑ I had a personal/family-related problem to resolve
   - ❑ I could not resolve a personal conflict with program staff
   - ❑ I could not resolve a personal conflict with other students in the program
   - ❑ The program activities were too basic for me
   - ❑ The program activities were too advanced for me
   - ❑ Other (*specify*):____________________

10. For each program component, activity, or attribute listed below, circle the grade you would give, from A to F, based on your overall experience in this program. **(A=Highest rating; F=Lowest rating)**

Program Components, Activities, and Attributes	What grade would you give this component of the program? (Circle *only one* grade per statement)				
1.	A	B	C	D	F
2.	A	B	C	D	F
3.	A	B	C	D	F
4.	A	B	C	D	F
5.	A	B	C	D	F
6.	A	B	C	D	F
7.	A	B	C	D	F
8.	A	B	C	D	F
9.	A	B	C	D	F
10.	A	B	C	D	F
11.	A	B	C	D	F
12.	A	B	C	D	F
13.	A	B	C	D	F

11. What had you hoped to get out of this program (e.g., skills, knowledge, tools, support), but did not (if any)?

1.____

2.____

3.____

12. What are the top three things you would change about this program (if any)?

1.____

2.____

3.____

13. Have you recommended this program to other students?

❑ Yes ❑ I have not, but I would if the opportunity arose ❑ I have not, and I would not

63

Administration of Alumni Survey

What: **Alumni Survey:** While it is important to examine the change in students while they are actively involved in the program, it is also important to examine what happens to students once they graduate/complete the program. Alumni surveys are used to accomplish just that. While it is sometimes difficult to track down students once they leave the program, by collecting information up-front, like their full name, phone number, and parent/guardian address, you will be more successful in program follow-up. The alumni survey provided here focuses on a high school pre-collegiate teacher recruitment program and assumes the recipients of these surveys would be high school graduates. Because this survey is designed to be used by a range of programs, you'll notice that several of the questions have blanks for you to fill in specific statements based on the unique components or activities of your program.

Who: The surveys should be administered to participants who have graduated from the program. Because it is unlikely that you have a very large number of participants from each "graduating class," you will want to survey all participants from a graduating class and make sure that you receive the survey back from as many participants as possible and that the respondents are representative of the group as a whole. For example, if you have a graduating class of 20 participants and 10 are male and 10 are female, then you will want to make sure to have a similar ratio of respondents. If you have 10 respondents and they are all female, you may make some assumptions about the program based solely on the "female" perspective. It is important, therefore, that you work to ensure that various participant types (e.g., sex, race) are represented adequately in the surveys returned. Of course, the higher the number of respondents to return the survey, the greater the likelihood that all participants are represented.

When: Based on your evaluation purpose and research questions, you will need to determine which graduating classes you want to survey. You may survey recent alumni (e.g., those who recently completed the program and graduated from high school) or you may be interested in what alumni of the program are doing five years after graduating.

Where: You will need to determine the best way to reach program alumni based on your time and resources. Since you are dealing with alumni, you will most likely have to mail the surveys to past participants or have them complete the survey over the phone. This is where the tracking information you collect (name, parent address, phone number) comes into use. For example, you can mail the survey to the participant's parent address and ask the parents to forward the survey to the participant. On the survey itself, you ask for the participant's current address and can then use that to update your database for future mailings.

How: [See "Where" above] Whatever way you reach non-returning participants, let them know that the information they provide will help you to determine and to understand participants' experiences in the program and how it relates to their post-program plans and goals. Tell them how you plan to use the information (e.g., to understand how well the program is working; to assess what parts of the program need to be improved, etc.). Stress that their input will help to improve the overall program and that it is very important that they respond to the survey. Indicate that no names will be used in any reporting, that you and your staff are the only ones to see the data, and that the respondents' confidentiality is ensured. If it is a mail survey, make sure to provide this information in a cover letter and provide a telephone number where they can reach you with any questions they may have.

Alumni Survey

Alumni Survey for: ______________________________
(Write in the name of the program)

Marking Instructions:
- DO NOT SKIP any questions unless directed to do so.
- Clearly indicate all marks and changes you make.
- Pencil or pen can be used to complete this survey.

Social Security Number: _ _ _ - _ _ - _ _ _ _

Last name	First name	Middle Initial
Street	City	Zip Code

Phone # (including area code)

Background Information

1. Are you: ❒ female ❒ male

2. Which best describes your racial/ethnic group?
❒ American Indian
❒ Asian/Pacific Islander
❒ Black/African American
❒ Caucasian
❒ Hispanic
❒ Other________

3. What is your birth date? ____ / ____ / ____
Month Day Year

4. In what year did you start this program?
199______

5. In what year did you complete this program?
199______

6. Which best describes your highest educational attainment to date? (*check the highest degree that you have completed*)
❒ High school diploma or less
❒ Some college courses but don't have a degree
❒ Associate Degree
❒ Bachelor's Degree
❒ Master's Degree
❒ Professional degree (MD, JD)
❒ Ph.D., Ed.D

Current Status

7. Are you currently pursuing a post-secondary degree?
❒ No
❒ Yes → indicate the degree you are currently pursuing:
❒ Certificate in:____________________
❒ Associate's degree in:______________
❒ Bachelor's degree in:______________
❒ Master's degree in:________________
❒ Doctorate (Ph.D./Ed.D) in:__________
❒ Professional degree (Law, Medical) in:__________________________

8. What is your CURRENT employment situation? (*check only one*)
❒ Employed with one job
❒ Employed with two or more jobs at same time
❒ Apprentice Training Program / Internship
❒ In military (*go to #10*)
❒ Homemaker (*go to #10*)
❒ Unemployed (looking for work) (*go to #10*)
❒ Not employed, other (*go to #10*)

65

9. Is your primary occupation as a teacher?

❐ No ➡ what is your occupation title? (*specify*):

____

❐ Yes ➡ what grade level(s) do you teach?

- ❐ pre-K
- ❐ elementary (K-5)
- ❐ middle/junior high (6-8)
- ❐ high school (9-12)
- ❐ post-secondary (college)

10. In what field/occupation do you ultimately want to work?

❐ None, do not plan to work

❐ Same occupation indicated in Question 9

❐ Other occupation

➡ List the field/occupation in which you ultimately would like to work:

____

Attitudes About the Program

11. Did the pre-collegiate teacher recruitment program listed in the title of this survey influence your post-high school plans?

❐ No

❐ Yes ➡ in what ways? (*check all that apply*):

- ❐ Encouraged me to attend college
- ❐ Helped me understand the steps I needed to take to get into college
- ❐ Prepared me with the academic skills to get into and succeed in college
- ❐ Provided me with practical experiences that helped me understand career options
- ❐ Helped me obtain information about financial aid needed to attend college
- ❐
- ❐ Other (*specify*):______________

____

12. Overall, rate this program in terms of its influence in helping you with post-high school plans:

- ❐ It was a primary influence
- ❐ It was an influence, but not a primary one
- ❐ It was not an influence in helping me with post-high school plans

66

Survey continues on next page ➔

13. In column A of the chart below, indicate the level of importance of the following skills in your everyday life, including your work and educational activities. In column B, indicate the extent to which **this program** helped to establish or improve this skill. *Answer Column B even if the skill is not important to your current life activities.*

Critical Skills	A. How important is this skill in your current life activities?			B. Extent that **this program** helped to establish or improve this skill:		
	Not at all important	Somewhat important	Very important	Not at all	Somewhat	Significantly
Brainstorming and problem solving	❑	❑	❑	❑	❑	❑
Interacting and communicating effectively with others	❑	❑	❑	❑	❑	❑
Having a solid knowledge in the core academic areas, including mathematics, science, and English	❑	❑	❑	❑	❑	❑
Being sensitive and relating to people of difference backgrounds	❑	❑	❑	❑	❑	❑
Thinking creatively and coming up with new ideas	❑	❑	❑	❑	❑	❑
Contributing and working well in a team or group setting	❑	❑	❑	❑	❑	❑
Managing money, time, and other personal resources	❑	❑	❑	❑	❑	❑
Using computers to complete tasks and projects	❑	❑	❑	❑	❑	❑
Leading and supervising others	❑	❑	❑	❑	❑	❑
Identifying goals (e.g., personal, educational, career) and the steps to reach your goals	❑	❑	❑	❑	❑	❑
Demonstrating self-confidence in yourself and your abilities	❑	❑	❑	❑	❑	❑
	❑	❑	❑	❑	❑	❑
	❑	❑	❑	❑	❑	❑
	❑	❑	❑	❑	❑	❑
	❑	❑	❑	❑	❑	❑
	❑	❑	❑	❑	❑	❑

67

14. Aside from the skills/abilities listed above, in what other ways has this program impacted you and your post-high school plans and goals?

15. Knowing what you now know, and looking back on your experience in this program, in what ways could we improve the activities, services, and support provided through this program?

16. Overall, if you had one thing to say about this program, it would be:

STEP 6: Analyzing and Interpreting the Data

O.K., What Does All of This Mean?

At this point, you may have two types of data collected through various collection procedures: qualitative and quantitative. As pointed out before, **qualitative** data are usually collected through a narrative description and often provide in-depth information about the topic of study; **quantitative** data are data represented numerically. Regardless of the type of data you have collected, one thing is clear—you now have to make sense of it all.

The basics for data analysis and interpretation involve at least three key steps:

- Checking the raw data and preparing them for analysis;
- Conducting an analysis of the data based on your research questions;
- Drawing interpretations of what the data mean based on your analysis.

A basic overview of these steps is presented below and is based on the analysis of data collected through a participant survey that includes both closed-ended and open-ended questions.

1. Checking the raw data and preparing them for analysis

The first step in data analysis is to "eyeball" your data through **data checking** for responses that may be out of line, inconsistent, or unrealistic. Examples might include checking off more than one response when only one can be selected, skipping questions that should have been answered, giving responses (to open-ended questions) that are not related to the question, and giving inconsistent responses. Depending on how out-of-line or unlikely these responses are, it may be necessary to eliminate these items from the data to be analyzed or to eliminate a respondent from the pool of respondents. For example, if responses to an item seem to be out-of-line across all respondents, then it may just be a "bad" item (e.g., respondents did not understand the item, the phrasing of the item was off, etc.) and you should consider dropping that item from the analysis. If you find that the responses from an *individual* respondent are out-of-line across the majority of the items, you may decide to drop that individual from the analysis. In both cases, keeping unreliable information in the analysis would lead to misinterpretations of the results.

Once you have checked your data, you will want to decide on a format for analyzing the data. This will depend on the computer software you will use to enter and store the data. You will also need to **code** your data in numerical form for quantitative analysis. If, for example, the survey you used is "pre-coded"—respondents are asked to select an item from a list—then coding is relatively easy. You would simply need to replace the check marks with a number. Pre-coded item #11 from the sample *Participant Survey* provided in this handbook would be coded as follows:

Original Item	Coded Item
11. Whether or not you want to become a teacher, what are some things that might keep you from becoming a teacher? (*check all that apply*):	**11. Whether or not you want to become a teacher, what are some things that might keep you from becoming a teacher?** (*check all that apply*):
❑ I don't have the grades to get into college to become a teacher	1. I don't have the grades to get into college to become a teacher
❑ I don't have the motivation or desire to teach	2. I don't have the motivation or desire to teach
❑ I don't have the confidence to teach	3. I don't have the confidence to teach
❑ I don't have the support from family and friends to become a teacher	4. I don't have the support from family and friends to become a teacher
❑ I don't have the support from my teachers and counselors to become a teacher	5. I don't have the support from my teachers and counselors to become a teacher
❑ (etc.)	6. (etc.)

