

DOCUMENT RESUME

ED 267 246

CE 043 806

AUTHOR Sewall, Timothy J.; Santaga, Marsha
 TITLE A Reference Guide to Program Evaluation in Adult Education.
 INSTITUTION Wisconsin Univ., Green Bay. Assessment Center.
 PUB DATE Mar 86
 NOTE 57p.
 PUB TYPE Reference Materials - Bibliographies (131) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC03 Plus Postage.
 DESCRIPTORS *Adult Education; *Adult Programs; Books; Citations (References); *Evaluation Methods; Guidelines; Higher Education; Models; Periodicals; Program Effectiveness; *Program Evaluation; Publications; Scholarly Journals

ABSTRACT

This paper provides a review of a wide range of books, guides, journal articles, and other professional literature associated with program evaluation in adult and higher education. It focuses on some of the basic questions associated with program evaluation. (For example, what purpose does program evaluation serve? What are the major program evaluation models used? In what ways, if any, is program evaluation in adult education different from the evaluation of other types of programs?) In general, the journal articles selected were those abstracted in the Current Index to Journals in Education between 1981 and 1985. Books were selected to represent fairly what is currently available in the field; most have been published in the last 10 years. The guides and workbooks selected for review include a wide selection of how-to evaluation manuals, ranging from fairly simple to complex. The paper has been divided into four major sections. The first section provides an overview of the major purposes for doing a program evaluation in adult education. Section II includes a brief description of four selected evaluation models that appear to be particularly applicable to adult education programs. The third section provides a critique of five commercially published "how-to-do-an-evaluation" packages and guides that can be applied to postsecondary adult education. The final section consists of an analytical summary in tabular form of books and guides pertaining to program evaluation and an annotated bibliography of selected journal articles and books that covers the professional literature for the past five years. (KC)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

A REFERENCE GUIDE TO
PROGRAM EVALUATION IN ADULT EDUCATION

ED267246

Timothy J. Sewall
Marsha Santaga

Wisconsin Assessment Center
University of Wisconsin-Green Bay
Green Bay, Wisconsin

March 1986

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

TJ Sewall

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)"

043806

TABLE OF CONTENTS

	Page
INTRODUCTION	2
PURPOSES FOR PROGRAM EVALUATION	4
SELECTED PROGRAM EVALUATION MODELS	6
CIPP Evaluation Model	6
Discrepancy Evaluation Model	8
Responsive Evaluation	9
Judicial Evaluation Model	10
COMMERCIALY PUBLISHED GUIDES/EVALUATION PACKAGES	12
Postsecondary Institutions and the Adult Learner	14
Program Evaluation Kit	16
An Evaluation Primer and Workbook	18
Program Evaluator's Guide and Workbook	20
Program Evaluation: A Practitioner's Guide for Trainers .	22
SELECTED PROGRAM EVALUATION LITERATURE	24
Analytical Summary of Program Evaluation Literature	26
Annotated Bibliography of Selected References	30
BIBLIOGRAPHY	41

PROGRAM EVALUATION IN ADULT EDUCATION

Introduction

There were several reasons behind the Wisconsin Assessment Center's decision to prepare this resource paper. During the past several years, there has been a renewed interest in the assessment of postsecondary institutions and programs. Program administrators in particular have become increasingly aware of the importance of evaluation. Faced with the prospect of diminishing financial resources, institutions need to make informed decisions on how to allocate the available funds. Consequently, for many programs, evaluation has become more of a necessity for survival than a luxury.

While most program administrators and staff have had some courses in tests and measurement and some experience with educational research, few have had the training to conduct a systematic evaluation of their program. The Wisconsin Assessment Center's response to this problem has been to develop a resource guide which would focus on the process of program evaluation, particularly as it relates to programs which specialize in meeting the needs of the nontraditional aged student.

This paper provides a review of a wide range of books, guides, journal articles and other professional literature associated with program evaluation in adult and higher education. It focuses on some of the basic questions associated with program evaluation. For example, what purposes does program evaluation serve? What are the major program evaluation models used? In what ways, if any, is program evaluation in adult education different from the

evaluation of other types of programs? What are the essential elements of a program evaluation? How can the evaluator improve the chances that the results of the evaluation will be used?

In addition, a concerted effort has been made to develop a document which is directed at the adult education administrator, particularly the novice program evaluator and practicing educator who might be interested in the process of program evaluation. However, this paper is not intended to be a planning guide or textbook on how to do a program evaluation. It is designed to provide an introduction and serve as a resource for individuals faced with the problem of where to begin their study of the concepts and techniques of this swiftly changing field.

The question of what documents to review, what theories to discuss and what models to emphasize was not an easy one to address. Even a brief foray into the program evaluation literature reveals an immense amount of information including hundreds of books and thousands of journals articles. Out of necessity, the criteria used to select the books, guides, workbooks and journal articles which appear in this paper was somewhat arbitrary. In general the journal articles selected were those abstracted in the Cumulative Index for Journals in Education between 1981 and 1985. CIJE is perhaps the most comprehensive and appropriate source of program evaluation literature. Books were selected to fairly represent what is currently available in the field. Most have been published in the last ten years but no attempt was made to do an exhaustive search and many important works may have been overlooked. The guides and workbooks selected for review include a wide selection of how-to-do manuals. They range from the fairly simple and straight forward to the lengthy and complex. All of them, to some degree, can be useful to the adult program evaluator.

The paper has been divided into four major sections. The first section provides an overview of the major purposes for doing a program evaluation in adult education. Section two includes a brief description of four selected evaluation models which appear to be particularly applicable to adult education programs. The third section provides a critique of several commercially published "how-to-do-an-evaluation" packages and guides which can be applied to postsecondary adult education. The final section consists of an analytical summary of books and guides pertaining to program evaluation and an annotated bibliography of selected journal articles and books which roughly covers the professional literature for the past five years.

Section I. Purposes for Program Evaluation

The prerequisite of any program evaluation should be delineation of a clear rationale for why an evaluation is being conducted. For example, a program director may be called upon by a governing board or administrator to evaluate his/her program and make recommendations about new policies and directions. Another director may have difficulty securing future funding support for a program without the availability of relevant program evaluation data.

One way to conceptualize these and other purposes is to divide them into basically two categories. The first category includes reasons associated with "program improvement." The second involves the determination of the "effectiveness" of a program. Scriven (1967) operationalized this distinction by differentiating a summative evaluation from a formative one. In summative evaluation, information is used to prove something, satisfy accountability or make a judgement about the overall quality of a program. Formative evaluation is used to modify and improve a program and is frequently used to provide feedback to staff and administrators while the program is in operation.

