Third Edition

PROGRAM EVALUATION

Methods and Case Studies

EMIL J. POSAVAC

RAYMOND G. CAREY

Third Edition

PROGRAM EVALUATION

Methods and Case Studies

EMIL J. POSAVAC

Loyola University of Chicago

RAYMOND G. CAREY

Parkside Associates, Inc.

Prentice Hall, Englewood Cliffs, New Jersey 07632

Acknowledgments

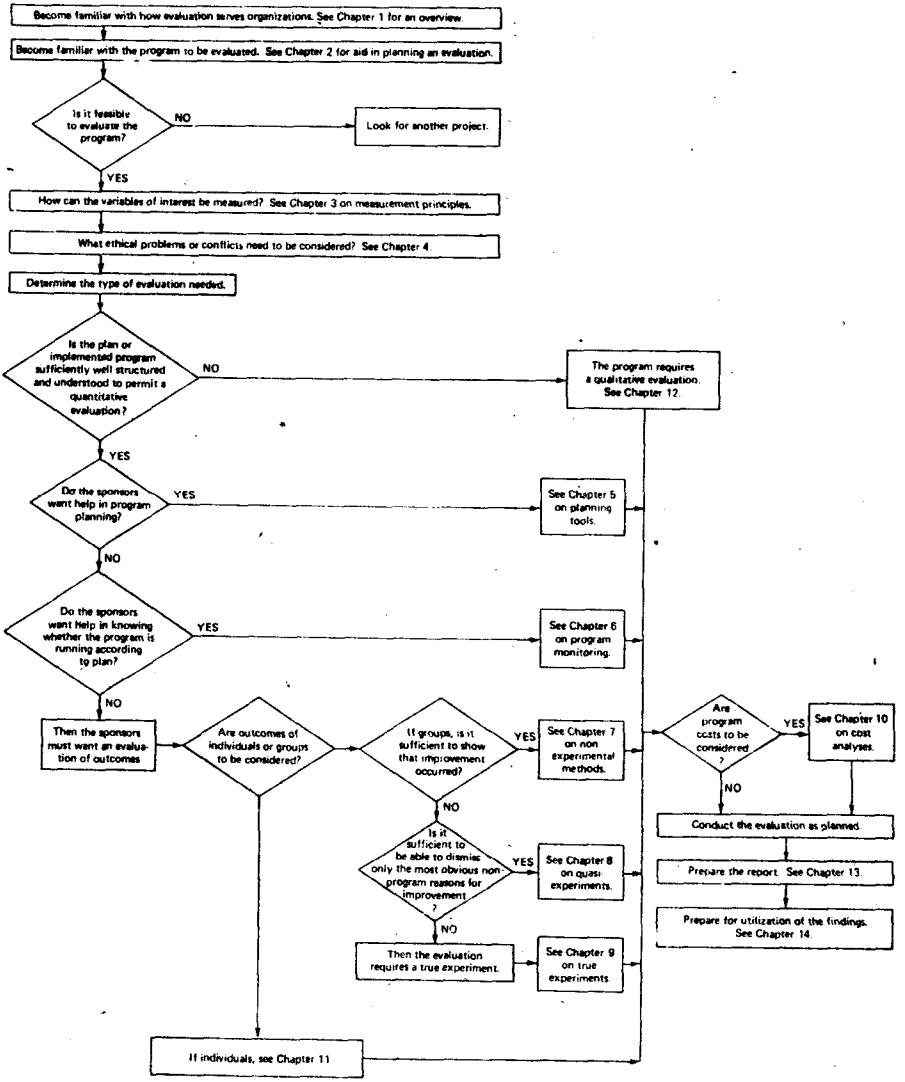
The following organizations and journals are thanked for permission to reprint or adapt material for this text: Institute for Program Evaluation, Inc., Roanoke, Virginia; *General Hospital Psychiatry; Journal of Alcohol & Drug Education; Evaluation Review; Evaluation; Evaluation & The Health Professions;* and American Psychological Association.

A number of secretaries and assistants have helped us in the preparation of the manuscript. At various times the following people have given much appreciated help: Carolyn Foraker, Karen Gianfortune, Bernadette Jaroch-Hagerman, and Susan Borkowski Lueger.

The authors are grateful to their respective institutions for encouragement during the writing of this text. The first author's contribution to the first edition was greatly facilitated by a sabbatical leave awarded by Loyola University of Chicago. The second author acknowledges with thanks the explicit support received from Lutheran General Hospital.