TIP

Technology TIP: While you can do some analysis of your data without the use of computer software, as you collect more data over time, it will become increasingly difficult to analyze the information by hand. It is therefore recommended that you store the data in an information database that can also be used for data analysis. If you are not familiar with data entry, coding, and analysis using a computer, you should seek out the assistance of someone who has experience in this area. For example, within a school district you may want to contact a technology teacher or a programmer at the district office. Graduate students from local colleges or universities are often available for assisting in data analysis.

Once you have coded all of your data, you would then key the data into a computer software program that could store and analyze it.

Data cleaning includes a final check of the data file for accuracy in the coding of the data and in entering it into a computer program.

2. Conducting an analysis of the data based on your research questions

Once you are comfortable with the data checking and preparation, the next step is to conduct an analysis of the data based on your evaluation plan and your research questions. In conducting this analysis, you will undoubtedly need to use some statistical concepts and measurements. While some forms of statistical analysis *can* be complex and, at times, intimidating, there are some fairly simple techniques that can provide valuable information. These techniques will be described here, while the *Resources* section of this handbook provides references to textbooks that outline other types of statistical methods.

Descriptive Statistics

Statistical procedures used in describing the properties of your sample are often referred to as *descriptive statistics.* Many evaluation questions can be answered through the use of descriptive statistical measures. Common descriptive statistical measures include *frequency distributions* (e.g., how many cases fall into a given category); *means* (average) and *medians* of responses; and *range of responses.* Some examples of these measures, based on the *Participant Survey*, are presented below.

Let's assume that your evaluation included the following research questions:

Research Questions	Sub-Questions
1. Does the program serve types of students most underrepresented in the field of teaching?	A. What is the racial composition of participants? B. What is the composition of participants by sex?
2. Does the program attract students who are on a Teaching Track?	A. What percent of participants expect to graduate from high school? B. What percent of participants expect to go to college? C. What percent of participants expect to become teachers?
3. What are the barriers that may keep students from entering the teaching field?	A. What is the average number of barriers indicated by students? B. What is the most commonly checked barrier?

TIP

While the focus here is on providing you with some basic statistical methods for describing your data, there exists another form of statistics called *inferential* statistics. In simple terms, inferential statistics are used to examine response differences between two or more groups (e.g., males and females) and determining if the differences are real or "significant." *Inferential statistics* include things like t-tests, analysis of variance, and regression and while most statistical software covers these methods of analysis, understanding how to use them and what their information represents requires some level of statistical knowledge. While we do not cover inferential statistics here, we have suggested some textbooks in the *Resources* section for your review.

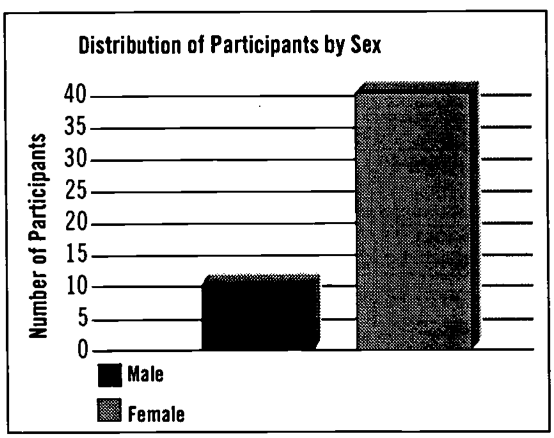
In addressing these questions, some very basic descriptive statistics can be employed:

Frequency Distributions Let's assume that all 50 of your program participants completed the *Participant Survey—Part A.* To answer research question #1 from your computer using statistical or spreadsheet software, you would run a frequency distribution on questions #1 and #2 of the survey (racial and gender groups). The computer program would group your data. The output would look similar to the following graph (*illustration only):*

Racial Group	Number of Participants	Percent of Participants
American Indian	1	2%
Asian/Pacific Islander	2	4%
African American	20	40%
Caucasian	12	24%
Hispanic	15	30%
Other	0	0%
TOTAL	50	100%

Sex	Number of Participants	Percent of Participants
Male	10	20%
Female	40	80%
TOTAL	50	100%

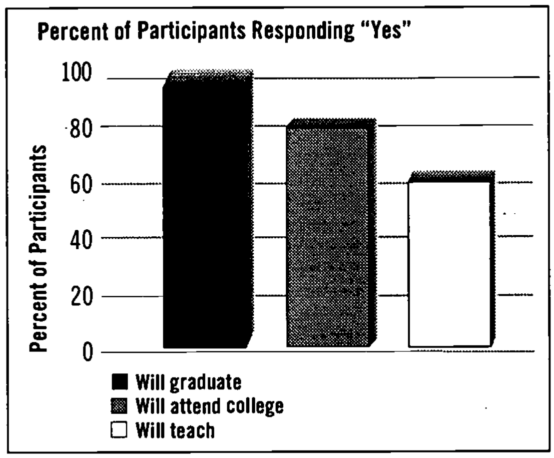
A bar graph is another way to display these data:



In addressing research question #2 (*Does the program attract students who are on a Teaching Track?*), you could run frequencies on the three sub-questions: *percent that plan to graduate from high school*; *percent that plan to go to college*; and *percent that plan to teach.* A frequency table would look something like this *(illustration only)*:

	No. of participants who said "yes"	
• Do you plan to graduate from high school?	48	48/50 (96%)
• Do you plan to attend college?	40	40/50 (80%)
• Do you plan to become a teacher?	30	30/50 (60%)

A bar graph is another way to display these data:



Calculating Means In answering research question #3 (*What are the barriers that may keep students from entering the teaching field?*), you could use statistical software to calculate means on the survey question that asks about barriers to becoming a teacher (Item 11—there are nine barriers for respondents to check). Let's say that you wanted to know the mean (average) number of barriers that participants checked off and the raw data looked as follows (*illustration only*):

# of barriers checked:	1	2	3	4	5	6	7	8	9
# of respondents:	15	15	5	5	5	0	5	0	0

TIP

TECHNOLOGY TIP: The quantitative data you have collected, once coded and entered into a computer, can be analyzed by the computer using various programs. Today, statistical software (e.g., SPSS or SAS) is sophisticated enough to read data from multiple formats, including Text, Database, and Spreadsheet. Again, we suggest that if you are not familiar with using a computer for data entry or analysis, you should seek out the assistance of someone who has experience in this area, such as a technology teacher, a programmer at the district office, or graduate students from local colleges or 'versities.

71

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Statistical software enables you to run means and frequencies relatively easily, but if you do not have access to such tools, you can easily use pencil and paper to calculate the mean number of variables checked off by respondents directly from your raw data. In this case, the mean (average) is 2.8. [because 140 barriers ÷ 50 respondents = 2.8].

Calculating the Median Using the raw data displayed on the previous page, you can calculate the median number of barriers checked (i.e., the value such that half the observations fall above it and half below it) as follows:

Number of Barriers Checked	Number of Respondents (* = 1 Respondent)
1	* * * * * * * * * * * * * * *
2	* * * * * * * * * * ▌ * * * * *
3	* * * * *
4	* * * * *
5	* * * * *
6	
7	* * * * *

In this case, with 50 observations, the median number of barriers would be between the 25th and 26th observations, which is 2.0.

Looking at Change Over Time The primary reason for surveying participants when they enter the program and again when they complete the program is to examine how their attitudes, knowledge, behaviors, etc. have changed over time and to assess the degree to which the program contributed to those changes. Remember that you can never make a direct causal linkage between the program and changes in participants. In other words, you can never say with 100% certainty that it was the program that caused the change. You can, however, infer that the program contributed to changes in participants and assess the strength of that contribution relative to other factors that may have contributed to the changes as well. This form of analysis is referred to as *inferential* statistics and includes things like t-tests, analysis of variance, and regression (see previous Tip Box).

For example, let's say you were interested in looking at the difference between participants when they entered the program and when they completed the program on the percent that planned to go on to college. Your data showed that at the start of the program, 20 percent of the participants planned to go to college and at the end, 80 percent planned to go to college. Is this a significant difference? Eyeballing the data, we would say it is. But this doesn't tell you if it is a *statistically* significant difference. To know that, you would have to use inferential statistics, specifically a *t-test.* While we do not cover the details of inferential statistics here, you can refer to the *Resources* section for a bibliography of text books that explain manipulating statistics for examining such questions. Although you couldn't say with 100% certainty that it was the program that caused this change, using inferential statistics you could say that after attending the program there was a *statistically significant* increase in the number of participants who planned to go to college and that the program most likely contributed to this change.

If you choose not to use inferential statistics, however, you can still report on and describe a change in program participants over time. What you couldn't do is make statements about statistical significance. What you could do, however, is support this interpretation by including other data collected, such as quotes from interviews with participants or participant testimonies about the program and its impact on their plans.

Qualitative Data Analysis

As mentioned before, you can have two types of data, qualitative and quantitative. Qualitative data are most likely collected through interviews, focus groups, observations, and open-ended survey questions. The analysis of qualitative data depends on the nature of the data, your research questions, and the purpose of your evaluation.

Methods for analyzing qualitative data range from preparing narrative descriptions to performing quantitative analyses of narrative concepts. For example, you can actually code the number of time respondents mentioned

TIP

Once again, for a more detailed discussion of qualitative data-analysis methods, we refer you to the *Resources* section.

certain words, phrases, or concepts and then turn that into a descriptive analysis, looking at frequencies or means (averages).

Searching for patterns and categories is another part of qualitative data analysis and once you have selected specific categories, patterns, or themes to support your research questions, you can use illustrative quotes from your data to support your analysis. Say you were interested in understanding how the program could be improved. You could, for example, analyze item 17 from the Participant Survey (Part B) which asks, "What are the top three things you would change about this program (if any)?" If you found specific comments repeated by many respondents, such as "more opportunities to mentor students," that would constitute a pattern.

3. Methods for Interpreting Evaluation Information

The analysis of your data depends heavily on organizing and reducing information and then describing through quantitative and/or qualitative methods (as discussed above). Interpretation involves *attaching meaning* to this information and drawing conclusions. You can now integrate your tables, graphs and figures based on the analysis of the information, which will provide the basis for your final report.

Quality interpretation involves careful methods of inquiry. For example, a responsible evaluator would never simply state, "The numbers speak for themselves." You should be suspicious of anyone who boils interpretation down to such superficial statements!

Interpretation, of course, is influenced by the evaluator's own bias, perspectives, and experiences. The bottom line, however, is that results must be interpreted so that you and others will know how best to understand and to use the information.

The field of evaluation is just beginning to develop systematic methods of interpretation, and new methods continue to be generated. Below is a list of some methods for interpreting evaluation information (Worthen & Sanders, 1987):

1. Determining whether objectives of the program have been achieved;
2. Determining whether assessed needs have been reduced;
3. Determining the value of accomplishments;
4. Asking critical reference groups to review the data and to provide their judgments of successes and failures, strengths and weaknesses;
5. Comparing results with those reported by similar organizations or programs.

While the evaluator is the primary interpreter of the evaluation information, he or she is not the only one. The evaluator/ evaluation team brings only one of many pertinent perspectives to bear. In fact, at times the evaluator may be *too* close to the evaluation and its data and needs to step back and receive input from others in order to see it more clearly. It is important therefore to interpret data through a "fresh set of eyes" and through multiple perspectives.

