A Step-by-Step Guide to Planning and Implementing Evaluation Strategies

Developed for the Virginia College Consortium
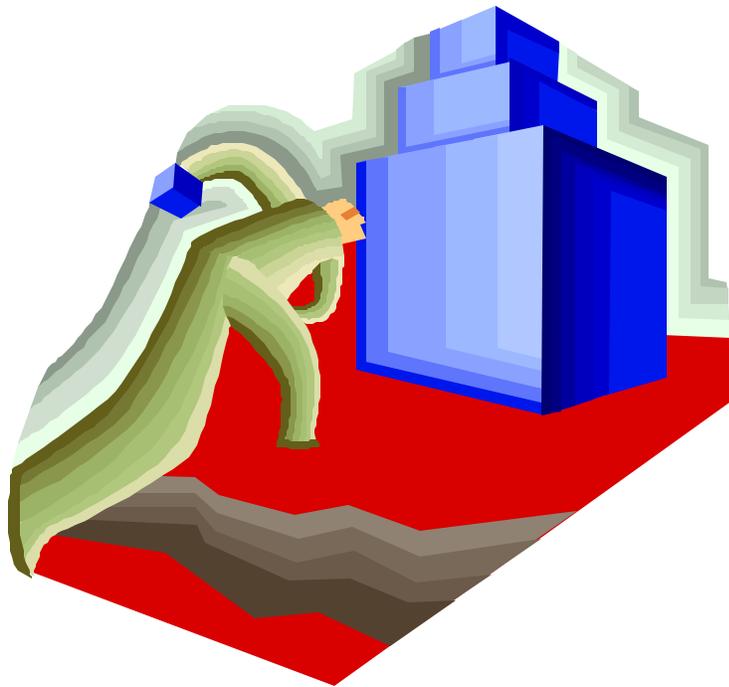
GEORGE MASON UNIVERSITY

Center for the Advancement of Public Health
Department of Health, Fitness and Recreation Resources
*Graduate School of Education*

A Step-by-Step Guide
to Planning and Implementing
Evaluation Strategies

Virginia College Consortium

Developed By
David S. Anderson, Ph.D.
Amr Abdalla, LL.B, M.A.

GEORGE MASON UNIVERSITY
Center for the Advancement of Public Health
Department of Health, Fitness and Recreation
Resources
Graduate School of Education
703-993-3697

IMPLEMENTATION

Reflection/Adjustment

Synthesis/Interpretation

EVALUATION

Planning

Measurements

Design

PROGRAM

Resource

Service

Activity

Event

Needs ◆ Hypotheses ◆ Accomplishments
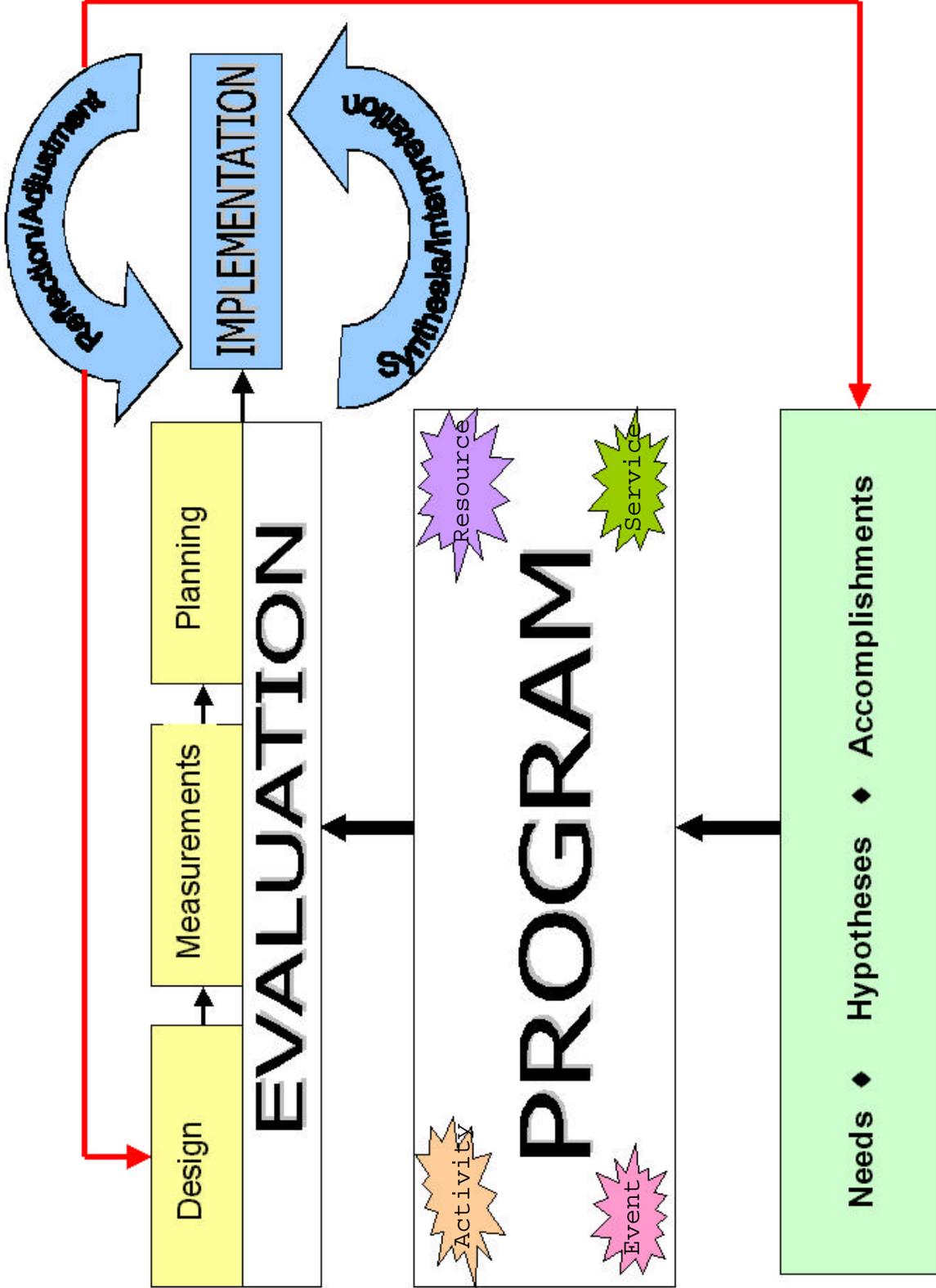
PROGRAM EVALUATION STEPS