The authors also wish to express their appreciation for the helpful comments of the following reviewers: Amado M. Padilla, University of California at Los Angeles; Alan Siman, School of Social Work, San Diego State University; Ross F. Conner, University of California at Irvine; Brian T. Yates, American University; Myron Mast, School of Public Service, Grand Valley State Colleges; Clara Mayo, Boston University; Richard M. Wolf, Teachers College of Columbia University; Robert J. Calsyn, University of Missouri at St. Louis; Francis G. Caro, Institute for Social Welfare Research of the Community Service Society of New York; and Fred B. Bryant, Loyola University of Chicago. For the third edition: James R. Cook, The University of North Carolina at Charlotte; Mark W. Lipsey, Claremont Graduate School; and Melvin M. Mark, Pennsylvania State University.

The first author thanks his wife, Wendy Cook Posavac, for reading and commenting on the manuscript and for providing unfailing encouragement through all stages of this text's preparation. He also thanks his son, Steve, for accepting his father's obsession. The second author acknowledges with gratitude the contributions to his personal and professional development made by his parents, the late Elizabeth Carey and the late Raymond G. Carey.



STEPS IN PROGRAM EVALUATION

Contents

part I

AN OVERVIEW OF PROGRAM EVALUATION

Education at Harvard University, job training at Leavenworth Prison, marriage counseling, blood pressure screening, school hot lunch services, the installation of safety equipment, and day care for preschoolers are formally organized ways that help people achieve their goals.

Of a myriad of services and products available in modern industrial societies, the greater proportion of workers and professionals are involved in meeting human needs for health care, education, training, counseling, emotional support, rehabilitation, and so on. The field of human services includes programs and facilities to help people lead more satisfying, healthier, safer, and more productive lives. Many of these needs have traditionally been met through the extended family or through voluntary charity; however, such needs increasingly are being met through organized, publicly funded efforts. These efforts are often called programs, and the methods used to plan, monitor, and improve such programs make up the field of program evaluation. The evaluation methods presented in this book are applicable to both the activities of nonprofit public and private agencies and to profit-making organizations.

Although scientific and engineering problems are important in industrial settings, success in business is often a question of success in managing human resources. Attempts to improve productivity, employee morale, or product quality all depend on good planning techniques, accurate feedback on the impact of the plan adopted, and utilization of that feedback. Furthermore, research on the need for and the effectiveness of a new product requires skills similar to those used by evaluators. Although this

text and the examples it uses reflect the fact that most well-known program evaluations have been in publicly funded organizations, the principles of program evaluation have wide applicability.

The first four chapters of this book provide an orientation to the field and an overview of the methods and goals of program evaluation. In Chapter 1 we describe organizations and the types of programs and services offered. The people responsible for these organizations have many questions about how to plan the programs and judge their effectiveness. The contributions of program evaluation to the various stages of program development and implementation are illustrated.

An overview of the approach evaluators take in preparing to conduct program evaluations is provided in Chapter 2. Often program evaluations succeed or fail due to decisions made during the initial contacts with program managers or sponsors. The principles described apply to all the types of evaluations discussed and illustrated in later chapters.

Because program evaluation is essentially a science of information and its utilization, evaluators must be prepared to assess the quality of the information forming the basis of their work. In Chapter 3 the reader is shown the major ways of gathering information on service programs and how to judge the quality of information obtained. This presentation reflects the need for multiple sources of information in evaluation work; various sources have different strengths and weaknesses. The chapter should expand the reader's appreciation of measurement principles in applied settings.

When research is conducted in organizations serving people's educational, health, employment, emotional, and other needs, special care is exercised to protect the interests of the students, patients, employees, and clients of these organizations. Chapter 4 deals with such ethical issues as well as with the conflicts of interest that can arise when data are collected in organizational settings.

How This Book Is Organized

The chapters of this book are arranged in a systematic fashion that reflects the steps followed in conducting a program evaluation. The flow chart that precedes this introduction provides a preview of what is to come. The reader can keep track of how each chapter fits into the organization of the text and can identify the major aspects of the program evaluator's responsibilities by referring to this figure now and as the course progresses.

We hope this text imparts some of the excitement of participating in the growing, developing field of program evaluation: the field is not fully defined, its techniques are varied, and conducting a program evaluation is challenging. We believe that it will continue to have a positive influence on our institutions and governmental agencies.

1

Program Evaluation and Organizations

Program evaluation is a new and exciting applied social science. A productive society recognizes both the importance of human resources and the importance of providing human services in an efficient manner. Program evaluators provide information about human services in the same way accountants and auditors provide information about financial resources. The mission of program evaluation, or simply evaluation, is to assist in improving the quality of human services. More specifically, program evaluation is a collection of methods, skills, and sensitivities necessary to determine whether a human service is needed and likely to be used, whether it is sufficiently intense to meet the need identified, whether the service is offered as planned, and whether the human service actually does help people in need without undesirable side effects. Through these activities evaluators seek to help improve programs, utilizing concepts from psychology, sociology, administrative and policy sciences, economics, and education. Before discussing specific applications of program evaluation methods, we will describe the field as a whole and illustrate how evaluation and evaluators fit into organizations.