One method of bringing multiple perspectives to the interpretation task is to use your *stakeholders*. Convening small groups of people with a direct interest in your evaluation (See Step 2: Identifying Audiences for Your Evaluation) to discuss their thoughts and interpretations of the evaluation information collected and analyzed is an effective way of understanding your data. It also gives stakeholders a "voice" and provides a forum through which stakeholders can, in essence, "buy-in" to the evaluation and its results. It is not necessary, however, to bring each and every stakeholder into the interpretation process. In selecting stakeholders to help with the interpretation of results, you should focus on people most directly linked to the program who provide useful insights and assistance, such as other staff and friends of the program. Before conducting your stakeholder meeting, you should supply stakeholders with the evaluation results, along with other important information such as the evaluation design and purpose and research questions. The meeting time can then be spent reviewing and interpreting evaluation results. Guiding questions to use in facilitating the interpretation process include:

- What is the most salient information to present?
- What does this information mean?
- What is the *practical* significance of this information?
- Is it good, bad or neutral?
- What are the consequences and implications?
- What, if anything, should be done?
- How much data should be presented to support a conclusion?
- What should be done with inconsistent or contradictory information?

These stakeholder interpretation meetings capture the range of perspectives and points-of-view, and also contribute to the usefulness of the evaluation while ensuring that those who should be involved are.

Worksheets #6A and #6B

Determining Your Analysis Plan and Interpreting Your Results

Make a copy of these worksheets for each member of the evaluation design team. As a group and based on information from Worksheets #4 & #5, identify your analysis plan as well as ways to interpret the information you have analyzed.

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74

Worksheet #6A: Determining Your Analysis Plan

Directions: Using your evaluation research questions and information collection procedures outlined in Worksheets #4C & #5, use the matrix below to flesh out your analysis plan.

Evaluation Questions (see worksheet #4C)	Information Collection Procedures (see worksheet #5)	Analysis Plan (e.g., frequency distributions, percentages, simple numerical tallies)
75	BEST COPY AVAILABLE	76

Worksheet #6B: Interpreting Your Results

Directions: In the first column below indicate some methods you will use in interpreting your evaluation information. In the second column, brainstorm the stakeholders who should be involved in the interpretation of results and why they should be involved.

Methods for Interpreting Evaluation Results	Stakeholders to Participate in the Interpretation Process	
	Stakeholder(s)	Why they should be involved
Example: One method of interpretation would be to determine whether the objectives of the program have been achieved based on the analysis of the evaluation information.		

STEP 7 Drawing Conclusions and Making Recommendations

Whew! You've come a long way in evaluating the program! Now that you've collected, analyzed, and interpreted your data based on your research questions, it's time to draw some conclusions and make recommendations for moving forward.

Drawing Conclusions

Going back to the beginning of this handbook, you'll recall that evaluation is about making judgments concerning the quality, effectiveness, or value of something—in this case, your teacher recruitment program. To make a judgment about the effectiveness, usefulness, or "goodness" of something, you must first apply predetermined *criteria* or *standards* against the data. Criteria or standards are what you and your colleagues believe to be appropriate levels of progress toward meeting previously identified program goals and/or participants' needs. For example, let's say that one of your research questions is, "How well does this program recruit minority students?" To answer this question and make conclusions about your program based on the evaluation data collected, you would need to have a standard against which to judge the data. If, for example, you used a 50 percent increase in the number of minority students entering the program from Year 1 to Year 2 as the standard, and your data showed that you got a 100 percent increase in the number of minority students enrolling in the program, then you could draw specific conclusions about the effectiveness of this program in recruiting minority students based on this standard. And one conclusion would be that a strength of the program is recruiting minority students.

Once you have identified the standards or criteria you will use to make judgments about the quality of what has been evaluated, the next step is to make conclusions about your program based on the data you've collected and analyzed. One common way of organizing your conclusions or judgments is under the headings of *program strengths* and *program limitations* (or *weaknesses*). Organizing your conclusions this way is straightforward, easily identifiable to a range of audiences, and leads easily to your recommendations.

Making Recommendations

Recommendations for program improvement should flow from your conclusions and be based on the purpose of your evaluation and its research questions. In thinking about recommendations for your program, you can use the organizing headings (e.g., strengths and limitations) as a guide. Another effective way of organizing recommendations is by "short" term (e.g., over the next few months) and "long" term (e.g., within the year) goals for program improvement.

Often, external evaluators will include recommendations for the client to consider in making improvements to the program and these recommendations are or are not included in the final report, depending on their nature (e.g., internal recommendations about organizational structure may not need to be shared with external audiences). Because you are evaluating your own program, you will need to decide which recommendations you want to share only internally (e.g., if they have to do with staff or funding issues) and which ones will be shared in the final report and with your audiences/stakeholders.

Worksheets #7A and 7B

Identifying Criteria/Standards, Drawing Conclusions and Making Recommendations

Make a copy of these worksheets for each member of the evaluation design team. As a group and based on your data analysis and interpretations, use worksheet #7A to identify the standards against which you will base your judgments/conclusions. Using worksheet #7B, draw some conclusions based on your data analysis and indicate short- and long-term recommendations for program improvement.

Worksheet #7A: Identifying Criteria/Standards on Which to Base Your Conclusions

Directions: In the matrix below, list the evaluation questions you have addressed through data analysis and the standards for each question (see example). Then indicate the outcome for that question based on the data collected and analyzed.

Evaluation Questions (see worksheet #4C)	Standards for Basing Conclusions	Outcomes (*your results for this question based on data analysis*)
Example: How well has the program helped participants to identify goals and the steps for reaching them?	*At least 50% of the new participants will have identified their goals in the program at the end of their first year.* *Overall, at least 75% of participants will have identified specific ways in which the program has helped them to identify their goals and the steps for reaching them.*	*Based on a review of participant portfolios as well as the year-end participant questionnaire, 75% of the new participants had identified their goals in the program; overall, about 25% of the participants identified specific ways in which the program helped them to identify their goals.*
80	BEST COPY AVAILABLE	81

Worksheet #7B: Drawing Conclusions and Making Recommendations

Directions: In the first column below indicate some conclusions based on the outcomes of your data analysis and the standards you have employed. In the second column, brainstorm some short- and long-term recommendations for program improvement.

Conclusions		Recommendations	
Strengths	**Limitations/Weaknesses**	**Short-term (e.g., over next couple of months)**	**Long-term (e.g., over next year)**
Example (continued): The majority (75%) of new participants are able to articulate their goals while in the program and have laid out the steps they need to take in reaching those goals.	*While the participants have identified their goals, it is not clear the extent to which the program itself has helped them to identify these goals. Few participants (about 25%) could identify specific activities or aspects of the program that helped them to identify their goals.*	• *Program staff strategic meeting to discuss these results and brainstorm ways of dealing with limitations.* • *Discuss with participants the other ways in which they receive support in identifying goals/steps toward reaching goals.* • *Identify and talk with staff from similar programs to see how they deal with goal-setting.*	• *Review current activities around goal-setting and identify improvements or revisions as well as new activities to implement over the next year.* • *Pilot these new activities with participants and get direct feedback about their usefulness, impact, etc.*

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82

83

STEP 8

Reporting Your Evaluation Results

Getting the Message Out: Reporting Evaluation Information

You have now identified your evaluation purpose and the research questions to guide the evaluation. You have employed various evaluation methods to collect data to address these questions. You have analyzed these data; and, based on this analysis, you have drawn conclusions about the program and have established recommendations for moving forward. Wow! Now what? Well, while all of these steps are crucial to an effective evaluation, your evaluation information will not be used by those who need it most, unless you take the final, and one of the most important, steps in the process: effectively communicating your results.

Probably because it is one of the last steps, reporting evaluation information is often attended to superficially or with little attention to detail. Understanding all the aspects of reporting your evaluation information—from reporting the *purpose* of your evaluation to tailoring the report to meet audience needs—will help to ensure that all of your hard work is put to good use. Given that, we present here an overview of some of the more important considerations in effective reporting.

Focusing the report on the evaluation's purpose

Step 1, which covered the purpose of conducting evaluation, stressed the importance of linking the evaluation to the role it was intended to play. For example, if the purpose of the evaluation was to guide program design and development, then the report should be used to inform staff and others involved in the design of the program about the adequacy of the design, reasonable alternatives, etc. If, on the other hand, the purpose of the evaluation was to make decisions about continuing the program, then the report could focus on determinants of program worth based on resources consumed. Throughout this handbook, the focus has been placed on *decision-making* and as such, the evaluation report should provide information based on this purpose. In other words, your evaluation report should be framed in such a way that it will present information for making decisions about your program. There are, however, other purposes served by evaluation reports. A list of typical purposes includes the following (Worthen & Sanders, 1987):

- To demonstrate accountability
- To convince and gain support
- To educate and promote understanding
- To explore and investigate
- To document
- To promote public relations

Identifying audiences for evaluation reports

Before you can produce your evaluation report, you need to have a clear grasp of who the audiences are that will use the evaluation information contained within it. Without a clear understanding of the types of audiences the report targets, you could spend a lot of time creating a report that is neither understandable nor useful to its ultimate users. In addition, identifying your audiences will also help you to understand the types of questions they are likely to raise about the evaluation findings. In so doing, you can be proactive in addressing these issues in the report rather than simply reacting to them after the fact.

Creating and presenting the report based on audience information needs

Obviously, your audiences may have different informational needs. For example, if staff from similar programs is one audience, they may seek information about the intricacies of the program and its activities. If another audience is funders, they may simply want the "bottom line" (e.g., did it do what it said it would do?). In preparing your evaluation report, you will need to consider the type of information your audiences will find more important, as well as the particular medium, format and style they are likely to appreciate. In other words, depending on the range of audiences and their information needs, you may need to develop a variety of presentation formats for your report. Often, however, you can accomplish this with one report. For example, you can provide a "user friendly" non-technical report that provides information in layman's terms but includes a technical appendix for those wishing to understand the details of the data collection process, as well as technical details about the data analysis procedures. You can also gain more mileage from your report by reformatting it to fit other audience's needs and interests. For example, for a community-wide dissemination strategy, you could use sections of the report to promote the program through a newspaper article or newsletter or through an interview on a local radio talk show.

Evaluation information is communicated most commonly through written reports. It can, however, be presented and communicated through several other media, depending on what you think is the most effective way to reach your audiences. For example, if one audience is legislators (i.e., funders), who are often too busy to pore through a long report, you might choose to present the evaluation findings through dialogues or testimonies coupled with some succinct graphs and charts. Other examples for displaying evaluation information include:

- Photo essays
- Slide presentations
- Film or videotape presentations
- Computer presentations (e.g., putting it on the Internet)
- Case studies and anecdotal portrayals
- Test score summaries
- Question & Answer sessions

The choices are limited only by your imagination and creativity. Remember, regardless of the way in which you choose to report evaluation information, that information needs to be *convincing and useful* to your audiences.

TIP

In writing the evaluation report, it is wise to ask colleagues to review sections as you write them and to provide feedback before completing the final report. As you know, when one gets too close to something, it is easy to lose perspective. Having someone who was not directly involved with the evaluation read the report can provide editorial support as well as "reality checks" about things such as interpretations, conclusions, and recommendations.

Components of a good written evaluation report

While you may tailor your written evaluation report depending on the unique context of your program, there are some generally agreed upon items that should be included in any evaluation report:

An **executive summary** can be included within the full report or function as a stand-alone document (usually used with a large evaluation audience). The executive summary is just that, a succinct summary of the evaluation purpose, procedures and major findings and recommendations. The executive summary is usually 3 to 15 pages in length, again depending on the size and scope of the evaluation. Obviously, if your full evaluation report is only 15 to 20 pages, your executive summary would be much shorter, about 3 or 4 pages.

An **introduction** to the report serves to set the stage for the rest of the report. The introduction will focus on the purpose of the evaluation and describe the audiences the report is intended to serve. Often the introduction will address such questions as: Why was the evaluation conducted? What questions was it to address? Who is intended to use the evaluation information? Another purpose of the introduction is to talk about any limitations to the study that affected data collection, analysis, or interpretations. Lastly, the introduction can serve as a "guide" to the full report—outlining in brief the sections that follow.