Using this distinction as the basis for a more detailed description of purposes, Deshler (1984) divides the purposes for program evaluation into four general areas. In general, the first two areas can be considered forms of summative evaluation while the third and fourth provide specific examples of formative evaluation purposes. However, in actual practice formative and summative evaluation frequently overlap.

Using this framework, the four major reasons for doing a program evaluation are (1) to satisfy externally mandated accountability requirements, (2) reduce uncertainty, (3) improve practice and (4) contribute to social/political influences. More specific reasons for doing an evaluation include the following:

1. Accountability - providing requested evidence of performance; justify or advocate a position that supports program continuation, expansion or changes. (Formative Evaluation)
2. Reduce Uncertainty - increase credibility and support for unpopular decisions; add or drop specific strategies or techniques; continue or discontinue a program; allocate resources among competing programs; initiate a similar program somewhere else. (Formative Evaluation)
3. Improve Practice - increase efficiency and reduce waste; identify and detect malfunctions and defects in procedures and program designs; develop new approaches and alternative procedures; adjust programs to changing situations, clients and/or resources; understand a failure to prevent future failures. (Summative Evaluation)
4. Social/Political Influences - stimulate informed political dialogue and challenge simplistic views; resolve political conflicts; address issues and add to social science knowledge pool; fill in conceptual gaps. (Summative Evaluation)

Section II. Selected Program Evaluation Models

There are a variety of models one can use in conducting a program evaluation. To a great extent, the model chosen is influenced by one's philosophy about evaluation -- although other factors including time, resources, evaluation expertise and availability of staff strongly influence the procedures used. Most program evaluation experts agree that there is no one best available model. As a result, it is necessary for the program evaluator to select a model which matches the requirements of a particular situation to produce evaluation findings which are most likely to accurately appraise a program's merits and shortcomings and to provide information about its goals, activities, outcomes, impact and costs.

Specific approaches to program evaluation have been summarized and compared in several sources. House (1978), Madaus, Scriven and Stufflebeam (1983) and Worthen and Sanders (1973) are particularly good references for the reader who is interested in gaining a broad perspective on the evaluation models which can be used within the context of adult education. Considering the wide variety of program evaluation models discussed in the literature, I have selected four which I consider to be particularly interesting or appropriate within the context of adult education. Many of the evaluation guides and other commercially published resources described in the third section of this paper are based in whole or in part on the models briefly described below. These models include the CIPP Evaluation Model, Discrepancy Evaluation, Responsive Evaluation and the Judicial Evaluation Model.

The CIPP Evaluation Model

The CIPP Evaluation model (Madaus, et al., 1983; Stufflebeam, 1969, 1971; Stake, 1967) was conceptualized by Daniel Stufflebeam as a result of attempts to evaluate projects that had been funded through the Elementary and Secondary

Education Act of 1965. CIPP is essentially qualitative in nature and complements the emphasis many programs place on goals and objectives. Elements of this approach were first popularized by Tyler (1969) and adopted by most federal and state funding agencies. There are four basic components in the model: context, input, process and product evaluation. Context evaluation is designed to focus on how the program "fits" into the larger system or organization and the methods used to meet the program's goals. The results of the context evaluation generally lead to decisions about whether to introduce some kind of a change in the program.

Input evaluation measures the amount of effort expended to meet the program's goals. Such an evaluation would query personnel about the amount of time spent in various activities -- the program director might be asked to itemize costs and other institutions might be studied to determine how they have implemented similar programs. Input evaluations are used primarily to decide whether the amount of time and resources invested in a program are compatible with the anticipated outcomes.

Process evaluation focuses on the design of the program, its implementation and the recording of procedural activities. The general purpose of process evaluation is to assist in the proper implementation of the program, identify defects and refinement of the program design and procedures. In some instances, staff and program administrators keep a log of the actual process of implementing the program for later use in interpreting outcomes.

Product evaluation concentrates on the collection of data, descriptions and judgements concerning outcomes and relates them to the program's objectives. Findings from context, input and process evaluations can also be incorporated into this evaluation component. Product evaluation is

particularly useful when it is necessary to gather information which will be used to make a decision to continue or modify a program.

An important factor when considering the use of the CIPP model is that a specific evaluation can include just one or a combination of the four components. The purpose or rationale for doing the evaluation ultimately determines which elements are used. Since its inception in the mid-1960s CIPP has become one of the most widely applied evaluation models used in educational settings.

The Discrepancy Evaluation Model

The Discrepancy Evaluation model, developed by Andres Steinmetz, (Madaus, et al., 1983; Steinmetz, 1976, Tyler, 1961), is based on the premise that in all types of evaluation we inevitably make comparisons. Use of this model would be particularly appropriate for programs which are able to establish "standards" which can be fairly easily quantified. The model has three basic evaluation phases. The first phase involves the articulation of the program's standards, that is generating a list or description of the qualities the program should possess. These standards can be derived from a historical review of documents related to the program's development or from interviews with past and present administrators and staff.

The second phase is concerned with the actual evaluation of the characteristics of the program. This phase is similar to the process component of the CIPP model and Steinmetz has borrowed heavily from Stufflebeam and his associates to develop this aspect of his own model.

The third phase involves a comparison between the standards articulated in the first element and the performance measured in the second. The discrepancy between these two elements provides the basis for making a judgement about the overall effectiveness or worth of the program being evaluated.

The Discrepancy Evaluation Model offers a straightforward, pragmatic approach to a wide variety of evaluation needs. It can be utilized by adult education teachers to evaluate their daily classroom activities or by the director of a large and complex adult education program. The Discrepancy Evaluation Model is particularly useful when program administrators wish to place an emphasis on self-evaluation and systematic program improvement.

Responsive Evaluation

Robert Stake (1973) contends that the focal point of program evaluation should be on the identification of the "real issues" which prompted the call for an evaluation of the program in question. Therefore, the clients being served by the program, program sponsors and program staff are all interviewed or surveyed to determine which questions or issues should be addressed during the evaluation process. The major difference between this model and most others is that the formulation of evaluation questions does not begin with an identification of the program's stated goals or activities. Rather, it is the perceptions of those individuals, who have a vested interest in the program, which determine what questions will be formulated and how the evaluation will proceed.

The basic assumption underlying this approach to program evaluation is that evaluation will be effective and useful only if it is responsive to the interests and needs of the individuals most affected by the program's existence. As a result, the evaluation plan is designed to be flexible enough to allow for changes at any time during the evaluation process. Frequently, large expenditures of resources are allocated to observing the program. Qualitative and naturalistic evaluation techniques are emphasized as a way of shoring up, reinforcing and humanizing the evaluation process. Responsive evaluation is particularly useful for formative evaluation or when the primary

purpose is to understand, in detail, the program's activities, strengths and shortcomings. Madaus et al., (1983) provide an excellent summary of this evaluation approach.

Judicial Evaluation Model.