1. Clarify what you are trying to accomplish
2. Specify what you want to know

3. Design the overall evaluation plan
4. Identify any constraints and limits
5. Acknowledge multiple sources of information
6. Build outcome evaluation measures
7. Build process evaluation measures
8. Incorporate qualitative measures
9. Identify who can provide assistance
10. Plan the evaluation

11. Implement the evaluation
12. Code and synthesize data
13. Report and present findings
14. Reflect on proposed revisions

A Step-by-Step Guide to Planning and Implementing Evaluation Strategies

The thought of doing evaluation is often overwhelming to professionals doing their activities. After all, they reason, if their work is of good quality, why does it need to be evaluated? That is precisely why formalized evaluation activities do need to take place - to document clearly the work that is being done. The evaluation helps provide the program designers with insight about ways of improving the efforts. It also helps to further substantiate the quality efforts, providing proof to others that the activities or services are working. Further, should the results be other than what is expected, or if something changes with the audience or setting, program modifications will be needed.

This **Guide** provides a user-friendly approach for understanding, orchestrating and implementing evaluation activities. It is prepared for the program person who actually implements the service activities, or who oversees the implementation of the activities. While this may be a helpful review for the person(s) conducting the evaluation, it is actually designed as a brief overview for the program manager or coordinator. In a sense, it is designed to "take the sting" out of doing evaluation.

The importance of doing evaluation in as complete a manner as possible (outcome and process evaluation, quantitative and qualitative approaches) is essential. As highlighted throughout the **Guide**, evaluation is integral to "knowing what works" and to "knowing why it works." Evaluation is NOT something that gets tacked onto the end of an activity or event (although many people view it that way); it is, when done right, integral to the implementation of high quality services, resources, and events. While some people are threatened by the implementation of evaluation activities, evaluation is actually designed to serve a useful role - it helps each of us improve what we are doing. It is a helpful set of tools that can help improve our efforts, thereby minimizing the implementation of activities that are really not helpful, or as helpful as they could be.

Evaluation is viewed as a process. It is one that evolves over time, and one that incorporates a range of approaches designed to accomplish different things. The 14-step model prepared here (see back pages) is offered to help organize the thinking and planning. The Guide provides a brief overview of each step, including rationale (the "why") and some considerations (the "how"). The pages for each step are complemented by a worksheet which offers a framework for key questions and issues. While the **Guide** is not "everything you wanted to know," it does provide the overall perspective and, hopefully, greater confidence for embarking upon evaluation activities.

Enjoy the journey!

Step 1
Clarify what you are trying to accomplish

Why:

This first step helps to provide focus to both the project activities and the evaluation plan. By clearly stating what you are trying to accomplish, the focus is on the end point for the project. The attention is on what you want to see different as a result of the project activities and services. With clearly defined endpoints, measures can be prepared which capture the attainment of these desired outcomes. With outcomes that are more fuzzy, it will be increasingly difficult to specify measures that capture their accomplishment. Within this context, program planners can articulate the linkages between their knowledge foundations (whether from research, experience, or theory), program implementation ideas, and assumptions about linkages among these factors.

How:

As explained, the purpose of this step is to help clarify the vision and purpose of the project. In order to accomplish this, it is necessary to engage all those who are involved with developing the project in various activities. The purpose of these activities is to identify, in a participatory manner, the various views and expectations of those involved with the program. Through dialogue and discussions, the group will be able to identify clear desired accomplishments. These discussions must be well- focused, and perhaps facilitated by a member of the project leadership or the evaluation staff.

Tips

C   Define the need as precisely as possible.
C   Clarify what you want to accomplish (outcome).
C   Consider different needs for various subpopulations.
C   Brainstorm with others from the beginning.
C   Engage from the beginning those whom you believe may be critics.
C   Think long-term and short-term.
C   Use this for the overall project as well as individual programs or events.
C   Do this process as often as possible.

What is your vision?

What are you trying to prevent?

What are you trying to promote?

Step 2
Specify what you want to know

Why:
Complementing the first step is an identification of what you want to know specifically.   While your desired outcome may be clearly stated, you may want to know only *that* the outcome was achieved. You may also want to know *what effort was made* to achieve that outcome. You may wish to know what *concerns* emerged and attained the desired outcome.   You may wish to *validate* some assumptions or hypotheses and then want to know contextual issues surrounding the project and its outcome attainment.   In addition to specifying what you want to know, it is helpful at the outset to specify what others want to know.   These stakeholders may include administrators, department heads, key influential people, and others with power and influence; they may use evaluation data and reports or may make decisions based on their results.