A **focus of the evaluation** section describes the object of the evaluation (i.e., the program) and places the evaluation within a context. This section also provides an overview of the evaluation questions used to focus the study.

The **evaluation plan and procedures** section of the report gets down to the nuts-and-bolts of the evaluation design by providing an overview of the information collection plan, the data collection instruments used, and an overview of data analysis and interpretation. Remember your audience—you should present enough detail about the process and procedures to ensure the credibility of your results without providing so much that your audiences are overwhelmed or disinterested. (You can always provide specific data collection methods and statistical procedures in a technical appendix.)

The **presentation of evaluation results** section contains the results of the evaluation and provides the source for the subsequent section, conclusions and recommendations. This section should provide a complete summary, including illustrative charts and graphs, while leaving the more detailed data analyses to a technical appendix (if necessary). One convenient way to lay out your results is to organize your findings around your research questions or the goals of the evaluation.

Conclusions and recommendations should be provided in their own section and should present the criteria and standards used to judge the program; the judgments about the program (e.g., the strengths and weaknesses of the program); and the recommendations for actions that might be taken over the short- and long-term for program improvement.

Appendices might include detailed descriptions of evaluation procedures, detailed data tabulations or analyses, complete transcripts of focus groups or interviews, and other information that might be relevant to the full understanding of the evaluation but not appropriate for the body of the report. You can also include in the appendices the data collection instruments (e.g., surveys or interview protocols).

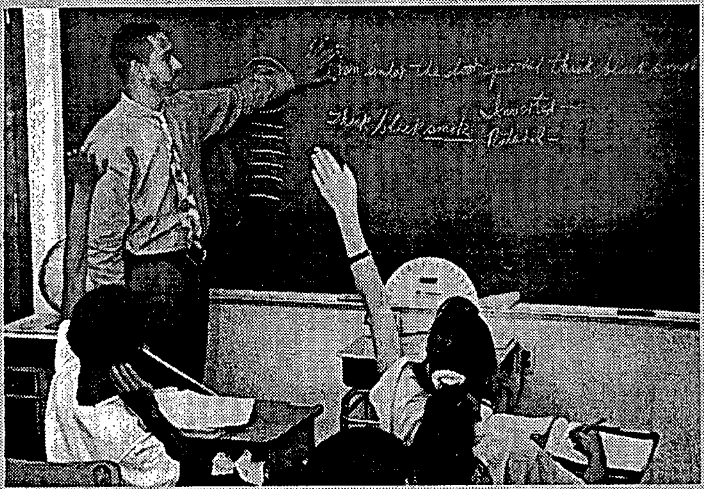
We have presented here an overview of the key sections that comprise a written evaluation report. Following is a checklist of things that would typify most good evaluation reports (adapted from Worthen & Sanders, 1987):

- ❐ Reports are provided in time to be most useful
- ❐ Report content is tailored to the audience(s)
- ❐ Report format and style are tailored to the audience(s)
- ❐ An executive summary
- ❐ An adequate introduction that sets the stage
- ❐ Mention of any limitations to the study
- ❐ Adequate presentation of evaluation plans and procedures
- ❐ Effective organization of the presentation results
- ❐ All necessary technical information provided (preferably in the appendix)
- ❐ Specification of criteria and standards for evaluative judgments
- ❐ List of both strengths and weaknesses
- ❐ Recommendations for action
- ❐ Sensitivity to those affected by the evaluation findings
- ❐ Accurate and unbiased presentation of the results
- ❐ Effective communication through telling the story
- ❐ Appropriate level of detail
- ❐ Lack of technical jargon
- ❐ Use of correct, uncomplicated and interesting language
- ❐ Use of examples and illustrations
- ❐ Attention to visual appearance and appeal

Notes

87

Mini-Case Studies of Program Evaluation



Mini-Case Studies of Program Evaluation

About the Mini-Cases

In order to provide handbook readers with "real-life" examples of program evaluation, RNT invited several pre-collegiate teacher recruitment program directors to write mini-cases describing evaluations they had conducted and what they had learned from the process. Our criteria for selecting the practitioners included:

- Program has a pre-collegiate teacher recruitment focus;
- Program director had conducted internal evaluation(s) and may have commissioned external evaluation(s);
- Evaluation was based on a predetermined set of questions tied to program goals and objectives;
- Evaluation included tracking of participants as well as examining the effectiveness of program components and features;
- Multiple data collection methods were used;
- Evaluation findings have been used to inform program improvements.

In addition, we sought to provide mini-cases from a variety of program types, ranging from single-site, local initiatives to statewide and regional multi-site efforts. All but one of the programs we selected are well-established and all are notable examples of school/college collaboration.

Each mini-case begins with a brief overview of the program, continues with a description of the evaluation process and how it benefited the program, and concludes with challenges encountered and how they'll be addressed in the future. Contact information is provided at the end of each piece, should you wish to contact the author directly for further information.

89

Consortium for Minorities in Teaching Careers

Brief Overview

The Consortium for Minorities in Teaching Careers was a collaboration among ten universities in five states and Puerto Rico to design and implement programs encouraging high school students to follow education and career paths leading to the teaching profession. It operated from 1990-1995 under two separate grants from the U.S. Department of Education totaling $2.5 million. While the programs used a variety of models, they shared the objective of increasing the number of minority youngsters motivated to become teachers. The main activity for participants in the Consortium was hands-on teaching of young people. At most sites, participants received a number of training sessions in lesson planning, instructional methodology and child development principles. Under the guidance of lead teachers, they planned lessons and team-taught elementary school children. Close to 400 students participated across eight sites in Baltimore, New Orleans, Los Angeles, New York City (3), Wisconsin, and Puerto Rico (2). Given the geographical, ethnic and programmatic differences among the programs, establishment of a comprehensive and well-conceived evaluation plan was essential.

Evaluation Process

An independent evaluation unit at the Center for Evaluation and Assessment within the College of Education at the University of Iowa designed and carried out formative and summative evaluation activities and developed instrumentation and data collection strategies that were implemented at each site. The Consortium site coordinators met annually at one of the program sites. In the early years, emphasis was on reviewing the data collection instruments, making modifications based on input from the site coordinators and training them in administrative procedures. In later years, emphasis was on interpreting results and making program modifications based on the lessons learned from the data collected. Interaction between evaluator and site coordinators was critical to the effectiveness of the evaluation. The evaluator was able to adjust procedures based on the realities at each site, while site coordinators gained confidence in the evaluation procedure through participation in design and modification.

The evaluation plan included a series of process evaluation (formative) activities as well as outcome (summative) activities. Functions of the evaluation unit included:

- development of protocols to guide the data collection activities of the on-site teams
- development and refinement of all evaluation instrumentation
- analysis and initial interpretation of all quantitative data
- review, summarization, analysis and interpretation of qualitative data
- management and coordination of evaluation information, including writing and producing evaluation reports
- establishment through training, cooperation and consensus of a unified management information system (structured database) to facilitate standardized data collection
- interpretation and dissemination of evaluation information about the projects at member institutions
- consultation, including troubleshooting of evaluation problems for site evaluation teams
- meta-evaluations of local site evaluation team activities in order to improve the evaluation process at individual sites and across the Consortium

Functions of the on-site evaluation teams included:

- implementation of data collection plans as stipulated in the Evaluation Design Workbook
- administration of data collection instruments at the local site
- conducting interviews and observations as stipulated in the final revised evaluation plan

- preparing initial analyses of all qualitative data
- transmitting primary evaluation data and initial analyses to the evaluation unit
- diagnosing problems with data collection or other evaluation problems that occur on site

Process Evaluation The staff at each site monitored the functioning of local programs by documenting the activities of program staff and participants. They used both quantitative and qualitative methods, including: participant and staff surveys; participant interviews; direct observation and reporting of program events; demographic and background characteristics of participants, including numbers of participants in salient categories; and reviews and summaries of program documents, manuals, materials and reports.

Questions that guided the design of the process evaluation were:

- How are potential minority teacher candidates recruited and how can recruitment efforts be improved?
- How can participation of recruited students be improved?
- What are the most important characteristics of the pre-collegiate intervention programs and how can the programs be improved?
- What program characteristics will affect dissemination of pre-collegiate intervention programs and how can dissemination be improved?

Outcome Evaluation Via quantitative and qualitative methods, outcome evaluation addressed specific objectives for the pre-collegiate programs across all sites.

Questions that guided the outcome evaluation were:

- How can significant numbers of minority junior high and high school students be encouraged to enroll in intensive, pre-collegiate, future teacher preparation programs?
- What changes occur in students' attitudes toward children, the learning process and toward teaching as a viable career as a result of participation in such programs?
- What changes occur in students' ability to work with children in a school environment as a result of participation in such programs?
- What changes occur in students' knowledge of and attitude toward critical subject matter and critical skills needed to become an effective teacher as a result of participation in such programs?
- Do minority students enrolled in pre-collegiate programs encouraging entrance into teaching careers demonstrate academic improvement through higher grades, higher test scores, or qualifying for and selecting college preparatory classes as a result of participation in such programs?

Reflections and Challenges

Through the design outlined above, the evaluation model not only provided a framework for collecting and analyzing data to measure the success of the project, it also developed and increased the capacity of participants at each member institution to become more adept at both process and outcome evaluation activities during the course of the project. Overall, the surveys showed very strong changes in participants' attitude about the status of the teaching profession and the interest in becoming teachers. In-depth interviews of selected samples confirmed the survey data and also indicated that the program caused many participants to have much more positive commitment to going to college regardless of the anticipated field of work after graduation. The direct interaction with young children in a teaching situation was an extremely positive experience for the great majority of classroom participants.

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Future Teachers Program

Brief Overview

Future Teachers is a precollegiate teacher recruitment program whose initial purpose was to increase the diversity of students pursuing teaching careers. With the evolution of its two main programmatic strands, CIMATEC (Ciencia, Matematicia, and Technologia) and FTOMST (Future Teachers of Mathematics, Science, and Technology), Future Teachers now focuses specifically on the recruitment of teachers in mathematics, science, and technology.

The Future Teachers Program has now been institutionalized in the Department of Secondary Education at California State University/Fullerton (CSU/Fullerton). The program has been in operation for 15 semesters and has served over 3,500 students who have provided over 120,000 service hours in elementary, middle, and high school tutoring. Many of these students are now in their first years of college at two- and four-year institutions. Each semester, over 250 new high school juniors and seniors complete the two-unit college course ("The Teaching Experience") as part of the Future Teachers Program.

The course is offered to California State University-eligible high school juniors and seniors in 18 high schools, and includes a weekly seminar, tutoring experience, career and academic advising, and a campus field trip with faculty presentations from the math and science departments. The university covers tuition, and students have access to the university library, health services, and other facilities while enrolled. High schools participating in the program were chosen because their districts serve as Professional Development Centers for the Single Subject Credential Program. Secondary teachers (one per participating school) who serve as Future Teachers Advisors receive a stipend and are considered adjunct, part-time faculty in the Department of Secondary Education. The department also provides three units of release time for a faculty member to direct the program. Additional grants have allowed us to pay stipends to a team of Faculty Advisors, who also attend seminars on the effective use of student journals; improving problem solving; writing in mathematics and science; developing students' math and science skills; and other topics. Students gain experience tutoring in math/science-related subjects, and are asked to reflect on teaching in journal writing assignments.

Evaluation Process

Three categories of questions guided our program evaluation research. The first area of analysis dealt with career choice:

- Does the Future Teachers experience increase positive attitudes toward teaching as a career choice?
- Which components of the program are most influential on career decisions?
- In what specific careers do students express most interest?

The second area of analysis focused on whether the Future Teacher experience was able to address any of the reasons why students of color are not entering teaching.