The Judicial Evaluation Model (Guba, 1978; Madaus, 1983; Wolf, 1974, 1978; Wolf & Tymitz, 1977) was conceptualized in the early 1970s, by Robert Wolf, as a method which would be useful for administrators who need to reach some decision regarding an educational program and want to go beyond the gathering of objective data. The model allows for the gathering of both objective and subjective information and is patterned after the legal model which places a premium on human testimony and judgement. It establishes a systematic procedure for inquiry including criteria for classifying, evaluating and presenting evidence in a clear, concise and reasonable manner.

Two investigative teams are formed to evaluate the program in question. One team is charged with building a case for a reduction or elimination of the program while the other is asked to gather evidence in support of its continued existence. Each team includes a case analyst who serves as the team supervisor and a case presenter who has the responsibility of actually presenting the case in "court." A forum moderator enforces the rules established for the proceeding and rules on objections. Finally, a clarification panel is selected to consider the evidence and present a written statement of their recommendations.

The judicial evaluation model is implemented in four stages. Stage one is an exploratory stage designed to identify as broad a range of issues as possible. The naturalistic inquiry paradigm is used heavily in this stage of the process. During the second stage, the issues identified are placed in order of priority and pooled to reduce them to a manageable size. Again, decisions are made through the extensive use of the strategies of naturalistic

inquiry. The third stage involves building cases and preparing arguments for case presentation. As in judicial court proceedings, both teams share their information and respective plans of action. In the final stage there is a public presentation of the data and other information collected. Case presenters make their cases and call witnesses. Direct and cross examination of witnesses are engaged in and opening and closing arguments are presented. Based on the evidence presented, the panel makes its decision and recommendations regarding the program being evaluated.

The Judicial Evaluation model can be particularly useful for dealing with policy-level problems. However, implementing this model in its entirety is a complex and complicated task. This model would probably be most useful for adult educators who want to be sure to incorporate both the positive and negative aspects of a particular program into their evaluation plan along with a heavy emphasis on naturalistic inquiry methods and human judgement.

Section III. Commercially Published Guides/Evaluation Packages

Since the late 1960s, the emphasis on program evaluation in educational practice has greatly increased. The decade of the 1980s has brought added importance to academic program evaluation. The projected decline in traditional-aged students and its impact on university enrollment will continue to be a significant problem. In addition, the demand for accountability and fiscal austerity is expected to continue. Institutional administrators are confronted, now more than ever, with problems of maintaining the quality of academic programs. They are also being asked to provide support for new programs to meet the changing needs of students and society.

While program administrators are rarely expected to be evaluation experts they are expected to be able to determine a good evaluation plan from a poor one. Limited time and resources may rule out calling in some outside experts to do a comprehensive program review. Consequently, a great deal of time and energy can be saved by consulting materials which are designed to assist an administrator or evaluation committee in the organization and implementation of an evaluation plan.

Many books have been published over the past few years on the evaluation of educational programs. The majority of these, however, are written in highly technical language and are much too cumbersome to be of benefit to individuals who are concerned with how to do a program evaluation, but do not have expertise in the area. The general purpose of this section of the paper will be to provide a description and critique of several program evaluation guides and other materials which are currently available. These "packages" are all designed to help guide the program administrator or evaluator through

the program evaluation process. Most of these materials were prepared by nationally recognized research and evaluation centers with extramural support from state and federal agencies. Many include a description of the program evaluation process and include worksheets, "do-it-yourself" exercises and other aids so that the user can effectively conduct a program evaluation. All of the materials described can be adopted for use by adult education programs.

Each critique includes four major sections: (1) a general description of the materials, (2) intended use, (3) general comments and, (4) information on how to obtain the materials.

Postsecondary Institutions and the Adult Learner:

A Self-study Assessment and Planning Guide.

by Commission on Higher Education and the Adult Learner

General Description

The Assessment Guide is a two-part self-study instrument which is designed to help an institution or program administrator organize an evaluation of a program which serves adult learners. Part I of the guide provides a brief introduction and an annotated bibliography of references which may be helpful in academic planning in the field of adult education.

Part II of the Guide contains the Self-study Instrument. There are ten modules which have been conceptualized as a comprehensive review of adult learner programs, policies and practices. Each section of the guide contains descriptors which typify good policy or practice at institutions where adult learners are well served. The format of the guide includes checklists and rating scales to assist working groups in the evaluation of the selected program.

Intended Use

The Guide "is designed for use by college and university presidents with the cooperation of key administrators to ascertain the current effectiveness of their institution, or a unit within their institution, in serving adult learners. It may also be used to assess institutional readiness to serve an adult clientele. Further, it can be an aid to institutional self-study for purposes of accreditation or state approval. This guide is intended to be used as part of the assessment and planning process to provide basic information for institutional planning with respect to instruction and services for adult learners.

Comments

This guide was developed as part of a larger project to develop methods which could be used by postsecondary institutions to evaluate programs which are specifically targeted to the adult learner. Several institutions across the country have used this guide under the direction of the organizations which developed these materials. Preliminary indications are that institutions have found the information provided to be very useful. The instrument itself provides excellent definitions and planning notes which can be placed within the context of a more general program evaluation plan. The Guide is probably one of the better tools currently available for customizing an evaluation plan to meet the needs of a program serving the adult learner.

How to Obtain Materials

The self-study assessment and planning guide is published by the Commission on Higher Education and the Adult Learner, 10598 Marble Farm Court, Columbia, Maryland 21044. The cost in February 1985 was \$17.25.

Program Evaluation Kit.

by Carol Taylor Fitz-Gibbon and Lynn Lyons Morris

General Description

The Program Evaluation Kit was developed at the Center for the Study of Evaluation, University of California, Los Angeles. The entire project was funded by the National Institute of Education, United States Department of Health, Education and Welfare. The Kit includes a series of eight practical guides covering various aspects of program evaluation. The first book in the series, The Evaluator's Handbook, is meant to orient the reader to program evaluation. The remaining volumes address seven major evaluation problems:

- a. How to Deal With Goals and Objectives
- b. How to Design a Program Evaluation
- c. How to Measure Program Implementation
- d. How to Measure Achievement
- e. How to Measure Attitudes
- f. How to Calculate Statistics
- g. How to Present an Evaluation Report

Each guidebook provides instructions, checklists, worksheets and examples of the topics discussed.

Intended Use

"The Program Evaluation Kit is a set of books intended to assist people who are conducting evaluations of educational programs. The scope of its potential use is broad. Because it comprises a set of step-by-step procedural guides, the Kit can advise a person conducting elaborate evaluations of far-reaching and many-faceted programs or it can help people as they gather, analyze, and interpret information for almost any purpose-whether it be surveying peoples' attitudes, observing a program in action, or measuring student achievement" (The Evaluator's Handbook, p. 5).