How:
This step is best implemented in conjunction with the first step "Clarify what you are trying to accomplish."   This is because the processes of identifying what you want to accomplish and what you want to know will inform each other. Thus, the project activities will be developed to provide answers to "what you want to know," and at the same time "what you want to know" will guide the design of these activities.

Specifying what you want to know about a project requires the examination of the purpose(s) of the project.   Based on that, different aspects of the project are identified with the goal of determining the type of information that needs to be gathered.   In some instances this information will be related to the process of the project; in others this information will be related to the outcome; and in other situations to both the process and the outcome.

Tips
C   Remember that you cannot answer everyone's questions.
C   Try to maintain the integrity of the program design and not let the evaluation determine the program.
C   Think about the range of stakeholders, and engage them at the beginning.
C   Realize that you cannot know everything.
C   Prioritize what you want to know, and when you need to know it.
C   Make sure that what you want to know gets covered in the design of the program and the design of the evaluation.

What you want to know	How to measure this

Step 3
Design the overall evaluation plan

Why:
Building upon the first two steps, the overall evaluation plan can now be prepared. It is critical that this be conducted at the beginning of the project in order to provide meaningful results. Further, in designing the evaluation activities at the onset of the project, clarification about project activities and strategies can be undertaken. The linkage between goals, objectives, strategies, and measures is one that must be clearly specified and arranged as early as possible. This avoids implementing unnecessary strategies, as well as unwielding, inappropriate, or insufficient evaluation designs.

How:
The overall design of the evaluation includes attention to scheduling, factors that affect the data collection and interpretation, as well as behavioral and implementation concerns among the target populations. In designing the evaluation, it is important to minimize the extent to which the evaluation affects the program design and implementation. Thus the program design should take the highest priority with evaluation prepared within the program design context. With this, the program is implemented to have the desired results, with data collected as a secondary function; this is in contrast to having the program designed entirely around data collection.

The Evaluation Plan is designed by evaluators in collaboration with the project staff, for they are the ones who may provide realistic information about the project, which could affect the evaluation design. Evaluators also need to assess the issues in step 2 "What do you want to know." This will help all participants clarify the types of information to pursue.

	Tips
C	Keep the overall evaluation design as simple as possible.
C	Acknowledge that different evaluators have different philosophies and orientations.
C	Let your genuineness show when preparing the evaluation.
C	Implement pre-test/post-test designs on a routine basis.
C	Have the evaluator involved at the beginning of the project.
C	Take care to minimize later criticisms by anticipating these, and building evaluation processes and designs to reduce these.

Goals, Objectives, and Activities	Schedule	Who
GOAL:		
Objective #1:		
Activities: 1) 2) 3) 4) 5)		
Objective #2:		
Activities: 1) 2) 3) 4) 5)		

Step 4
Identify any constraints and limits

Why:
Evaluation designs can range from extensive (and expensive) to simple and narrow. As the overall evaluation is being designed, clarifying the strengths and limits helps provide guidance about building the evaluation plan. Every project does not need a long-term theoretically complex evaluation design. On the other hand, a complex project will not be well served by a simplistic evaluation. Attention to a variety of considerations which provide data that can be useful is important for early planning discussions. It is also important to determine whether the evaluation is a supplement to a project, or as in the case of research studies, whether the project is more subservient to the evaluation.

How:
Early in the process, evaluators must engage in discussions of the project's resources with the project's leadership. In such discussions, the evaluation design will be tailored to match the resources available, whether human, financial, logistic or technical. Hardly ever do evaluators work in a vacuum or separate from the project staff. Therefore, recognizing what type of human resources are available to the evaluation staff, and in what capacity, helps in identifying what the evaluators, realistically, may expect in terms of data collection by project staff.

Financials factors, of course, are always of great significance. However, it is not necessarily true that financials are always "too short" to serve evaluation needs. In many instances project staff who are not familiar with evaluation techniques and costs believe, wrongly, that data collection and analysis are expensive tasks. On the other hand, many project staff, who are used to quick types of "pre/post" evaluation of short term events (such as workshops and one-day conferences) assume that this is what it is all about; thus, they believe, it should not cost much at all. Of course, they, too, are inaccurate in their assessment of evaluation. Evaluation could be far more complex and deep than a quick pre/post self-administered survey.

Evaluators usually are aware of the costs of their different tasks. They can help project staff break some of their misperceptions about insufficient or extravagant financial costs of evaluation. They can also suggest to project staff different methods of pursuing funding, and assist them with writing proposals to obtain such funds.

Finally, even if human and financial resources are available, logistics may get in the way. Logistical considerations expand time and space constraints. In many instances, it is time constraints that make it difficult to pursue an ideal evaluation design. However, evaluators should be able to assist project staff in designing evaluation plans which will maximize the use of their time, by developing small, yet representative samples, for example, or by developing techniques and tools that are less time consuming.

Constraints/Limitations	Strategies to Overcome
1)	1) 2) 3) 4)
2)	1) 2) 3) 4)
3)	1) 2) 3) 4)
4)	1) 2) 3) 4)
5)	1) 2) 3) 4)

Step 5
Acknowledge multiple sources of information

Why:
Information and data can come from multiple sources. In building an evaluation plan, it is helpful to think about sources of information that already exist, as well as those that can be created. It is also helpful to consider quantitative and qualitative measures, as well as ways of quantifying measures that are gathered or prepared from a qualitative approach. The overall theme is to integrate the insight and information from the multiple data sources.