A third area of analysis addressed the tutoring experience:

- In what ways did tutoring provide participants with an early field experience in teaching?
- Did participants grow professionally as tutors?
- Was it a positive experience for participants?
- In what kinds of tutoring experiences did students participate?

Research methods included both qualitative and quantitative measures. Students completed a pre- and post-test questionnaire on the first and last days of the course and were surveyed on issues of program effectiveness. The pre-test/ post-test and end-of-program surveys were designed to determine attitude changes regarding teaching as a career choice as well as to identify effective program features. Tutoring logs, course journals, program documents, and newspaper articles on the program were qualitatively analyzed for common themes related to program evaluation. In addition, student journals were analyzed for common themes relating to personal histories, course experiences, and attitudes toward teaching. Two major findings pointed to the positive influence of the program. First, students identified the Future Teachers Program as the second greatest influence on their decision to pursue the career of teaching ("a teacher" was the primary influence). Second, participants identified the tutoring experience and the university field trip as the two most helpful activities.

Reflections and Challenges

Positive evaluation findings and the growing demand for teachers of mathematics, science, and technology prompted our decision to make the two strands—CIMATEC and FTOMST—the primary emphasis of the Future Teachers program. Consequently, we believe Future Teachers has begun to impact both the teaching of mathematics and science and recruitment of teachers in those subjects. However, we also learned through the monitoring process that all students were not receiving the same level of training. We responded to this challenge by increasing the frequency of faculty visits to schools, and by offering training workshops for advisors on such topics as: course development, arranging tutoring opportunities, increasing student awareness of campus facilities, and ideas for arranging valuable field trips and seminars.

Student portfolios were yet another tool that enabled us to assess program effectiveness and monitor the progress of our future teachers. The portfolio fulfilled both process and product goals. As a process tool, the portfolio helped students integrate knowledge of, skills in, and attitudes toward teaching and learning; developed and refined reflective observation skills; and fostered professional orientations to problem solving, decision making, and leadership. As a product tool, the portfolio helped students develop a record of achievement that was richer and more illustrative than a transcript; chronicled self-growth; and promoted professional skills and abilities in the college market. The decision to include portfolios was also prompted by a variety of developments that have come in the wake of California's authentic assessment movement. For example, an area university (University of California/Irvine) recently used portfolios as the basis for student admissions. Furthermore, CSU/Fullerton teacher candidates, and first- and second-year teachers in induction programs, are all required to prepare portfolios. Therefore, adding portfolios at the high school level was consistent with requirements for other components of the pipeline into teaching.

To others conducting internal evaluations we would suggest allotting at least one-third of your budget to evaluation. Our program grew very fast and we simply did not have the resources to conduct evaluation (internal and external) in the manner we felt necessary. We had originally wanted to follow up every student completing the program over a five-year period. The large numbers of students completing the program and student mobility of over 50 percent, made this task impossible. Our current plan is to identify two students from each of the 18 high schools to follow up over the next five years.

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The Golden Apple Scholars of Illinois

Brief Overview

This nationally recognized program recruits, selects and prepares high potential, mostly minority (79%) and/or low-income high school graduates to teach in Illinois' high need schools. Combining preservice training during four Chicago-area summer institutes with loan repayment, mentoring by award-winning teachers, university networking and work study opportunities during the school years, the Golden Apple Scholars garner approximately 4,000-6,000 hours of training, workshops and classroom experience in urban schools prior to student teaching their senior year of college. In return, they commit to teach for five years in an Illinois high need school.

The program began with 15 Scholars selected from the Chicago-area schools in 1989. By the summer of 1992, when the program expanded statewide, the Scholars numbered 120, with 60 selected in the first statewide class of 1993 and the same number selected each year thereafter for a cohort of 240. The university network tripled from seven to 22 universities, all providing liaison and financial aid services to the Scholars and the foundation.

In 1992, the program's budget was $50,000. The next year we received $80,000 planning grants from each of two state education agencies, as well as $50,000 from two city of Chicago offices. By 1996, the budget had grown to over $2 million.

The first four classes of Scholars selected from 1989 through 1992 (n=62), were privately funded at $7500 each per year for four years. Therefore, the reporting requirements for this group included tracking several factors. The donors wanted to know the progress of each Scholar in school, his/her high school and community background, and retention and progress in the summer institutes.

However, internal reportage and tracking of Scholar nominations (600-1,000 per year), retention, and descriptive statistics on the winners did not satisfy the state and city agencies. It was time to turn to external evaluation: to report outcomes, success stories, the "bang for the buck." We also needed to examine our program goals and determine our next steps in program expansion.

Evaluation Process

At first, we thought we might evaluate the first Scholar graduates as they began their teaching. Since this cohort numbered 15, of whom only three were fully certified the first year after graduation, we decided to evaluate the relationship of the universities to the Scholar program. Universities in the downstate area of Illinois, both public and private, had recently joined the network. Since universities were key to the recruitment, attendance, retention, and certification of Scholars, that became the nucleus of the first evaluation, "Expectations of Participating Universities." We turned to the North Central Regional Educational Laboratory for help in determining the focus and parameters of the investigation. We answered three questions using scholar interviews, scholar surveys, telephone interviews with university liaisons, surveys with other university contacts, and staff interviews: 1) How well had the program been implemented at participating universities? 2) What implementation barriers occurred and how were they overcome? and 3) What impact did the program have on participating universities?

With program costs spiraling, a second investigation, "An Exploratory Cost-Effect Analysis of the Golden Apple Scholars of Illinois Program" was undertaken as soon as the first evaluation was completed to determine the cost effect or value-added costs to educate Scholars versus traditional teacher candidates. In addition, each component of the program was examined and the total cost factored to come up with a percentage for each. The costs of each segment were then analyzed to determine future programming and budget needs and clarify decisions about the original investment.

Research questions used during the second evaluation included:

- How well does the program do on the selected outcomes:
  a) graduation
  b) capability and "preparedness" of program teachers to teach in high need settings
- What resources are involved in providing program services or activities?
- What are the values of the resources used?
- Who provides the resources — the project? teacher candidates? others?
- What is the relationship of outcomes to costs for the Golden Apple Scholars program?

The third evaluation, "Preparing Teachers for the Urban Classroom: An Examination of the Golden Apple Scholars of Illinois Program," became the first phase of a longitudinal study of the Scholar Teachers who have graduated and are teaching in the Chicago Public Schools or Chicago area private schools (n=22 out of 25 graduates in 1995). Human Capital Research Corporation, an education, policy, and research consulting firm, conducted our longitudinal study.

Research questions used during the third evaluation included:

- What are the characteristics of Scholars now teaching in urban settings?
- What are the experiences and actions of teachers who have been prepared through this model program?
- How long do they plan to stay in teaching?
- What obstacles have they encountered in the field and what elements of support contribute to overcoming these obstacles?

This third evaluation painted a portrait of the first-, second- or third-year Scholar teachers, documented the Scholar story and determined early program outcomes. As a baseline, we also surveyed more experienced teachers assigned to the same schools as the Scholar to learn what the teachers looked like who were teaching in the urban schools, how they built collaborative relationships, interacted with administrators, involved and communicated with parents, interacted with the community, experienced professional development activities, and addressed non-instructional classroom problems. Over 80% of the Scholars reported plans to stay in teaching, with 10% planning to leave teaching but stay in education, and 10% to teach in a different school or different grade.

These results informed the fourth summer institute which was completely recast as a preservice teacher induction workshop designed by the Scholar teachers and the senior Scholars who had just completed student teaching. During the one week seminar, 52 Scholars met and developed their capacity to job search, prepare for student teaching, and got reacquainted with their cohort group (they attend over 20 separate universities). In addition, a formalized professional development series for Scholar teachers is being implemented. The role of external evaluation is crucial to determining progress, outcomes, and next steps.

Reflections and Challenges

It is always difficult to hear any criticisms of your program, but, pleasantly, by working closely with the evaluation team, what came out of this process was a much clearer understanding of what was working and why. Since we are funded by government agencies and the state legislature, it is much easier to explain our outcomes when backed by hard data, evaluated by a neutral but skilled party. Another realization is that you have a successful program when you hear the participants praise various aspects of it.

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The M & M Program

Brief Overview

The Minority Education and Recruitment into Teaching (MERIT) program at Springfield Technical Community College (STCC) was initiated in 1996 to increase the number of minority teachers for the Springfield, Massachusetts schools. MERIT is funded by the Minority Education Opportunity Program (MEOP), a state program to expand educational opportunities for minority students. At neighboring Springfield College (SC), the Mentors Inspiring New Directions (MIND) program, also funded by MEOP, was initiated in 1996 to expose minority children to college and encourage them to attend.

For the 1996-97 school year, the MERIT program and the MIND program combined to form the M & M Program. The partnership was inspired by the similarity of program goals and the potential for a well-rounded program for high school students when institutional resources were merged. Furthermore, the combined efforts of two colleges, one technical and one liberal arts, provided a unique opportunity for creative planning.

Program Activities The program incorporates three main types of activity: academic enrichment, tutoring, team building, and field trips. Each week, faculty members from both colleges (STCC and SC) teach enrichment workshops in leadership, writing, computer math, and science. All of the after-school workshops are interactive and hands-on, with an emphasis on the teaching process. Professors begin workshops by describing their own journey into teaching, what schools they attended, and how their own teaching methods have evolved over the years. Once each week, six minority graduate students from SC and one undergraduate from STCC's minority teacher recruitment initiative with University of Massachusetts (Project STRIDE), serve as tutors for individual or small groups of students after school. Mentor teachers are present to oversee the tutoring process.

Between the academic enrichment and tutoring, students in the program have the opportunity to visit both campuses each week. Additional trips include a visit to the University of Massachusetts at Amherst, where students attend a college class in educational methods, visit the "observations corridor" at the campus elementary school, and tour the Campus Center to learn about the diverse student groups and activities on campus. Students also receive tours of both the SC and STCC campuses, and visits to other educational/cultural museums and exhibits.

Evaluation Process

The Planning Team Session, held at the beginning of the year, and the Team Evaluation Session, conducted at the end, were crucial to program planning and evaluation. Both were scheduled and established as a condition of employment in the contracts of all teachers, tutors, and mentors.

Planning Team sessions served to prepare and orient the teachers, tutors, and mentors for the program's three main areas of focus: enrichment activities, academic tutoring, and team building. These preparatory meetings also gave tutors the opportunity to define their roles and get faculty input for structuring their tutoring sessions.

At the Team Evaluation session, we discussed in-depth participants' responses to selected questions from the end-of-year program evaluation survey form. Completed by all faculty and tutors prior to this meeting, evaluation forms included a common set of questions about the program, plus a page of questions specific to each participant (i.e., tutor, advisor, or instructor). Students were also asked to complete a written evaluation and to discuss the questions in a session with their home school advisor. Program staff summarized major findings for each evaluation question and sent them out to all participants following the Team Evaluation session.

As our program started later than planned and with fewer students than anticipated, on-going evaluation throughout the six months occurred informally, primarily via team meetings during which attendance data and observations about participation were shared. At the end-of-the-year Recognition Picnic for students and their families, parents engaged in informal discussion with the staff and most commented that their children's grades had improved and motivation about school in general had increased. We saw these parental observations and the fact that about half of the students had perfect program attendance as positive program validation.

Program staff also tracked student and program success by collecting statistics on the following: socio-economic factors (the percentage of students eligible for free or reduced lunch); ratio of male to female students; ethnic background; and academic performance (the percentage of students that showed increases and/or stability in their final grades in English, science, and/or math).

Reflections and Challenges

For the first year of the program, the evaluation process was quite sufficient. Though some participants thought the process was too extensive, all agreed that it was very meaningful to sit as a group and reflect on the program as a whole. Most importantly, we will implement some positive program changes and new initiatives for the following year based on the evaluation data.