In addition to suggesting step-by-step procedures, the Kit introduces and explains concepts and vocabulary common to evaluation. You can therefore use it for training or staff development. The Kit is intended to be useful to people with extensive experience in evaluation as well as those encountering program evaluation for the first time.

Comments

This is an excellent series of guides which can be used effectively by individuals with a limited background in program evaluation. However, persons without at least an undergraduate statistics course and a solid background in tests and measurements may find it difficult to use the material in some of the books. In general, however, I would highly recommend this series to the adult educator who is confronted with a wide range of evaluation problems and issues. With only a moderate investment of time the worksheets and narrative instructions provide an excellent framework for conducting a high quality evaluation of an educational program.

How to Obtain Materials

The Program Evaluation Kit is published by Sage Publications, Inc., 275 South Beverly Drive, Beverly Hills, California 90212. The current price for the complete kit is \$59.95.

An Evaluation Primer and An Evaluation Primer Workbook:

Practical Exercises for Educators.

by Arlene Fink and Jacqueline Kosecoff

General Description

The Primer has been organized into eight chapters. The first chapter includes introductory information which the authors consider essential in helping the evaluator move from thinking about program evaluation to doing program evaluation. The remaining chapters discuss methods and procedures for formulating credible evaluation questions (chapter 2), constructing evaluation designs (chapter 3), planning information collection (chapter 4), collecting evaluation information (chapter 5), planning and conducting information analysis activities (chapter 6), reporting evaluation information (chapter 7) and managing an evaluation (chapter 8). The companion Workbook provides a series of exercises which are intended to provide practice in applying evaluation skills to education programs. Each chapter in the Workbook corresponds to a chapter in the Evaluation Primer.

Intended Use

The major purpose of these two volumes is to enable the reader to conduct and interpret evaluations of social programs. The Primer and Workbook are based on the premise that "the evaluator's main task is to provide information that is technically sound and not to make decisions about how to use it" (p. ix). The primary intended users are professional educators, school administrators and evaluation specialists who are charged with conducting a program evaluation, particularly the evaluation of social programs.

Comments

These materials provide extremely well organized and concise step-by-step procedures for conducting a program evaluation. The authors place a great deal of emphasis on objective evaluation procedures including the use of

quasi-experimental designs and statistical analysis of the evaluation data. Although these materials were designed for evaluating social programs, the adult education administrator or program director would have little difficulty adopting the materials for their use. All things considered, the Primer and Workbook could be very useful for the novice program evaluator.

How to Obtain Materials

The Evaluation Primer and Workbook is published by Sage Publications, Inc., 275 South Beverly Drive, Beverly Hills, California 90212. The cost in 1985 was \$9.95 for softcover book.

Program Evaluator's Guide and Workbook on Program Evaluation

by Alexander I. Law and Carolyn M. Fowle

General Description

This guide provides a detailed description of the steps involved in planning and carrying out a program evaluation. The guide was developed as part of the California Evaluation Improvement Project under the auspices of the California State Department of Education. The Guide contains eight major sections: determining the purposes and requirements of the evaluation, development of a program evaluation plan, determination of evaluation and sampling, the selection and development of evaluation instruments, data collection, analysis of evaluation data, reporting of evaluation results and application of evaluation findings.

Each section includes numerous examples, charts and checklists to assist the program evaluator throughout the entire evaluation process. The inclusion of brief case studies, exercises, random numbers tables and excerpts from actual evaluation reports are also included to clarify the content.

The Workbook is intended to accompany the Guide and contains review sheets, practical examples of the major components of an evaluation plan, worksheets and data analysis forms. Each section of the Workbook corresponds to a chapter in the Guide and can serve as a handy reference and review of the concepts covered by these materials.

Intended Use

The Guide have been used in conjunction with two and five-day workshops to improve program evaluation practices among educators. The Guide was prepared to give the practitioner an increased appreciation of program evaluation practices and higher-level skills in the key evaluation functions. The Guide is not particularly technical in nature, consequently, it is particularly

appropriate for workshops or classes which are comprised of educators and adult education practitioners rather than evaluation or measurement specialists.

The Workbook has two purposes. It can be used as a learning and instructional aid while one masters the procedures, techniques and methods of program evaluation. It can also be used to help an evaluation team keep complete records of the important information related to the program evaluation.

Comment

This is another excellent set of materials which describes in great detail the major components of the evaluation process. The basic philosophy behind the materials seems to be that the practitioner is in the best position to design and implement an effective program evaluation. Despite its emphasis on the evaluation of public school programs, this guide and workbook can be used very effectively to assist the adult education practitioner to properly collect information that will indicate how well a program is meeting its objectives, how well the program is being implemented and other information required to make informed decisions about the program being evaluated.

How to Obtain Materials

These materials were originally published by the California State Department of Education but is distributed by the Educational Testing Service Publications Order Service, CN 6736, Princeton, N.J. 08541-6736. The cost of the Guide is \$12.00. The workbook is \$8.00.

Program Evaluation: A Practitioner's Guide for Trainers
and Educators, Sourcebook/Casebook and Design Manual

by R.O. Brinkerhoff, D.M. Brethower, T. Hluchy, and J.R. Nowakowski

General Description

The Practitioner's Guide was developed by the Evaluation Training Consortium (ETC) project at the Evaluation Center, Western Michigan University. The ETC project was funded by the U.S. Office of Special Education from 1972 to 1982.

The package consists of two volumes. The first volume is a sourcebook, which contains examples, guidelines, criteria and checklists which can be used to implement each of seven key evaluation functions:

- (1) focusing an evaluation and clarifying its purpose
- (2) designing an evaluation
- (3) collecting information
- (4) analyzing information
- (5) reporting: interpreting and using evaluation findings
- (6) managing evaluation activities
- (7) evaluating evaluation efforts

The Casebook (which is in the same hardcover volume as the Sourcebook) is a collection of twelve case studies about evaluation applied to real-life programs in different settings. These case studies are included to show how each of the seven evaluation functions can be implemented in different settings.

The soft-covered Design Manual contains a programmed set of worksheets, directions, and guidelines for designing a program evaluation. The manual assists the user in the production of a document which covers each facet of the overall evaluation design.

Intended Use

According to the authors, this set of materials is intended for use in training, teacher education and other professional programs and projects in agencies and postsecondary institutions. They were designed to be used by individuals or groups for their own program evaluation use and can also be used to train others.

Comments

This guide is obviously the result of a great deal of time and effort. The authors present a fairly advanced treatment of how to conduct a program evaluation and have designed the materials around a commonly accepted division of the key evaluation functions. The comprehensiveness of the materials provides the potential user with a great deal of information. However, I suspect that only the experienced evaluator could make complete use of the information provided. An individual looking for a concise, easy to understand discussion of the evaluation process will probably not find this practitioner's guide useful. The evaluation consultant or administrator with some knowledge and experience with the program evaluation process will probably find the guide to be very informative and a fine addition to their reference library.