In research terms, this is called "triangulation." Just as airline pilots and watercraft captains need multiple sources of information to know where they are, program leaders need a variety of sources. For example, just because you know that you accomplished something does not inform you how you achieved it; triangulation helps to fully understand what you need to know. With multiple sources of information, data can be gathered and then compiled to point towards an overall and more complete understanding.

This is particularly helpful with blending qualitative and quantitative information. Many program personnel "know" and "feel" that the process worked, and can gather information in a qualitative way; however, this may not be able to be fully captured with raw numbers. However, many program managers (the decision makers with the budget) want to see numbers, but do not understand the process without qualitative insights or perspectives.

How:
Every program is made of a set of activities. These activities target certain populations in various ways. For example, a program activity may provide information on alcohol to college students in order to increase their awareness of how alcohol affects the body. Another activity may be to provide support groups for students who come from substance abusing families. A third program activity may provide referrals and resources to students who are having problems with their alcohol use. For each of these activities, an evaluation design which may best serve the program relies on multiple sources of information. For example, for the situation of providing support groups, an evaluation design may be made comprised of a combination of outcome and process tools.

For the outcome evaluation, two methods may be applied: a pre-post test for participants to assess their knowledge, attitudes and behavioral changes as a result of the support group; and an in-depth interview to assess some of the "qualitatively significant" effects of the support groups which may not have been captured by the pre-post test.

For the process evaluation, two methods may also be applied. One method is to have an independent evaluator conduct observations of the support groups in order to capture the elements of the process which may have had greater effects on the participants. Another method is to ask the staff to provide an assessment of each group to determine how they perceived the process and its effects.

The combination of information from these various sources is then analyzed to produce as much depth and breadth about the support groups, their process and their outcomes.

Tips
C Learn how to prepare a quality evaluation by reading other proposals.
C Focus the issues to be addressed since every question cannot be answered.
C Consider using information that has already been gathered.
C Try to get other individuals/groups to gather information that helps meet your needs.
C Determine which questions can best be answered by which processes.

Questions to be Addressed	Quantitative Measures	Qualitative Measures

Step 6
Build outcome evaluation measures

Why:

This step links to the first step by adding measures to monitor what you are trying to accomplish. With a clearly defined specification of what you want to accomplish, you have already prepared the desired outcome. Outcome measures, then, help address whether that desired outcome was achieved. In building outcome measures, attention to methodology, validity, reliability, and sampling will be undertaken. The aim is to maximize confidence in the knowledge that is gathered with an aim of being able to attribute what is changed to the program implementation.

How:

The building of outcome measures depends greatly on the type of program conducted, the type(s) of data available, and the available resources. However, what is common for all outcome measures is that their purpose is to assess the immediate effects of the program on the targeted audience or population. Outcome measures, thus, must be developed to capture information related to the intended effects of the program. So if a program's purpose was to improve students' knowledge of alcohol related problems, an outcome measure will focus on how much the students' knowledge improved. It would be wrong in this case to focus an outcome measure on students' behavior, because changing behavior was not intended as a program purpose. With outcome measures, it is important to focus on what is reasonably within the reach of the program; while the ultimate aim is generally behavior change, the program itself cannot alone accomplish that.

Once the intended effects of the program are defined, evaluators need to determine the appropriate tool(s) to be used to capture information related to the program's effects. This could be accomplished by utilizing both quantitative and qualitative measures. Both are important because the former provides broad generalizable information, while the latter provides in-depth information. In both cases evaluators will have to attend to certain principles: reliability and validity of tool(s), and sampling randomness and representativeness. The reliability and validity of tool(s) refer to their consistency and accuracy in capturing information from a wide audience. A tool is reliable and valid to the extent that it is understood in the same way by all participants, and the responses provided have the same meaning.

Sampling is also necessary because in many cases it is impossible to conduct evaluation with every member of the targeted audience. Therefore evaluators must find ways to sample their audience in ways that are random and representative. A sample is random to the extent that it allows each person a fair chance to be part of the outcome evaluation. A sample is representative to the extent that it is a reflection of the demographic, and other important, factors which are characteristic of the larger population. Of course, with smaller groups (like a workshop), sampling is not appropriate because all participants are present and the numbers are too small to justify getting information from only a portion of these individuals. The selection of tool(s) varies according to the nature of the project. Survey questionnaires, with pre-test /post-test, as well as "experimental" and control group designs,

are popular approaches to be used with quantitative methods. Interviews and focus groups are methods frequently used to collect qualitative information.

Tips

C   State, as specifically as possible, what you want to see different over a period of time.

C   State the desired outcome up front as early as possible in planning, and then build linkages and measures.

C   Think about the project overall as well as the individual programs or events.

C   Maximize a quality design to provide you and others with confidence in the results and avoid criticisms.

C   When sampling, strive for randomness and representativeness.

C   Attend to all the details to make the process run smoothly.

C   Prepare a quality approach to maximize repeat evaluation opportunities.

C   Focus on the most immediate results; think about what your program/project can reasonably address.

Desired Result	Outcome Evaluation Measure

Step 7
Build process evaluation measures

Why:

Not only is it important to identify *what* happened, but it is also helpful to know *how* it happened. Process evaluation measures address issues such as implementation efforts and efficiency, as well as how those engaged view the implementation. Process measures help us understand how the implementation proceeded, what obstacles and concerns evolved, and what was particularly successful so that an interpretation of the achievement of outcomes can be made. Thus, should one wish to replicate the project because desired outcomes were achieved well, process measures will help to provide the necessary information. Further, should one wish to modify the project because desired outcomes were not achieved as well as desired, process measures will then be helpful in gaining insights.