The evaluation questions will remain similar next year, but more statistical data will be collected from the participating schools in future years (particularly with regard to academic grades, attitude, and attendance upon entrance) to allow comparison in these areas from start to end of the program. Also, we will ask more individualized questions of students who continue in the program for a second year.

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97

Project PRIME, Programs to Recruit and Inspire Minorities in Education

Brief Overview

Morgan State University's School of Education and Urban Studies (SEUS) is the lead institution for Project PRIME—Programs to Recruit and Inspire Minorities in Education—an initiative to increase the number of students of color who enter teaching careers. The DeWitt Wallace-Reader's Digest Fund made a five-year, $3,008,000 grant to Morgan State University to support the project.

PRIME is a collaborative effort among multiple programs to provide early recruitment and continuing support of students of color who enter teaching careers at partner institutions.

In addition to Morgan State, the PRIME coalition includes the Baltimore City and Baltimore County Public Schools, the Maryland MESA Program, and several area colleges and universities. These institutions are committed to implementing a plan that will dramatically increase the number of African Americans in the Baltimore area who enroll in teacher education programs. Successful implementation of PRIME has spawned many precollegiate recruitment activities throughout the state of Maryland.

Project goals are:

1. To inspire minority youth, in particular African Americans, to consider teaching as a career;
2. To enrich and enhance the image of teaching as a profession;
3. To recruit minority youth, in particular African Americans, into mathematics and science teaching careers;
4. To prepare teachers to work effectively with diverse student populations;
5. To establish PRIME as a state resource center for minority teacher recruitment.

PRIME includes a pipeline of eight programs aimed at recruiting and retaining students of color into teaching careers, beginning with interventions that start at the middle grade and high school levels—a time when students make course enrollment decisions that determine whether or not they will pursue a college preparatory path of study. Serving approximately 2,940 students annually, project activities reach students and families directly, informing them of (1) the need for a diversified teaching force, and (2) the "joys and challenges" of the teaching profession. Activities include the following: ProTeam and Teacher Prep classes, Future Educators of America chapters, campus tours, Citywide Program for the Teaching Professions magnet program, and the Hands-On Science for Elementary Students program (taught by middle and high school students).

Evaluation Process

Prior to 1995, PRIME engaged in formative evaluation activities, which included the following: participant response feedback forms, workshop evaluations, parent assessment forms, and narrative reflection activities. Students who received formal instruction through the ProTeam and Teacher Prep classes also completed pre/post surveys. At the end of each project year, the college partners engaged in a group self-study process.

In May 1995, PRIME contracted with Research and Evaluation Associates, Inc. to conduct an external evaluation for project years four and five. The purposes of the evaluation were to "help implementers assess their progress and effectiveness; identify and target program components that need improvement; and inform others of the effectiveness and/or ineffectiveness of identified recruitment strategies."

Staff and mentors, in consultation with the evaluators, identified the following major questions:

1. To what extent has PRIME contributed to students choosing teaching as a career?

2. What has been the effect of PRIME's efforts to enrich and enhance the image of teaching as a profession?
3. To what extent has PRIME been effective in recruiting ethnic minority youth into mathematics and science teaching careers?
4. To what extent have efforts to enhance teacher effectiveness in culturally diverse classrooms been successful?
5. To what extent has PRIME been established as a statewide resource center for precollegiate minority teacher recruitment?
6. Does PRIME provide a pipeline from grades 6 through 12 to increase student interest in teaching?
7. What has been the nature of collaborations between PRIME and higher education institutions?
8. What are the unanticipated effects of PRIME?

Two principal methods were utilized for data collection: interviews and surveys. Secondary sources included observations and document reviews. Using a pre/post test design, pre and post surveys were administered to all students participating in curriculum-based components delivered during the regular school day (ProTeam and Teacher Prep). Each class was matched with a control group. This same design was also used with PRIMETime with Clergy, the church-based component designed to enhance the image of the profession among congregants and to sensitize them to the need for African American teachers. We collected data from all PRIME component constituents and participants, including teachers, family members, and counselors, through the use of evaluation/feedback forms. Findings from the surveys, interviews, observations and document reviews were instructive and informative. They confirmed informal self-assessments relative to the effectiveness of curricula, the impact of school bureaucracy on effective implementation, and the importance of the affective domain in the lives of African American children.

The evaluation process—especially internal evaluation—benefited project staff in several ways: immediate corrective feedback, data for long-range planning, realization of participant ownership in the project, clarification of project goals and objectives, and opportunities for mid-course corrections.

Reflections and Challenges

Problems with the evaluation process were inextricably tied to the challenges of effectively implementing an instructional program within an urban school district experiencing daily turmoil, political upheaval and state-imposed sanctions. We contended with matters of attrition, accountability, approval and availability. Additionally, communicating the significance of consistent and accurate documentation and data collection to teachers, counselors, principals, and others who deliver the curriculum and implement the strategies was an assiduous task. Because of the spontaneous nature of urban schools, timely data collection was particularly challenging.

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99

South Carolina Center for Teacher Recruitment

Brief Overview

The purpose of the South Carolina Center for Teacher Recruitment (SCCTR) is to provide leadership in identifying, attracting, placing, and retaining well-qualified individuals for the teaching profession in our state. In addition, the SCCTR responds to changing needs for teachers from underrepresented populations, in critical subject fields, and in under-served geographical areas in South Carolina. When the SCCTR was created in 1986, the founders had the wisdom to insist on program evaluations and the collection of longitudinal data. Later, the governing bodies of the SCCTR implemented an external review of SCCTR that looked at all programs and operations and how they functioned in toto to address the state's teacher recruitment needs.[1]

SCCTR offers a continuum of programs and services—all but one has undergone a formal evaluation. Most of the SCCTR's evaluation efforts and resources have gone to annual evaluations of the two largest programs—Teacher Cadet (2,300 students at 145 sites, 30% minority) and ProTeam (800 students at 38 sites, 64% minority). The College HelpLine Program and the Teacher Job Bank have also undergone formal evaluations and some data have been collected on the two summer institutes and the annual job fair (EXPO) sponsored by the Center. Evaluations utilized written surveys, focus groups, on-site and telephone interviews, and case studies from current student participants and teachers, administrators, college partners, former Cadets who are not in college, former Cadets who have become licensed to teach, former Cadets who did not become teachers, former Cadets who are currently teaching, parents, and Job Bank applicants.

Evaluation Process

Much of the information gleaned from recent evaluations of the Teacher Cadet and ProTeam Programs has been very similar to past evaluations and marginally helpful in improving programs. We have been challenged in recent years to move from evaluations that focused on *inputs* to ones that focused on *results* (e.g., how many former Cadets are teaching in South Carolina?)

We have found that the questions you ask in designing an evaluation are critical in determining the quality and usefulness of information you receive from the study. Tying the questions to the mission of the program(s) is critical. Once the questions are determined, the next challenge is to determine the means (and indicators) of collecting the information within the resources that are allocated for evaluation. Currently, the SCCTR spends approximately two percent of its budget for evaluation and research— most recommendations state that ten percent is more appropriate. Currently, the following questions guide our programmatic evaluations:

Teacher Cadet

1. Is the Teacher Cadet Program an effective tool for recruiting males and minorities into a career in education?
2. Is the Teacher Cadet Program an effective tool for recruiting teachers in critical subject and geographic areas?
3. Is the SAY (Science and Youth) component of the Teacher Cadet Program encouraging young people to consider teaching science?
4. Is implementation of the Teacher Cadet Program, including recruitment initiatives, being carried out according to SCCTR guidelines?

1.The external reviews were conducted by Dr. Russell French, University of Tennessee in 1991; Dr. Robert Shoenberg, University of Maryland in 1993, and Sally Bond, Horizon Research in 1996. For eight years, the annual program evaluations were conducted by the South Carolina Educational Policy Center at the University of South Carolina. In 1997, the studies were conducted by Patricia ...rns, Inc.

5. Do former Teacher Cadets become civic advocates for education?

Pro Team

1. Does ProTeam increase the number of students wanting to go to college?
2. Does ProTeam increase the number of students interested in considering teaching as a career option?
3. Do the students elected to be in ProTeam possess the characteristics sought by the program?
4. Is the program being implemented according to the guidelines established by SCCTR in terms of time allotted for the class, teacher and student section, and curriculum activities?
5. To what extent are teachers who are selected for ProTeam experienced teachers with exemplary teaching skills and high student rapport?

Longitudinal Tracking In addition to the information collected from current and past program participants, the staff collects and maintains a database on over 19,000 students. We begin tracking students when they participate in the ProTeam Program (middle school), and we have access to the teacher licensure database at the South Carolina Department of Education to determine how many become licensed, in what area(s) they are licensed, what college/university they graduated from, and whether or not they are teaching in geographic areas where there are shortages of teachers. The database indicates whether the student participated in the Teacher Cadet Program, if he/she received assistance through the College HelpLine Program, and if he/she received a South Carolina Teacher Loan. The database also contains demographic information (race, gender, permanent address, current address, intended major in college, parents' names, etc.).

Reflections and Challenges

Finding evaluators who are willing and have the expertise to conduct studies of teacher recruitment programs is often challenging. The evaluators need to understand the issues involved in precollegiate teacher recruitment. Producing reports that are succinct and readable by policy makers is another aspect of evaluation with which we have struggled. Most policy makers are not going to read 50-page reports; however, that depth is often needed by program administrators who use the results to make programmatic improvements.

The most important lesson that we've learned from our experience is that you can't afford not to have evaluations of your programs. Evaluations that show results will help you stay in business and get increases in funding.

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101

Teacher World

Brief Overview

The Teacher World program seeks to motivate students to become creative teachers and leaders who believe all children, in a culturally diverse society, can learn at high levels and will make positive changes throughout the world. One of Teacher World's primary goals is to increase the percentage of minority teachers in the state of Wisconsin. Due to its success, the Teacher World program has become an established model for minority teacher recruitment in the state of Wisconsin.

The Wisconsin Department of Public Instruction (DPI) began designing and implementing the program in 1989. In addition to primary financial support from the DPI, Teacher World receives support from the University of Wisconsin-LaCrosse, University of Wisconsin-Parkside, Milwaukee Public Schools, Wisconsin Education Association Council, Wisconsin Improvement Program, local teacher associations, and local school districts. Annual cost of the program is $80,000.

Program Activities

The program brings one hundred students—fifty percent of whom are students of color—to spend one week during the summer on the UW-LaCrosse campus. Participants are selected from a pool of public and private high school applicants from across the state.

During the program, students: plan and teach actual lessons; discuss current issues; listen to experiences of various professional educators; participate in a college recruitment fair; and take special classes in art, drama, music, and/or dance. The students also receive academic counseling; learn what is required for admission to Wisconsin's best teacher training programs; and discover the programs that best suit their needs.

Evaluation Process

Students complete a detailed on-site evaluation on the final morning of the program in which they rate each program activity. Data from these evaluations are used by teachers and staff at both the fall and spring meetings to refine and/or revise the program in preparation for the summer.

In addition, a five-year follow-up study was conducted using a random selection of 25 percent of the students who attended the 1989-1993 Teacher World Programs. The five-year benchmark was chosen in order to coincide with students' junior year in college, when it is presumed that they would have elected, and begun work in, a major course of study such as education. The results indicate that 85-90 percent of the students enrolled in college, and approximately 50 percent of those students are enrolled in schools/colleges of education preparing for a career in teaching.

To increase the likelihood that students would be available for comment, all calls were made to home phone numbers during the December holiday break. This strategy was largely successful, and the feedback resulting from students greatly enriched the evaluation reports.