How to Obtain Materials

These materials can be obtained by contacting Kluwer-Nijhoff Publishing, 190 Old Derby Street, Hingham, Massachusetts 02043. In 1985 the Sourcebook and Casebook was \$35.95 and the Design Manual was \$17.95.

Section IV. Selected Program Evaluation Literature

This section provides a summary of reference information on the general topic of program evaluation in higher education using two formats: an analytical summary chart and an annotated bibliography. The documents summarized in the chart include only books and guides pertaining to program evaluation. All of them are relevant to evaluation in adult education, although not all of the publications can be considered part of the adult education literature. Summarizing the information in this manner¹ is an attempt to provide the reader with an index to the type of program evaluation information found in each publication. The chart is divided into several categories which correspond to key elements in the evaluation process. Publications are listed alphabetically by author. An "x" on the chart indicates that the publication contains a fairly detailed description of the particular aspect of program evaluation indicated by the column headings. A complete bibliographic citation can be found in the final section of this document.

The annotated bibliography was drawn from the Current Index of Journals in Education (CIJE) database of the Educational Resources Information Center (ERIC). The bibliography includes journal articles which cover several aspects of program evaluation with an emphasis on evaluation of adult higher education programs. The listing is not intended to be exhaustive and, in fact, only covers the years 1981-1985. However, the sources listed appear to be representative of the available literature

¹ The format for this summary is similar to one used by Scrk (1984).

Finally, the reader should keep in mind that the number of professional publications on the topic of program evaluation have expanded tremendously since the early 1970s. In addition to a wide variety of books and manuals, several periodicals which publish articles pertaining to program evaluation are now available. Some of the better publications include: Evaluation News, The Journal of Evaluation and Program Planning, New Directions for Program Evaluation, Research in Higher Education, New Directions for Institutional Research, and Evaluation and the Health Professions. Some organizations also sponsor bulletins or newsletters to update people on the current happenings in the field of program evaluation. One such bulletin is the Evaluation News Quarterly Bulletin. How to Evaluate Education Programs is a newsletter published by Capital Publications in Washington, D. C., which provides concise summaries of particular aspects of program evaluation.

ANALYTICAL SUMMARY OF PROGRAM EVALUATION LITERATURE

Publications by Author	General Context	Emphasis			Evaluation Functions Discussed						Data Collection Procedures	Type of E	
		Clarify Concepts	Describe Procedures	Presents Models	Purposes	Formulating Questions	Evaluation Design	Analysis of Results	Reporting of Results	Utilization, of Results		Qualitative	Quantitative
Alkin, 1985	POST	x								x			x
Apple, 1974	POST	x			x	x					B		x
Austin, 1982	SP		x		x	x	x		x		A, B, D, F, H	x	
Ball, 1981	SP		x				x	x			H		x
Barak, 1982	HE	x			x								x
Brinkerhoff, 1983	HE		x			x	x	x	x	x	A, B, C, D, E, F	x	x
Claven, 1980	HE	x			x					x			x
Commission on Higher Ed., 1984	HE	x	x			x		x		x	A, B, C, D, F	x	
Connor, 1981	SP			x				x			B, D, H	x	
Cook and Reichardt, 1979	GEN	x				x					B, C, D, F	x	
Cronbach, 1982	SP	x			x		x	x	x			x	

ANALYTICAL SUMMARY, CONT'D

Publications by Author	General Context	Emphasis			Evaluation Functions Discussed						Data Collection Procedures	Type of Eval.	
		Clarify Concepts	Describe Procedures	Presents Models	Purposes	Formulating Questions	Evaluation Design	Analysis of Results	Reporting of Results	Utilization of Results		Qualitative	Quantitative
Cronbach, et al, 1980	SP		x				x			x		x	
Deshler, 1984	ACE		x	x	x	x				x		x	
Fink and Kosecoff, 1978	POST		x		x	x	x	x	x	x	A, B, C, D, E, F		x
Groteleuschen, et al, 1976	ABE		x		x	x			x	x	A, B, D, F		x
Hoole, 1978	GEN		x			x	x	x	x	x	E, F		x
House, 1973	POST	x					x				B, C, E, G, H, I		x
House, 1980	GEN	x			x							x	x
Knox, 1979	ACE		x		x		x	x	x		A, B, F, H	x	
Law & Fowle, 1979	POST		x		x	x	x	x	x	x	A, B, C, D, E, F	x	x
Madaus, et al, 1983	GEN	x		x							x	x	x
Morris and Fitz-Gibbon, 1978	POST		x			x	x	x	x	x	A, B, C, D, E, F		x

ANALYTICAL SUMMARY, CONT'D

Publications by Author	General Context	Emphasis			Evaluation Functions Discussed						Data Collection Procedures	Type of Eval.	
		Clarify Concepts	Describe Procedures	Presents Models	Purposes	Formulating Questions	Evaluation Design	Analysis of Results	Reporting of Results	Utilization of Results		Qualitative	Quantitative
Patton, 1978	GEN	x				x	x		x	x		x	x
Patton, 1981	GEN	x		x							B, C	x	
Patton, 1982	GEN		x			x	x	x	x		A, B	x	
Popham, 1974	GEN	x					x	x	x		E, H		x
Popham, 1975	GEN	x					x	x	x		E, F, H		x
Rosecoff and Fink, 1982	POST		x			x	x	x	x	x	A, B, E		x
Rossi and Freeman, 1982	SP	x	x			x	x	x			A, B, F, H		x
Rutman and Mowbray, 1983	SP		x		x		x			x			x
Rutman, 1977	SP		x				x	x			H		x
Rutman, 1984	SP		x			x	x	x	x	x			x
Smith, 1981	SP		x	x			x	x				x	

ANALYTICAL SUMMARY, CONT'D

Publications by Author	General Context	Emphasis			Evaluation Functions Discussed						Data Collection Procedures	Type of Eval.	
		Clarify Concepts	Describe Procedures	Presents Models	Purposes	Formulating Questions	Evaluation Design	Analysis of Results	Reporting of Results	Utilization of Results		Qualitative	Quantitative
Struening and Brewer, 1983	GEN	x	x		x		x	x			H		x
Taylor and Bogdan, 1984	SP		x			x	x	x	x	x	B, C, D, F	x	
Trochim, 1984	SP		x	x			x	x	x		A, E, H		x
Walvekar, 1981	HE		x			x	x				A, E, F		x
Woolridge, 1981	SP	x		x					x		x		x

KEY TO ABBREVIATIONS

General Context Abbreviations

ACE = Adult Continuing Education
 HE = Higher Education
 POST = Elementary/Secondary Education
 GEN = General, All Education Levels
 SP = Evaluation of Special Programs

Data Collection Procedures Discussed

A = Written questionnaire
 B = Interviews/discussions
 C = Report/document analysis
 D = Observation
 E = Tests
 F = Self-report
 G = Supervisor's rating
 Cost-benefit analysis

Annotated Bibliography of Selected References

Assessing Student Outcome as Part of the School Self-study. (1985) North Central Association Quarterly; 60(1), 14-20.