How:

Process measures are concerned with the "how" question. Therefore, evaluators develop mechanisms and tools which are capable of assessing the ways in which a program is implemented. Several aspects of a program may be used to assess how it works. For example, if a program is concerned with providing a series of activities to help students who are children of alcoholics better cope with college life, one process measure could be a review of how many activities each student was exposed to (the dosage).   Still another could be the perceived attractiveness of these offerings. Another method could be the number of activities that were made available over a period of time.

In addition to measuring the process in terms of the quantity, dosage, or receptivity, it could also be measured in terms of quality. For example, a process evaluation may contain observations of activities. These observations aim at describing the interactions and processes that take place during an activity. Another method of collecting qualitative information is to conduct interviews with staff and with students to assess their thoughts and feelings about how the activities are conducted. Another popular method for conducting more in-depth observations is participant observation.

An important element for the success of any process evaluation approaches is consistency. Consistency applies to implementing the method according to plan (day in and day out), and also it applies to coding the information collected in a uniform way. Consistency in data collection and data coding provides for meaningful interpretations of the data, and useful feedback to the program.

Tips	
C	Remember that the purpose of process evaluation is to add in refinement as well as replication.
C	Know your program inside and out.
C	Be methodical and fully sequence measurement activities.
C	Process evaluation is needed once a program is running to find out if any pieces are missing and how participants view the program, thus providing a way to make modifications early.
C	It is important to document no success as well as success.
C	Knowing what worked or did not work needs to be complemented by why and how it happened.

Information Desired	Process Evaluation Approach

Step 8
Incorporate qualitative measures

Why:
Much of the evaluation conducted emphasizes quantitative approaches. It is important to incorporate qualitative measures because these. These analyses, mainly statistical, will prove unfruitful if the data were too loosely recorded. Also, they are helpful in providing insights that are otherwise not captured. They can be helpful in both outcome and process evaluation and are important for inclusion throughout the evaluation plan. They provide rich insights and serve as a substantiative data source.

Again, as cited with Step 5 of qualitative approaches should complement quantitative approaches, as they help provide the richness, flavor, and feeling typically not found with quantitative measures. They are emphasized here because they are often overlooked by many practitioners.

How:
Qualitative methods are research designs whose purpose is to gather information about certain events, activities, or people, in as natural a state as possible. In that respect, qualitative designs are developed to capture information as it actually appears in real situations, or as it is actually expressed by people, with minimal intrusion by the researcher or the research design. Because of this tendency to capture raw natural data, qualitative methods are structured to be adaptable, flexible and inclusive. Instead of guiding the research by its design (such as is found in most quantitative methods), qualitative methods are driven more by the nature and characteristics of the phenomenon that is subject of the inquiry.

The strong question and response structure of quantitative methods is necessary for the types of data analysis performed with such methods thus not manageable. By contrast, the qualitative data may lend itself to either quantification and statistical analyses (after a process of coding and transforming responses into quantitative data), or to qualitative interpretation, which does not abide by statistical requirements and methods.

Qualitative methods, as illustrated in the examples above, provide depth and insights into data that may not be attainable using quantitative methods. Because most qualitative methods engage the researcher and individuals involved with the subject of inquiry (i.e., focus groups and interviews), the possibilities of exploring more research aspects and expanding or deepening the inquiry are always present; the researcher has more control over how far and how much research to conduct. The findings from qualitative methods usually provide a realistic picture of the subject of inquiry.

Despite their advantages, qualitative methods, like all other methods of inquiry, are not without disadvantages. Their effectiveness depends basically on sound planning and implementation. A major concern with qualitative methods is the subjectivity of their data. The strong involvement of the researcher with these methods could lead to influencing the objectivity of the process and

the findings by the researcher' bias, preconceived ideas and beliefs, and even his or her personality.

Another concern with qualitative methods is related to their limited generalizability to other similar subjects of inquiry. However, this concern assumes that a qualitative research is intended to provide such generalization. Yet, in many instances this research is intended only to investigate aspects of a specific event, case or activity, not to be generalized to other situations.

In summary, the use of qualitative methods is almost inevitable for any type of inquiry. They provide depth, meaning and "life" to the subjects of inquiry. The flexibility and adaptability of qualitative methods allow researchers to plan and manage their resources to the research needs. Finally, qualitative methods do not negate the need for the quantitative methods which usually provide the direction and raise the questions that are better answered by the qualitative ones.

Tips
C   At its basic level, this means asking "why" and "how."
C   Recall that qualitative information adds richness and perspective to the data.
C   Consider involving others to gather this information.
C   Qualitative findings can be used to illustrate or to explain.

What Lends Itself to Qualitative Approaches	**Specific Qualitative Measures**

Step 9
Identify who can provide assistance

Why:
It is impossible for a single person to conduct all the evaluation tasks on his or her own. Thus, they usually rely on program staff to provide assistance. In addition to that, there might be other tasks that the program staff may not be well equipped to handle, and the evaluator may not be in a position to do them. In these situations, the evaluator and the project staff have to be creative in seeking the assistance of others.