Reflections and Challenges

Because the Teacher World director acts to facilitate, rather than to dictate, the course of the program, the corps of teachers who work in the program each year are empowered to make decisions regarding program development, revision, and implementation. The student evaluations have been instrumental in supporting program development and improvement because data (both qualitative and quantitative) from them are examined and discussed during bi-annual planning sessions. During these fall and spring weekend retreats, the master teachers (permanent Teacher World faculty) and teaching assistants (college students) are brought together to plan for the coming summer.

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Walton/Lehman Pre-Teaching Academy

Case Study

Brief Overview

The goals of the program are to give qualified minority teenagers first-hand experience with teaching, provide them with the support and training necessary for success as both students and teachers, and motivate them to enter the teaching profession. Unanticipated outcomes have led to additional goals: re-energizing teachers who serve as mentors; increasing student outcomes in classes to which interns are assigned; and improving the school climate.

Program objectives for pre-teaching students are to: promote positive attitudes toward teaching; improve self-confidence and presentation skills; provide first-hand experience in teaching; improve academic skills; ensure college readiness; and provide accelerated education through exposure to college courses. Objectives for teachers are to: increase morale and motivation; increase collegial communication; provide professional development; and disseminate teaching methods. Objectives for students in classes where pre-teachers are assigned are to: provide interaction with positive peer role models; increase individualized attention; and encourage interest in the teaching profession.

Program Operation The Pre-Teaching Academy was established in 1984[1] with a budget of $60,000 and $50,000 in in kind contributions (teacher time and college credits), and continues as a partnership between Lehman College and Walton High School. The academy's philosophy is that the sooner students can be "turned on" to the joys and satisfactions of teaching, the more likely they will be to make an informed, realistic choice about teaching as a career. During the school year and in the summer, approximately 75 high school juniors and seniors (99% of whom are Latino, African American, or Asian) complete teaching internships under the supervision of high school teacher-mentors. Through classroom observation of their mentors and their own forays into teaching, they actually experience what works and what doesn't. They witness first hand the application of theory in practice.

Pre-teachers have a wide range of classroom experiences during their four semesters and two summers in the program: tutoring, instructing small groups, reviewing homework, presenting preliminary lesson materials, teaching parts of lessons, teaming with their mentor-teachers to teach entire lessons, teaching entire lessons on their own and preparing and grading tests. Pre-teachers have also taught entire lessons in classes in which in-subject substitute teachers were not available.

Pre-teachers are registered for one credit of "pre-teaching" in each of their four internship terms. They receive a grade for the course determined by their cooperating teacher in conjunction with the program coordinator. Part of their responsibility is to keep a journal and a portfolio of lessons; these are reviewed by the program coordinator.

All interns complete a three-credit course, "Introduction to Education,"[2] offered on the Lehman campus, and most go on to take an additional college course, "Introductory Speech."

Evaluation Process

Lehman College conducts formative and summative evaluations of the program via the following methods: program evaluation surveys

1. Past funding for the programs has come from the Department of Education Fund for Innovation in Education, Aaron Diamond Foundation, and the New York Alliance for Public Schools' "Mentor in Education" program.

2. The text used in the Introduction to Education course is a 319-page manual written collaboratively by pre-teachers and mentors for use in the program. It includes such topics as: The Art of Questioning, Handling Problem Situations, Using Alternative Learning Strategies (with sample lessons in a variety of subject areas), and Planning Effective Lessons.

completed by pre-teachers and mentor-teachers; written teaching observations of interns; review of student excerpts over the four internship semesters from pre-teacher journals with publication in a monthly program newsletter, Chalk Talk; occasional formal pre-teacher evaluation by students in assigned classes; anecdotal reports on interns by their mentors; review of lesson portfolios; review of school records; review of standardized test scores; tracking (when possible) of college entrance, graduation and entry into teaching. An additional aspect of the evaluation is to solicit participant suggestions for program improvement.

Key Questions the Academy is Trying to Answer:

1) Does the academy promote positive attitudes towards the field of education?
2) Does the academy encourage young people to become teachers?
3) Does the academy prepare students for college?
4) Does the academy provide students the opportuniry to accelerate their education?
5) Does the academy expose students to a college environment?

The on-going evaluation has consistently demonstrated positive outcomes. The Academy:

a. Promotes positive attitudes toward the field of education in both interns and mentors, as evidenced by survey results, journal entries, and intent of interns to enter college programs to prepare for teaching.

b. Encourages young people to become teachers as evidenced by the 25% of (800+) pre-teaching participants since 1984 who have entered careers in teaching. Many current pre-teachers indicate that their interest was sparked through having a peer as a pre-teacher in their class.

c. Prepares students for college entry as evidenced by the 95% of interns who graduate from high school within four years and enter college.

d. Provides interns the opportunity to accelerate their education as evidenced by the 100% of interns who earn at least three college credits; the 75% who earn at least six credits; and the 20% who earn nine or more college credits.

e. Exposes students to a college environment as evidenced by the fact that interns and mentors frequently attend workshops, courses and events at the college.

f. Improves student self-confidence as evidenced by survey results, by changing journal entries, and by anecdotal reports of mentor teachers.

g. Reduces teacher isolation as evidenced by mentors' anecdotal reports, survey results, participation levels in workshops, and collegial tone of the school.

h. Exposes interns and mentor teachers to new teaching methods and strategies as evidenced by: comments in journal entries; survey results; observation of the dissemination patterns of new/innovative/ creative teaching methods, strategies and techniques. The interns are, in a very real sense, like bees who carry these methods, strategies and techniques from internship assignment to internship assignment trying them out in the classroom and spreading them to new teacher mentors. This has proved a far more effective (though perhaps not efficient) dissemination technique than holding workshops.

Evaluating the program enabled us to determine what was working well and what needed modification. We were also able to determine how different constituencies within the school and the college perceived the program.[3] With this information we were able to strengthen the program and improve outcomes. We were also able to submit the program to an external evaluation process which resulted in program validation by the New York State Education Department. Without ongoing evaluation this would have been impossible. At present we

[3] These included: program alumni, administrators, teachers serving as mentors, other teachers in the school, interns and students in whose classes pre-teachers served.

have been given the opportunity to apply for program replication funds. Without the data we gathered over the years, further funding, especially for replication, would be difficult, if not impossible, to obtain.

Reflections and Challenges

We have encountered several challenges when evaluating:

- Tracking former students to: find out what they were currently doing; ascertain long-term program impact on them; get input about what they saw as strengths and weaknesses of the program over time; and ask what they would change and what they would maintain.
- Finding appropriate equivalent measures to use with a multilingual population of students served by preteachers.
- Finding ways to ascertain some of the more elusive and hard-to-measure changes that interns experience, e.g., increased self-confidence, enhanced self-esteem, improved ability to present to large groups, and attitude toward teachers, education and school.

If I were to begin this program in a new environment, a different school, knowing what I know now, I would spend more time initially collecting baseline data on: school climate; teacher self-perception; teacher perception of students; academic achievement for potential interns and for students they will pre-teach. I would also find ways to do content analysis of student logs and journals. Finally, I would videotape students teaching from early in their internships as a record of their growth and would have each intern maintain a portfolio of lesson plans, essays, class work, etc.

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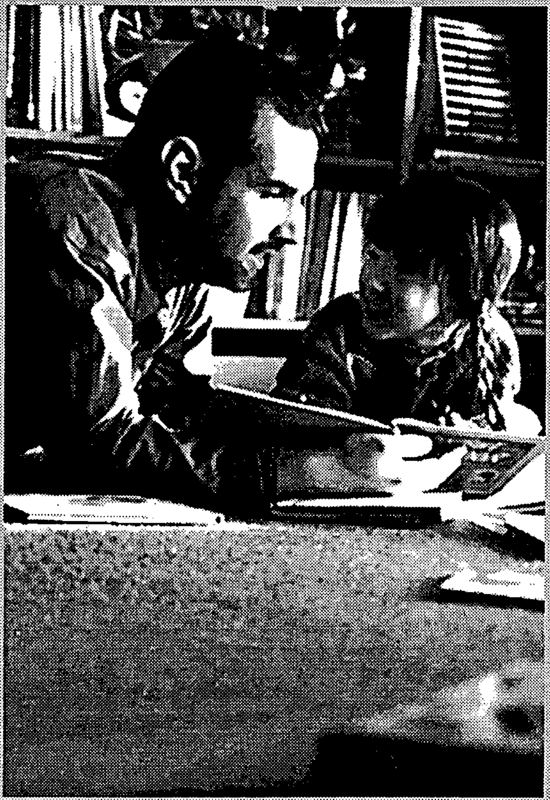
106

Notes

107

Appendices



More Tips From Practitioners

Getting Started

✔ It is never too soon to start the evaluation.

✔ Remember that no amount of hard work can make up for the lack of planning on the front end.

✔ View evaluation as a necessary and critical part of the success of your program.

✔ Develop and/or review a mission statement (purpose) and objectives (what you hope to accomplish) for your program.

✔ Base your evaluation on your mission and objectives.

✔ Be explicit about what you will evaluate and why; determine questions you want to answer.

✔ Consider how you will answer the questions (e.g., methodology: surveys, interviews, data retrieval, etc.).

✔ Consider how data will be used and how results will be reported.

✔ Ask: what story do I want to tell?

✔ Define what success means for your program.

✔ Write evaluation into grant proposal budgets—funders like to see that you're planning to evaluate.

✔ Determine the audiences for your evaluation (e.g., policy makers, legislators, state board, donors, your board of trustees, program staff and participants).

✔ Bring together as many stakeholders/ representatives of your audience(s) as possible to: discuss evaluation, create buy-in, and get multiple perspectives on your program.

✔ Find out what is important to your policy makers and build those components into your evaluation.

✔ Establish a pace (when and how often to collect data).

✔ Be prepared to work through all the "red tape" of collecting data (e.g., students right to privacy, parental permission).

For external evaluation: develop a professional relationship with the program evaluator(s) so that he/she will feel comfortable asking for additional information and you'll feel comfortable offering suggestions; remember that the evaluator you choose must have credibility and be respected by policy makers.

Data Collection

✔ Include qualitative information, if possible (let the "stories" tell your story).

✔ Explore all possible sources of data (e.g., state department teacher licensure databases, loan recipients).

✔ Describe what your program is about (for descriptive part of evaluation); convey the essence of the program (mission, goals, objectives, core values of program).

✔ Document your project's history.

✔ Track your own indicators: school retention, program retention, grade point average, honors, ethnicity, gender, etc.

✔ Systematically collect data and organize it in a manner that is easy to retrieve.

✔ Continuously communicate to students, teachers, administrators, etc. of the purpose of ongoing evaluations and the importance of their participation.

Reporting Your Findings

✔ Determine who should receive a copy of your evaluation results and make sure they receive a succinct report that is understandable in layman's terms.

✔ Explain how you plan to implement the recommendations.

Long-range Uses and Benefits

✔ Listen to your critics (no matter how painful)—they may have some excellent suggestions for ways to improve.

✔ Annually re-evaluate your evaluation plan and make necessary modifications.

✔ Use recommendations from evaluations to assess current state of program, make program improvements, develop goals for the upcoming year.

✔ Don't throw away data that have been collected; you may not use the data now, but the information could come in handy later.

Glossary*

Anonymity (provision for): Evaluator action to ensure that the identity of subjects cannot be ascertained during the course of a study, in study reports, or in any other way.

Assessment: Often used as a synonym for evaluation. The term is sometimes recommended for restriction to processes that are focussed on quantitative and/or testing approaches.

Attrition: Loss of subjects from the defined sample during the course of a longitudinal study.

Audience(s): Consumers of the evaluation; those who will or should read or hear of the evaluation, either during or at the end of the evaluation process. Includes those persons who will be guided by the evaluation in making decisions and all others who have a stake in the evaluation (see stakeholders).