Committee on schools entitled, "Assessing Student Outcomes a Guide to Incorporating with School Self-study Activities and the Teen Visit and Evaluation of the Extent to Which Student Outcome Objectives are Being Met." Presents procedures for assessing direct or school/student and instructional program outcomes.

Backer, Thomas E. et al. (1980) Information Resources for Program Evaluator's. Evaluation and Program Planning: an International Journal; 3(1), 25-33.

Included are listings of important books, journals and newsletters. Brief descriptions of the major professional societies and the program evaluation field (including membership information) a listing of resources for evaluation training materials and a brief discussion of targeted research on evaluation.

Baker, Octave V. (1979) Criteria for the Evaluation of Career Education Activities. Journal of Research and Development in Education; 12(3), 9-13.

This article presents the criteria developed by the American Institute for Research to select, evaluate exemplary career education projects across the nation for submission to the Joint Dissemination and Review Panel of the Office of Education and the National Institute of Education.

Ball, S. (1982). The perils of program evaluation. Contemporary Education Review, 1(3), 166-73.

In reacting to five recent books on program evaluation, the author discusses eight evaluation perils: poor preparation of evaluations, programs with unrealistic goals, a mix up of models, interpersonal conflicts, the morass of measurement, answering evaluation questions, the secondary evaluator as sniper and hostility for program staff.

Ball, Samuel. (1981) Outcomes the Size of the Impacts and Program Evaluation. New Directions for Program Evaluation; 9, 71-86.

The variety of context, the politics of each situation and the availability of resources all dictate variations and assessing outcomes. Seven major principles of program evaluation are considered along with a questioning note to the ambitious who expect large program effects.

Barak, Robert J. (1977) Program Reviews by State-wide Higher Education Agencies. New Directions for Institutional Research; 16 (Increasing the Proaccountability of Higher Education); 4(4), 67-90.

The rationale for state level program reviews in higher education is illustrated by case studies in Florida and New York. Different approaches to evaluation, reviews of existing programs and agencies structure and responsibilities are also discussed.

Barnatte, J. Jackson. & Thompson, John C, III. (1979) A Descriptive Assessment of the Effect of Evaluations on Instruction. Studies in Educational Evaluation; 5(1), 77-86.

A survey examines secondary school teacher's perceptions of the affects of program, student and teacher evaluations on instructional improvement. Results indicated that student evaluation was most effective in influencing teachers to revise their instruction. Teacher and program evaluations appear to be ineffective as changed agents.

Bogue, E. Grady. (1980) State Agency Approaches to Academic Program Evaluation. New Directions for Institutional Research, 27 (Academic Program Evaluation); 7(3), 69-87.

With artistic leadership state agency roles can complement those of institutions and their governing boards. Enhancing the renewal function of program evaluation and insuring that evaluation centers on the improvement of educational effectiveness.

Boruch, Robert F. (1979) Educational Program Evaluations: Some Implications for Evaluation Policy, a Summary. American Behavioral Scientist; No. 4, 23(2), 275-96.

Presents an overview of the development of evaluation and comparative testing techniques. Topics discussed include case studies of evaluation and other cultures, objectives of the evaluation, problems, uses, implications, success rates and design principles

Brinkerhoff, R. O. (1981). Making evaluation more useful. Training and Development Journal, 35(12), 66-70.

This article summarizes the major concepts and approaches of an evaluation training consortium project, showing how they relate to evaluation in a human resources context.

Burstein, Leigh. (1984) The Use of Existing Data-Bases and Program Evaluation and School Improvement. Educational Evaluation and Policy Analysis; 7(2), 307-18.

The purposes are opposed to comment on practice in the use of existing data-bases and program evaluation and school improvement and to explore directions for increased and improved use.

Caulley, D. N. (1983). Document analysis in program evaluation. Evaluation and Program Planning: An International Journal, 6(1), 19-29.

An introduction and overview of document analysis and retrospective data collection techniques are presented.

Cietz, James E. (1981) Program Reassessment, Reduction and Redirection. New Directions for Community Colleges; 9(1), 59-67.

Discusses the importance of occupational program reassessment and social reallocation program planning. Provides suggestions regarding reassessment planning, goals and systematic implementation. Recommendations of a reassessment structure that promotes objectivity, identifies the areas that should be evaluated and provides examples of measures of productivity and program resources and activities.

Clowes, D. A. (1981). Community college program review: A model. Community College Review, 9(2), 3-9.

The author proposes a community college review model which promotes institutional autonomy and satisfies accountability demands. Recommends that community colleges use a needs/access model rather than the quality/excellence model appropriate for universities. Proposes an open and flexible review process, specific products and seven evaluation criteria for all review programs.

Czebisesi, Michael. (1984) Program Evaluation: A Qualitative Planning Tool. Planning and Changing; 15(3), 144-51.

The program evaluation process at the University of Houston involving self-studies by academic departments and review by outside evaluation teams is described. The process considers educational goals and objectives as well as the quality of students, faculty and facilities.

Delves, A.R. & Watts, John. (1979) A Year of Evaluation. Forum for the Discussion of New Trends in Education; 22(1), 27-29, 25.

This article notes the trends in Australia towards school base decision making through school/community counsels and describes the school evaluation conducted by the Counsel of the Huntingdale Technical School in Milbourne.

Deshler, David. (1984) An Alternative Approach to Evaluation and Continuing Education. New Directions of Continuing Education; 23, 3-14.

A brief history of educational evaluation efforts and trends with definitions and distinctions between summative and formative evaluation provides an overview of alternative methods and a rationale for selecting formative evaluation when appropriate.

Diamond, Esther E. (1985) Development of the Joint Committee's Standards for Evaluations of Educational Programs, Projects and Materials. Measurement and Evaluation in Counseling and Development; 18(2), 51-57.

Discusses the need for standards in the evaluation of educational programs, projects and materials and describes the development of such standards by a joint committee representing 12 organizations with widely differing constituencies.

Dillon, J. T. & Starkman, S. S. (1981). A "Model" Approach to Evaluation of Teacher Education Programs. Education, 101(4), 366-371.

This teacher education program evaluation model incorporates six features: program modification, field based perspective, longitudinal approach, involvement of related program personnel, reliable and comprehensive data and examination of importance in values as well as effectiveness. Operation of the model and reaction of the participants and implication of practices are described.