It is also important to acknowledge that the expertise of others is often needed. They may offer quick assistance on a task that otherwise may take a long time. Generally, those charged with overseeing evaluation for a project are not specialists in evaluation; they do, however, have a *desire* to implement strategies that are meaningful and helpful. Thus, specialists in various aspects of evaluation design and implementation, as well as in data analysis and reporting, must be identified.

Finally, engaging others not only eases the burden on one person, but it also helps gain others' support and understanding of the project through their participation, their buy-in and support may be increased.

How:
To gain specialized assistance, try to identify individuals on the campus such as faculty in sociology, psychology, business, mathematics, and elsewhere. There may also be administrators and other professionals with expertise in these areas.

To provide other labor assistance, think about student workers or clerical staff who can, with appropriate guidance and helpful standards, provide many of the labor intensive activities integral to the evaluation.

With this process of engaging others, it is important to communicate clearly the project needs, such as identified in the Steps 1, 2, and 4. This may be perceived as a "win-win" situation whereby these professionals or students can get some of their needs met while you obtain data and insight regarding the program.

Tips
C   Use consultants and evaluators to help you meet your needs.
C   Use available technical assistance.
C   Think creatively.
C   Maintain overall continuity by focusing on the "big picture."
C   Remember that you hold the overall management of the evaluation implementation.
C   Don't let others' agenda ruin yours.

Evaluation Task	Potential Resources (Who can help?)	Their Perspectives (What is Ain it@ for them?)

Step 10
Plan the evaluation

Why:

This step focuses on the specific plans and organization for implementing the evaluation. Conducting the evaluation is not simply a single activity, but rather a series of activities. While a specific event may be evaluated with respect to its ability to increase knowledge, a campaign may be monitored for its overall helpfulness and the range of audience it reaches. The program as a whole may be reviewed both from the perspective of how it is received as well as whether it is ultimately effective in achieving desired outcomes.

How:

Evaluators and program staff usually engage in designing a detailed plan of what parts of the evaluation will take place at what time, by whom and for how long. These plans will be successful only if they take into consideration the various constraints, demands and circumstances which affect every step of the evaluation. For example, when planning a massive survey campuswide, it is important to avoid exam periods when students and faculty are too busy to respond to surveys. Also, when planning focus groups, avoid the days immediately before holiday times when students are likely not around.

The plan also must be logical and built upon the cumulative completion of tasks. This means that, for example, steps to prepare and print survey forms must be put in the proper sequential order, and to precede by reasonable time margin the time for distributing the surveys. Time for data collection must be set realistically and must account for the possible need to conduct a "follow up" call.

It is essential that plans for evaluation take into consideration the involvement of the program staff with their program activities. The evaluation should not be so invasive that it takes away from the time needed by program staff time to conduct the program and deliver their services. Evaluation activities need to be scheduled around the program activities, not the other way around.

Finally, it is of utmost importance that evaluation discussion and planning about evaluation begin at the earliest possible time. If a new project is being undertaken, evaluation design efforts must be part of the initial planning. Ideally the evaluation effort should blend into the programmatic and service activities.

	Tips
C	Be detail-oriented and prepare for all the "nuts and bolts."
C	Maintain balance between what the program services and activities are trying to accomplish and what the evaluation portion is attempting to accomplish.
C	Prepare a clear timeline with goals and responsibilities identified.
C	Set up data-gathering systems at the beginning of the project.
C	Pilot test any instruments developed with attention to clarity of instructions, readability, and length.
C	Remember to identify any constraints and limits.
C	Remember to involve those who can provide assistance.

Desired Outcome	Unit of Measure (Person/Group/ Behavior)	Information Source (Tool/Instrument)	Who	When

Step 11
Implement the evaluation

Why:
The evaluation plan is both short-term and long-term, with individual activities making up the "whole of the evaluation."   The specific evaluation includes implementing the activities identified in the plan, monitoring how smoothly they are proceeding, making adjustments as appropriate, and providing on-going review and feedback to make sure that events are on schedule. All too often, program personnel leave evaluation until the last minute or "run out of time," and are unable to do it well. Thus, the project coordinator must monitor this carefully to ensure that it is indeed accomplished in a reasonable, timely, and appropriate fashion.   In addition, the coordinator must monitor him/herself and not become frustrated that all possible information is gathered; recall the priorities set during Step 2 which specify what you want to know.

How:
Once a plan of evaluation is designed, that does not mean that the implementation will go perfectly according to plan.   In most cases the implementation faces unforeseen obstacles and complications- -students did not show up on time, the mailing of surveys is backed up by slow printers and insufficient forms, or it snowed!   Such complications   are almost regular occurrences with each and every evaluation implementation.   Therefore, it is important to anticipate such occurrences and make every effort to reduce the probability of their happening. Always have back-up plans or "plan B" to respond to these crises.   It is important that experienced evaluators be present during the implementation of major evaluation activities in order to ensure a proper reaction in case of crisis.

In addition to being able to respond to crises, it is important to develop methods of activity tracking. These methods are intended to ensure that each step of the evaluation is well recorded and described. For example, when a survey is conducted and responses are received by mail, status as well as there should be a system to track the arrival of each survey form should exist. This includes its data entry status as well as any concerns with it. If a mailing list is used to send survey forms, there should be a tracking of who responded, when they responded, and if a second mailing was sent to those who did not respond.

	Tips
C	Build a flexible plan, since some things will change.
C	Try to implement an evaluation plan that is as unobtrusive and quick as possible.
C	Remain true to your general hypotheses and needs.
C	Implement the evaluation activities in a respectful manner.

Project Monitoring Checklist	Complete?