WHY PROGRAM EVALUATION DEVELOPED

Quality of Service Not Assumed

No longer is it assumed that well-meaning individuals or groups who institute a new health, education, training, rehabilitation, or other service actually help people. The rejection of the assumption that all human services help people

receiving the service has made the efforts of many people who teach, counsel, provide medical care, or work with community groups more challenging—but possibly more productive. Today innovative programs as well as expansions of standard services can seldom be funded without some means of demonstrating that the costs of the service are justified by the improved state of the clientele. Although Congress initiated the requirement that services supported by federal grants be evaluated (see, for example, Neigher et al., 1982), the source of a program's funding has little effect on whether the program must be evaluated: It must.

The increasing use of social science methods to improve the effectiveness of human service programs and institutions made evaluation a "growth industry" during the 1970s (Guttentag, 1977). There were several reasons for this growth. Well-meaning, expensive, and ambitious attempts to overcome the effects of disadvantaged backgrounds during the middle and late 1960s were by and large ineffective; at least the impact of these efforts did not measure up to the optimistic expectations held by many program developers, government officials, as well as the general public (Cook and Shadish, 1986). During the 1970s considerable caution was expressed about beginning national programs whose effectiveness had not already been demonstrated. Boruch et al. (1983) show, however, that such warnings were often not heeded.

Besides the need to show that proposed programs will be effective, there are persistent needs to demonstrate that existing programs are worth having and are managed efficiently. Frequently, government programs are not explicitly terminated. Instead, new approaches to problems are implemented alongside of old programs. Some have suggested that programs be authorized for a specific length of time—five years, for example. After the specified period of time expires, the program goes out of existence unless its success has been documented and it has been reauthorized (Chelimsky, 1978). Although federal legislation has not been passed requiring this degree of evaluation of federal programs, this idea illustrates a rigorous use of program evaluation methods to guide legislation.

Difficulty in Defining and Measuring Results

Another reason why the demand for the evaluation of people-oriented services grew is that it is difficult to describe the intended outcomes of human service organizations as compared to those of product-oriented organizations. Whenever the intended outcome is hard to define, assessments of success are very complicated. Industrial firms make things that can be seen, weighed, and counted. Department stores, supermarkets, and bakeries sell merchandise. To evaluate the success of such organizations is easy—at least in theory. To judge success, it is necessary to determine whether the products were in fact made and sold, and whether the amount collected for the products exceeded the cost of making and selling them. In practice, these questions are complex, due to the nature of large businesses; however, the approach to judging the ultimate success of such an organization is easy to define and widely ac-

cepted. Of course, the ways of improving the profitability of a company require one to pay attention to the human resources of the organization.

The use of human resources is just as important as the use of financial resources; however, for many human services, the nature of the "products" is as difficult to describe as are the methods of assessing their quality. What are the goals of a remedial education program? How do we know that a child has obtained what a program was designed to offer? When is an injured person rehabilitated? What level of rehabilitation should be hoped for? If the state provides hot lunches to a school, but the children throw out the vegetables, is the program a failure? Should we change the menu or teach nutrition to the parents? If, after marriage counseling, a couple gets a divorce, was the counseling inadequate?

Regulation of Human Services

If human services were available only on a fee-for-service basis, evaluating them might be left to free-market forces. The services that were purchased would, by definition, be successful; unwanted services would fail because there would be few, if any, buyers. The free-market approach has not been permitted to govern the field of human services. There are two major reasons why this is so. First, it has been assumed that the public cannot easily differentiate between poor and good human service providers. How many patients, for example, can really tell when a physician is competent? For this reason, physicians and many other service providers are required to obtain a state license before providing services to people. Traditionally, qualifications for offering services were based on training; however, a trend is developing that would require a demonstration of skill before licensing.

A second reason why free-market forces do not control human services is that the recipient usually pays for the service indirectly. Private insurance companies, large charitable organizations, local governments, and, increasingly, federal and state governments cover the costs of many human services. Once a service program is developed, the intended recipients have little to say about how it is administered or what is provided. However, it is important that insurance and public funds be used wisely and productively. The need to demonstrate the effectiveness of human services is critical.

HOW PROGRAM EVALUATION IS USED IN ORGANIZATIONS

Types of Organizations Requiring Evaluations

The preceding paragraphs have been very general, and the reader may have had some difficulty knowing just what sort of activities are being discussed. The following is a brief discussion of the types of human services that can and ought to be evaluated.