Background: The contextual information that describes the reasons for the project, its goals, objectives, and stakeholders' information needs.

Baseline: Facts about the condition or performance of subjects prior to treatment or intervention.

Case study: An intensive, detailed description and analysis of a single project, program, or instructional material in the context of its environment.

Coding: To translate a given set of data or items into machine-readable categories.

Cohort: A term used to designate one group among many in a study. For example, "the first cohort" may be the first group to have participated in a training program.

Comparison group: A group that provides a basis for contrast with (in experimentation) an experimental group (i.e., the group of people participating in the program or project being evaluated). The comparison group is not subjected to the treatment (independent variable), thus creating a means for comparison with the experimental group that does receive the treatment. Comparison groups should be "comparable" to the treatment group, but can be used when close matching is not possible (see also Control Group).

Content analysis: A process of systematically determining the characteristics of a body of material or practices.

Control group: A group that does not receive the treatment (service or product). The function of the control group is to determine the extent to which the same effect occurs without the treatment. The control group must be closely matched to the experimental group.

Correlation: A statistical measure of the degree of relationship between variables.

Cost-effectiveness: This analysis determines what a program or procedure costs against what it does (effectiveness). Is this product or program worth its costs?

Criterion, Criteria: A criterion (variable) is whatever is used to measure as success, e.g., grade point average.

* Excerpted from: Frechtling, J., Stevens, F., Lawrenz, F., Sharp, L., (1993). *User-Friendly Handbook for Project Evaluation: Science, Mathematics, Engineering and Technology Education.* Washington, D.C.: National Science Foundation.

Descriptive statistics: Those that involve summarizing, tabulating, organizing and graphing data for the purpose of describing objects or individuals that have been measured or observed.

Design: The process of stipulating the investigatory procedures to be followed in doing a certain evaluation.

Dissemination: The process of communicating information to specific audiences for the purpose of extending knowledge and, in some cases, with a view to modifying policies and practices.

Effectiveness: Refers to the conclusion of a Goal Achievement Evaluation. "Success" is its rough equivalent.

Executive summary: A non-technical summary statement designed to provide a quick overview of the full-length report on which it is based.

External evaluation: Evaluation conducted by an evaluator from outside the organization within which the object of the study is housed.

Focus group: A group selected for its relevance to an evaluation that is engaged by a trained facilitator in a series of discussions designed for sharing insights, ideas, and observations on a topic of concern.

Formative evaluation: Evaluation designed and used to improve an intervention, especially when it is still being developed.

Generalizability: The extent to which information about a program, project, or instructional material collected in one setting can be used to reach a valid judgment about how it will perform in other settings.

Impact evaluation: An evaluation focussed on outcomes or pay-off.

Implementation evaluation: Assessing program delivery (a subset of Formative evaluation).

Indicator: A factor, variable, or observation that is empirically connected with the criterion variable, a correlate. For example, judgment by students that a course has been valuable to them for pre-professional training is an indicator of that value.

Inferential statistics: These statistics are inferred from characteristics of sample to characteristics of the population from which the sample comes.

Informed consent: Agreement by the participants in an evaluation of the use of their names and/or confidential information supplied by them in specified ways, for stated purposes, and in light of possible consequences prior to the collection and/or release of this information in evaluation reports.

Instrument: An assessment device (test, questionnaire, protocol, etc.) adopted, adapted, or constructed for the purpose of the evaluation.

Internal evaluator: Internal evaluations are those done by project staff even if they are special evaluation staff, that is, external to the production/writing/teaching/service part of the project.

Longitudinal study: An investigation or study in which a particular individual or group of individuals is followed over a substantial period of time to discover changes due to the influence of the treatment, or maturation, or environment.

Matrix: An arrangement of rows and columns used to display components of evaluation design.

Mean: Also called "average" or arithmetic average. For a collection of raw test scores, the mean score is obtained by adding all scores and dividing by the number of people taking the test.

Measurement: Determination of the magnitude of a quantity.

Median: The point in a distribution which divides the group into two, as nearly as possible. For example, in a score distribution, half of the scores fall above the median and half fall below.

Mode: The value which occurs more often than any other. If all scores (in a score distribution) occur with the same frequency, there is no mode. If the two highest score values occur with the same frequency, there are two modes.

Needs assessment: Using a diagnostic definition, need is anything essential for a satisfactory mode of existence or level of performance. The essential point of a needs assessment for evaluation is the identification of performance needs.

Norm: A single value, or a distribution of values, constituting the typical performance of a given group.

Objective: A specific description of an intended outcome.

Observation: The process of direct sensory inspection involving trained observers.

Outcome: Post-treatment or post-intervention effects.

Peer review: Evaluation done by a panel of judges with qualifications approximating those of the author or candidate.

Performance-based: The use of global ratings of behavior assessment which is a movement away from paper-and-pencil testing. This assessment is costly and there may be a loss of validity and reliability.

Pilot test: A brief and simplified preliminary study designed to try out methods to learn whether a proposed project or program seems likely to yield valuable results.

Planning evaluation: Evaluation planning is necessary before a program begins, both to get baseline data, and to evaluate the program plan, at least for evaluability. Planning avoids designing a program that is unevaluable.

Population: All persons in a particular group.

Post test: A test to determine performance after the administration of a program, project, or instructional material.

Pretest: A test to determine performance prior to the administration of a program, project, or instructional material. Pretests serve two purposes: diagnostic and baseline. Also the use of an instrument (questionnaire, test, observation schedule) with a small group to detect need for revisions.

Process evaluation: Refers to the evaluation of the treatment or intervention. It focuses entirely on the variables between input and output.

Product: A pedagogical process or material coming from research and development.

Progress evaluation: A subset of formative evaluation.

Prompt: Reminders used by interviewers to obtain complete answers.

Qualitative evaluation: The part of the evaluation that is primarily descriptive and interpretative, and may or may not lend itself to quantitative treatment.

Qualitative evaluation: An approach involving the use of numerical measurement and data analysis based on statistical methods.

Random: Affected by chance.

Random sampling: Drawing a number of items of any sort from a larger group or population so that every individual item has a specified probability of being chosen.

Reliability: Statistical reliability is the consistency of the readings from a scientific instrument or human judge.

Sample: A part of a population.

Self-administered instrument: A questionnaire or report completed by a study participant without the assistance of an interviewer.

Self-report instrument: A device in which persons make and report judgments about the performance of their project, program, or instructional material.

Significance: Overall significance represents the total *synthesis* of all you have learned about the merit or worth of the program or project. This is different from *statistical significance* which may be testing one of several conditions of a program or project.

Stakeholder: A program's stakeholder is one who has credibility, power, or other capital invested in the project, and thus can be held to be to some degree at risk with it.

Summative evaluation: Evaluation designed to present conclusions about the merit or worth of an intervention and recommendations about whether it should be retained, altered, or eliminated.

Unanticipated outcomes: A result of a program or interview that was unexpected. Often used as a synonym for side-effects, but only a loose equivalent.

Utility: The extent to which an evaluation produces and disseminates reports that inform relevant audiences and have beneficial impact on their work.

Validity: The soundness of the use and interpretation of a measure.

113

Resources for Program Evaluation

On-Line Resources

Fund for the Improvement of Postsecondary Education

Notes on Evaluation Design.

http://www.ed.gov/offices/OPE/FIPSE/notes.html

National School Network

NSN Resource Exchange: Standards, Evaluation and Assessment Desk

http://www.nsn.bbn.com/resources/desks/evaluation/index.shtml

Includes information on program and project evaluation, national and state standards, other evaluation rubrics, student and teacher assessment

American Evaluation Association

http://www.eval.org/

CRESST: National Center for Research on Evaluation, Standards, and Student Testing

http://www.cresst96.cse.ucla.edu/index.htm

Funded by the U.S. Department of Education, CRESST conducts research on important topics related to K-12 educational testing. Register for free newsletters about the latest CRESST research, and related links page for other web sites with valuable assessment information.

ERIC Clearinghouse on Assessment and Evaluation

http://ericae.net

Question/Problem: Qualitative and Quantitative Research Methods page includes: responses to questions such as "What distinguishes qualitative research from quantitative research? When is it appropriate to use each type?"; other internet resources; non-ERIC bibliographic resources; ERIC Digests; ERIC citations and abstracts; instructions for ERIC Documents Access.

Books on Evaluation

Babbie, E. (1990). *Survey Research Design.* Belmont, CA: Wadsworth Publishing Company.

Brinkerhoff, R., Brethower, D., Hluchyj, T., and Nowakowski, J. (1983). *Program Evaluation: A Practitioner's Guide for Trainers and Educators.* Boston: Kluwer-Hijhoff.

Cronbach, L.J. (1982). *Designing Evaluations of Educational and Social Programs.* San Francisco: Jossey-Bass Publishers.

Frechtling, J., Stevens, F., Lawrenz, F., Sharp, L. (1993). *User-Friendly Handbook for Project Evaluation: Science, Mathematics, Engineering, and Technology Education.* Washington D.C.: National Science Foundation.
Can be accessed on the internet at: http://www.ehr.nsf.gov/EHRIRED/EVAL/handbook.html

Herman, J.L., ed. (1987). *Program Evaluation Kit.* Newbury Park, CA: Sage Publications.

Sanders, J.R., Chair, Joint Committee on Standards for Educational Evaluation. (1994). *The Program Evaluation Standards, 2nd ed., How to Assess Evaluations of Educational Programs.* Thousand Oaks, CA: Sage Publications.

Weiss, C. (1997). *Evaluation: Methods for Studying Programs and Policies.* Upper Saddle River, NH: Prentice-Hall.

Wholey, J.S., Hatry, H.P., Newcomer, K.E., eds. (1994). *Handbook of Practical Program Evaluation.* San Francisco: Jossey-Bass Publishers.

Worthen, B. and Sanders, J. (1988). *Educational Evaluation: Alternative Approaches and Practical Guidelines.* New York: Longman.

The Grantseeker's Guide to Project Evaluation. (1997). Alexandria, VA: Capitol Publications, Inc.

Effective Evaluation: A Systematic Approach for Grantseekers and Project Managers. (1993). Alexandria, VA: Capitol Publications, Inc.

Measured Steps: Reader Response Form

We welcome your comments on this handbook. What you tell us will help us to revise and improve Measured Steps *for future use. Please return your completed form by* ***FAX to Recruiting New Teachers, Inc., at (617) 489-6005*** *or by* ***MAIL to Recruiting New Teachers, Inc., 385 Concord Avenue, Suite 103, Belmont, MA 02478.*** *Thank you!*

Name **Title**

Affiliation **Phone**

Address

1. How have you used this handbook to date?
   - ❑ I have read it, but have not used it in conducting an evaluation as yet – *Skip to #4.*
   - ❑ I have used it in the evaluation of (specify program, activity, etc.): ______________________

2. How would you rate your evaluation skills before you used this handbook (*check one only*):
   ❑ None ❑ Basic ❑ Moderate ❑ High

3. How would you rate your evaluation skills after you used this handbook (*check one only*):
   ❑ None ❑ Basic ❑ Moderate ❑ High

4. Please rate the following aspects of the handbook with an "1" being Excellent and an "5" being Poor (*circle one only*):

a. The purpose and objectives of the handbook are clearly presented.	1	2	3	4	5
b. The handbook is well organized.	1	2	3	4	5
c. The content is at an appropriate level for the novice.	1	2	3	4	5
d. The handbook prepared me to apply what was learned.	1	2	3	4	5

5. Please identify the most valuable feature(s) of this handbook for you:

6. Did your understanding of evaluation and evaluation methods change as a result of your use of this handbook?
   ❑ YES ❑ NO Please explain:

7. Was there something you had hoped to learn from this handbook, but did not? Please explain:

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RNT

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