Step 12
Code and synthesize data

Why:
This task appears rather laborious, it is central for the completion and ultimate reporting of the data. Any data received must be incorporated into an established quality and secure approach. Data received should be confidential and maintained in that format due to the trust that is transferred to the holder of the data by those providing the information. Information will be coded and entered into a data set where it can be analyzed. Appropriate methodology should be implemented, including validity and reliability issues, with respect given to statistical analyses. At this time, qualitative data may be coded and analyzed and data blended together for overall synthesis and review. From this initial review, additional questions and suggestions for follow-up questions and considerations can be generated. These then can promote complementary evaluation activities.

How:
Managing data is one of the evaluation tasks, that no matter how much you read about, you can never perfect except by practice! Managing data entails several steps, each geared towards ensuring 1) the integrity of your research and evaluation, and 2) the accuracy of your results.

In most instances, collected data is privileged information, or strictly confidential. This requires treating it accordingly. Therefore, systems must be set up to ensure that data received is well recorded and stored in a secure place. A log book is your best tracking method; but, it is only as good as how you and your staff make use of it.

In many instances data received is recorded on forms that look identical (i.e., Scantron or Opscan forms). In many cases respondents neglect or forget to record their identifying information (i.e., identification number, classroom, group name). This requires that data coders make the effort to identify data before storing it. This may prove to be the most crucial action in this process if, for some reason, you need to review the raw data for accuracy of data entry or analysis. If you don't have identifying information, you may never be able to go back and confirm your data's accuracy.

In order to talk about your results with confidence, you must first be certain that the data that you analyzed was accurately coded and entered into your database (in most cases, on a computer program). The first step in this process is to ensure that all your staff are reading the data in the same way- in other words, an answer of "Yes" is coded in the database as "1" by all coders, not "1" by some and "2" by others. Develop a codebook for coding all possible responses from your evaluation forms.

The next step is to ensure that all data coded is reviewed by at least two people. Develop a data entry log to show who entered data, and who reviewed it. Again, make sure the log is used.

One piece of data that is problematic in the coding, entry and analysis process is the "Missing Data." Missing data includes the non-responses to certain questions, or the responses that do not fit within the expected response format (i.e., a response of 9 reported for a scale from 1-5). Missing data may tell you more about your program, and your evaluation tools, than you may have ever thought! For example, non-responses to certain questions by certain groups within your sample, may indicate that the questions are too sensitive, too difficult to comprehend, or located at the end of the evaluation instrument without time to complete.

In addition, missing data may be useful when you are looking at frequencies or patterns of responses (i.e., how many responded "Yes", how many responded "No", and how many gave no response). If you are looking at trends, such as mean and median scores, missing data will be meaningful only if a no-response has a certain value on the response scale. If it does not, then you need to ensure that it is dismissed before running any trend tests. For example, if you asked respondents about their age, and you want to find the mean or average age, including the missing data (which usually has a value of zero) will make your population seem too young. Exclude missing data first, then run your mean test to get to the real average age.

Finally, you can look at your data endlessly, because there is always one more issue that interests you or interests someone you care to please. If you have other things to do (such as writing a report of your findings and presenting it to your funder), then draw a line on where you will stop your analysis. Look back at your goals and objectives, and what you wanted to learn, then decide where the line is to be drawn.

Tips
C   Maintain careful control over the data.
C   Continue to attend to the details.
C   Check and double-check the data; verify that what is reported is coded accurately.
C   See if the data makes logical sense; where it does not, recheck data entry and coding.

Data Review Issues	Verification
Confidentiality	
Secure Location	
Accuracy Check	
Other:	
Other:	

Step 13
Report and present findings

Why:
The main purpose of the evaluation process overall is to provide information back to the program staff. This helps them assess their effectiveness and to identify ways to improve the performance of the project. An Evaluation Report is the vehicle that the evaluators use to formally present their findings, as well as any recommendations. Therefore, a report must include the information that will best aid the staff in doing their tasks.

In addition, a report is intended for sharing and disseminating information about the program with other professionals, as well as to others who may be interested in similar projects. Therefore, the report must include sufficient information about the program itself and the evaluation design, along with findings related to the program accomplishments.

How:
When considering the audiences interested in the data identified in Step 2, reports may be prepared in different formats. The specific format will be determined by the needs of the program staff, project management personnel, and other stakeholders (such as funding sources, oversight boards of directors, and community groups). Different formats may include a detailed report with full sets of data, brief reports, executive summaries, and press releases.

In preparing these documents, maintain clarity so that the message intended by the writer is presented properly. In fact, the same information and data may be recast in a range of formats and writing styles, all determined by the target audiences. Preparations should also be made for public presentations and discussions whereby interpretations may be made and issues for follow-up evaluation activities may be identified. Those who are most intimately knowledgeable of the data should, at this time, offer their insights and interpretations, as well as recommendations for program implementation.

Tips

C   Be articulate.
C   Consider using a handout; build your graphics that help the reader.
C   Repeat what's central and essential.
C   Watch your wording in the beginning and at the end.
C   Make sure you don't contradict any statements that you make.
C   If you're not sure about an issue, don't mention it.
C   Keep meeting the ultimate needs of the audiences you serve.
C   Be prepared to market the program to others.