Eichelbergerr, Tony. (1979) Evaluating Educational Program: Some Basic Considerations and Criteria. CEDR-Quarterly; 12(1), 16-19.

Four fundamental issues and program evaluations are discussed; (1) evaluations involve stake holders with adverse interests; (2) data involve some degree of subjectivity; (3) meaningful interpretation of results requires understanding of the assumptions on which results are based; and (4) programs are dynamic and require flexible evaluation.

Fortune, J. C. & Forbes, R. (1982). Utilization of evaluative information. Education; 103(2), 179-182.

The authors discuss the utilization of evaluative information in terms of the dimensions of evaluation, pitfalls of evaluation, and facts concerning useful evaluation.

Friedman, Myles I. & Anderson, Lorin W. (1979) Evaluating to Solve Educational Problems: an Alternative Model. Educational Technology; 19(9), 16-23.

A 19 step general evaluation model is described through it's four stages: identifying problems, prescribing program solutions, evaluating the operation of the program, and evaluating the effectiveness of the model. The role of the evaluator and discussion making is also explored.

Good, H.M. et al. (1980) Modeling and Evaluation. Studies in Higher Education; 5(1), 33-43.

The evaluation of educational programs in higher education needs a better theoretical base than it has had. Proposals as to what that base that should encompass are discussed and an approach that involves a more adequate conceptual and procedural model is explored. Focus is on a system's view point.

Gordon, Sheila C. & Heinemann, Harry N. (1980) Structuring an Internal Evaluation Process. Journal of Cooperative Education; 16(3), 47-54.

The design of an internal program evaluation system requires: (1) formulation of program, operational and institutional objectives; (2) establishment of evaluation criteria; (3) choice of data collection and evaluation techniques; (4) analysis of results, and (5) integration of the system into the mainstream of operations.

Halasz, I. M. (1982). Evaluating vocational education programs in correctional institutions. Journal of Correctional Education, 33(4), 7-10.

Discusses the eight steps to be used for evaluating vocational education programs in correctional institutions: (1) determine purposes, (2) identify evaluation audience, (3) determine questions that need to be answered, (4) select methods, (5) identify staff, (6) collect data, (7) analyze data, and (8) reporting results.

Hanson, Alan L. (1981) Use of "Standards of Practice" in the Design and Evaluation of the Continuing Education Program. American Journal of Pharmaceutical Education; 44(1), 56-60.

To demonstrate the potential use of "standards of practice" by continuing education providers selected tasks from the standards were used in both the design and evaluation of a six hour introductory program on effective communication and pharmacy. Evaluation of program effect was based on a pre-test and a posttest.

Hatch, J. A. (1983). Application of qualitative methods of program evaluation in education. Viewpoints in Teaching and Learning, 59(1), 1-11.

This article explores the utilization of qualitative methodology in program evaluation, the rationale for using these approaches, and the potential qualitative applications within the evaluation. It also describes the "scientific" and "artistic" qualitative methodologies, suggests practical qualitative application, and calls for conceptual shift in methodology decision making in the evaluation.

Health, R. W. & Brandon, P. R. (1982). An alternative approach to the evaluation of educational and social programs. Educational Evaluation and Policy Analysis, 4(4), 477-486.

This paper discusses problems associated with the application of experimental methods to program evaluation, proposes an alternative approach (program attributes scale) and reports the procedures and results of the trial application of this alternative approach.

Holt, Margaret E. & Courtenay, Bradley C. An Examination of Impact Evaluations. Continuum; 49(1), 23-35.

Presents guidelines for determining whether an impact studies is desirable or feasible for evaluating continuing education programs. Describes evaluation methods and program aspects that can be measured.

House, E. R. (1982). Alternative evaluation strategies in higher education. New Directions for Higher Education, Number 37. (Designing Academic Program Reviews); 10(1), 5-15.

Different approaches to evaluation are described: system analysis, behavior objectives, professional review, and case study. In order for an evaluation system to operate, it must be perceived as being fair. The article makes the point that the legitimacy of the evaluation is dependent on the issue of fairness.

Huffman, J. & Harris, J. (1981). Implications of the "input-outcome" research for the evaluation and accreditation of educational programs. North Central Association Quarterly, 56(1), 27-32.

Reviews six studies that investigated the relationship between input variables (e.g. training, experience, education staff, suitability and availability of materials and teaching aids, and adequacy of facilities) and educational outcomes. Examines the implications of the study findings for the evaluation and accreditation of educational programs.

Jacobson, Harvey K. (1978) Framework for Evaluation, Indicators of Effort, Performance, Effects. New Directions for Institutional Advancement (Evaluating Advancement Programs); 1, 17-63.

The problem of selecting appropriate indicators for the evaluation of higher education programs is discussed. A set of indicators and a model for assessing institutional advancement programs are presented as a framework for the institutional manager.

Kemmis, S. (1982). Seven principles for program evaluation in curriculum development and innovation. Journal of Curriculum Studies, 14(3), 221-240.

Proposes seven principles of program evaluation to serve as guidelines for designing evaluation procedures in Australian schools. The object of the evaluation is to generate useful information about the educational environment which can be used for decision making in the curriculum development process.

Kennedy, M. M. (1983). The role of the in-house evaluator. Evaluation Review, 7(4), 519-541.

In-house evaluators must develop an evaluation procedure that accommodate not only their own professional standards but also the problem-solving styles of the organizations that they serve. This article describes how a small group of evaluators have adapted their methods to their contexts.

Knox, Alan B. (1979) Conclusions about Impact Evaluation. New Directions for Continuing Education; 3, 117-21.

There is sufficient evidence from impact studies throughout the field to conclude that continuing education can have an impact on evaluation. The challenges to increase the proportion of programs that do so and to develop more efficient procedures to assess impact.

Lee, Barbara (1985) Statistical Conclusion Validity and Ex-post Facto Designs, Practicality and Evaluation. Educational Evaluation and Policy Analysis; 7(1), 35-45.

Different evaluation models were applied to data from high school career education program to investigate problems in statistical conclusion validity and program effectiveness judgements. If potential threats to internal validity are analyzed and protection strategies are developed more confidence in unplanned ex-post facto design using a naturalistic model is justified.

Legare, Thomas L. (1980) Evaluating Educational Program when Experimental Design is Inappropriate. Educational Research Quarterly; 5(2), 37-49.

Applying attribution theory principles to evaluation of educational programs. The affects of training for social service employes who are evaluated by trainees, training instructors and agency supervisors. Findings confirmed a concept of attribution theory. Trainees and instructors tended to have similar responses while agency supervisors responses were different.

Light, Richard J. (1980) Evaluation Methodology for Education Programs with Diffused Goals: Applications to Extension Evaluation. Education and Urban Society; 13(1), 109-34.