Who are your audiences	What they need to know	Proper formats for presentation

Step 14
Reflect on proposed revisions

Why:

An essential aspect of evaluation efforts is to learn from the current activities. This has to be with ways the project or program itself can be improved (the feedback loop into the "Needs/Hypothesis/Accomplishments" section. This final and most important stage in the evaluation process incorporates all the data and findings from the evaluation activities to serve the program. Therefore, evaluation and program staff must assign adequate time and efforts to reflect upon the evaluation process and findings and discuss ways to make these findings beneficial for future program implementation.

How:

Building upon the results of data analysis and any reports prepared, those familiar with the project data should provide their reflections about what the data means and ways it can be used. Specific ideas may be generated about needs and gaps in services. These discussions may suggest directions for the future, identify program modifications, and enhancements of efforts, and reaffirm what is going well.

As the materials are reviewed, it is also helpful to reflect and revise some of the evaluation processes. Review the ways that the individual events in the program as a whole are proceeding and make modifications so that accomplishments included in Step 1 are more likely to be met. The integration of the outcome and process measures (Steps 6 and 7) helps identify ways of improving the individual and global strategies so that the desired accomplishments can indeed be better met.

Tips

C   Strive for interaction and interplay between the program and evaluation.

C   Retain the integrity and value of the evaluation plan.

C   Remember that you don't have to reinvent the wheel.

## Issues for evaluation and program teams to reflect upon

What did we learn?

What additional information do we need?

What was confusing or contradictory?

What are the implications for the program?

What are the implications for the evaluation design?
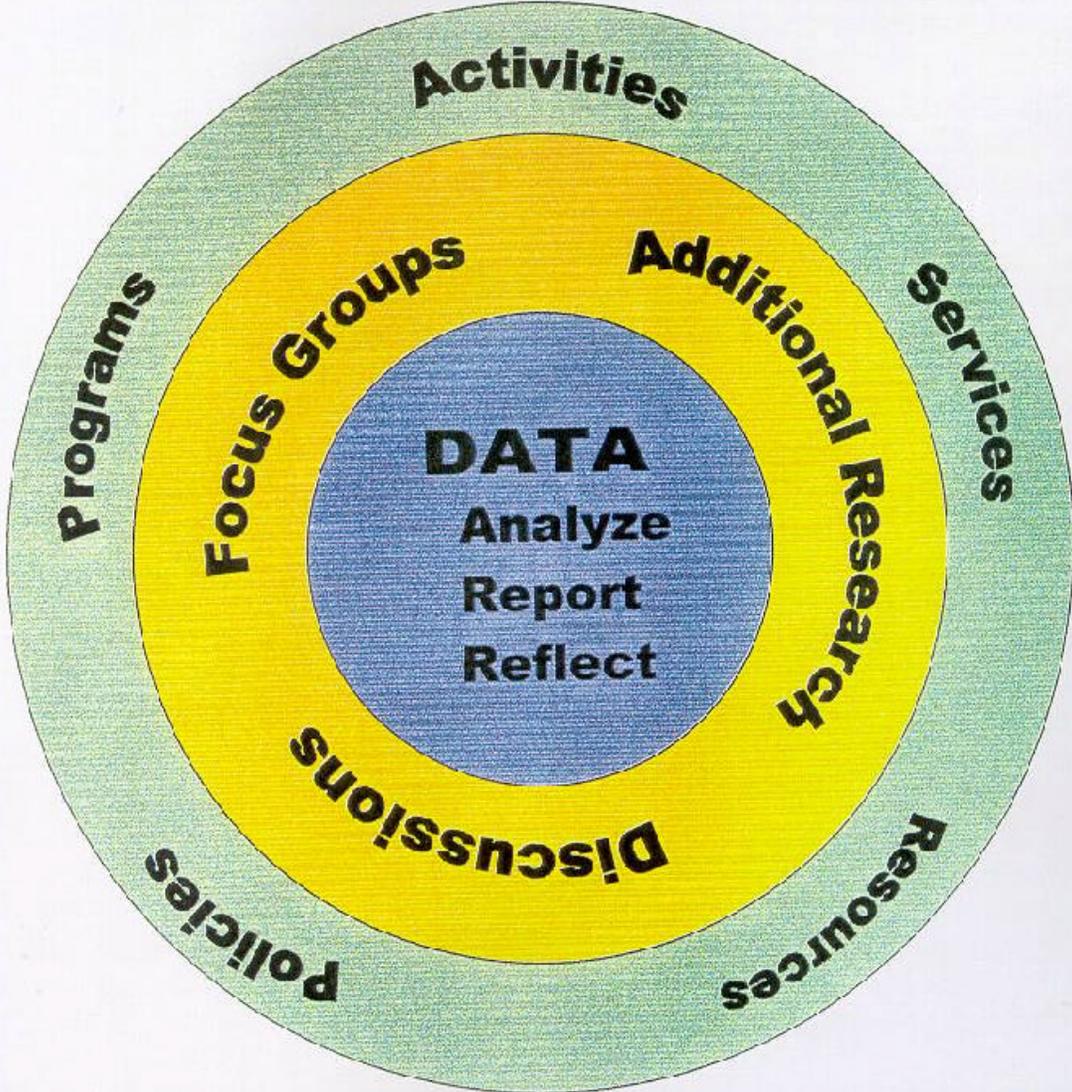
GEORGE MASON UNIVERSITY

Center for the Advancement of Public Health
Department of Health, Fitness and Recreation Resources
Graduate School of Education

MS 1F5
Fairfax, VA 22030-4444

Phone: 703-993-3697
Fax: 703-993-3763
E-mail: caph@gmu.edu

www.caph.gmu.edu
www.promprac.gmu.edu