Discusses applications of evaluation methodology for educational programs to extension evaluation. Reviews alternative evaluation designs, makes specific suggestions for interpreting past evaluation studies and present ideas for future extension evaluation.

Light, Richard J. (1984) Six Evaluation Issues that Synthesis Can Resolve Better than Single Studies. New Directions for Program Evaluation; 24, 57-73.

Using the examples from government program evaluation studies, six areas where research synthesis is more effective than individual studies are presented. Research synthesis can (1) help match treatment type with recipient type, (2) explain which treatment features matter, (3) explain conflicting results, (4) determine critical outcomes, (5) assess treatment stability and (6) assess research design.

Lindvall, C. M. & Nitko, A. J. (1981). Basic considerations in assessing the validity of evaluation designs. Educational Evaluation and Policy Analysis, 3(4), 49-60.

Designs for evaluation studies of educational programs should provide valid and defensible inferences. Design problems may be resolved by creatively utilizing features of specific evaluations in designing unique conditions that permit valid inferences.

Martin, Ann M. (1979) Program Evaluation, Some Federal Imperatives. Journal of Studies and Technical Careers; 1(2), 143-51.

A major problem facing program evaluation of vocational education is a lack of a national manpower policy. This concern involves workers acquiring and developing occupational skills which are needed by society and demanded by employers. Federal legislation specifications spell out program requirements which educator's must keep in mind.

Mathis, William. (1980) Evaluating the Policy Implications. CEDR-Quarterly; 13(2), 3-6, 22.

A number of ways in which evaluations may be biased are illustrated (1) policy and political purposes for evaluations; (2) sources of policies or political bias prior to evaluation activities, (3) limitations and biases within the evaluation itself, (4) utilization of evaluation information in the policy process.

Matkin, R. E. (1982). Program evaluation strategies for private-for-profit rehabilitation. Rehabilitation Counseling Bulletin, 25(5), 268-277.

Advocates the need for a systematic approach to evaluating services for those participating in private rehabilitation. Uses examples of services, that are performed in the private sector. Discusses summative and formative evaluation strategies.

Mullen, P. D. & Iverson, D. (1982). Qualitative methods for evaluative research in health education programs. Health Education, 13(3), 11-18.

Qualitative methods can play a significant role in both formative and summative evaluations. There are at least six functions of the qualitative methods in education. Tables and figures present information and characteristics of the qualitative and quantitative methods, selected qualitative evaluation models and a check list of evaluation situations for which qualitative methods are appropriate.

Munitz, Barry A. & Wright, Douglas J. (1980) Institutional Approaches to Academic Program Evaluation. New Directions for Institutional Research, 27 (Academic Program Evaluation), 7(3), 21-42.

The imperatives of institutional planning in an environment of scarce resources have brought program evaluation activities under more systematic processes serving varied needs. Evaluation processes at Michigan State University, the University of Michigan and the University of Houston are examined.

Munro, B. H. (1983). A useful model for program evaluation. Journal of Nursing Administration, 13(3), 23-26.

This model for program evaluation, that was originally designed for use by educational evaluators has been found useful for the evaluation of health care delivery programs. The model provides the basis for comprehensive evaluation and could serve as a useful tool for nurse administrators in the ongoing evaluation of the programs they supervise.

Newman, I. & Deitchman, R. (1983). Evaluation-research: A suggested move toward scientific and community credibility. Journal of Studies in Technical Careers, 5(4), 289-298.

Discusses the relationship between research and evaluation. Presents several evaluation models currently used and discusses considerations for each of them.

Ross, John A. (1980) Decision Rules and Program Evaluation. Evaluation Review; 4(1), 59-74.

An example is provided of an evaluation in which the formulation of explicit decision rules was a central activity. The case for and against the use of decision rules in program evaluation is considered and the appropriate context identified. Implications for the rights of decision makers are addressed.

Rossi, P. H. & Berk, R. A. (1981). An overview of evaluation strategies and procedures. Human Organization, 40,(4), 287-299.

Provides a detailed introduction and the variety of purposes for which evaluation research may be used into the wide range of methods currently explored in the field. Uses specific examples to provide concrete illustrations in both goals of the evaluation research and the methods used.

Rossi, Robert A. & McLalghlin, Donald H. (1979) Establishing Evaluation Objectives. The Evaluation Quarterly; 3(3), 331-46.

Establishing evaluation objectives requires formal, frequently and extensive interaction among program evaluator's and administrators to obtain from administrators the information necessary to make the most effective choices in planning and carrying out evaluations. Three techniques are described that can be used to insure that this interaction is constructive.

Saracho, O. (1982). New dimensions in evaluating the worth of a program. Evaluation, 103(1), 74-78.

Evaluation is essential to assess the worth of a program and to provide suggestions for modifications. An ideal evaluation program can be designed by implementing the expert's best ideas, provided they meet the needs of the program and by involving those who are directly and indirectly involved in the program.

Scott, Robertt A. (1980-81) Quality: A Program's Reviews Missing Link. College Board Review; 118, 18-21, 30.

How to define quality and how to improve and clarify present standards of judgement and assessment in education are discussed. Three forms of external program review are identified; regional accreditation, professional society accreditation and the state agency evaluation. Quality is seen as representing the level of attainment over appropriate goals.

Simpson, William A. (1985) Easing the Pain of Program Review: Departments take the Initiative. Educational Record; 66(2), 40-42.

Renewed interests in program reviews has developed in recent years as resources for higher education have declined and demand for accountability has increased. University level program review and department and unit level program review are discussed.

Slimmer, V. M. (1983). Evaluating Programs in Higher Education. Assessment and Evaluation in Higher Education, 8(1), 52-65.

A model for the evaluation of an ongoing college program is presented that integrates six instrument assessing constituent groups satisfactions or dissatisfactions: current student satisfactions survey, graduate survey, administrator's perception survey, questionnaire on the program's strengths and weaknesses and visibility within the state.

Slotnick, H. B. (1982). A simple technique for collecting, analyzing and interpreting evaluation data. Evaluation and Health Professions, 5(3), 245-58.

Describes the best liked/least liked technique for collecting evaluation information. The technique is composed of stages (data collection, data analysis and data interpretation) that are characterized by their specific use. The techniques used can be narrowly or broadly focused, and it can be used for achievement testing or for affective measurement.

Smartt, Steven. (1984) Linking Program Reviews to the Budget. New Direction for Higher Education; 48, (Financial Incentives for Academic Quality Person); 12(4), 43-56.

Three types of state level roles in higher education program review as it relates to budgeting are outlined. Ideas from the literature about the efficacy of program budgeting are summarized, and North Carolina's use of state level reviews for program improvement and budgeting is described.

Smith, Donald K. (1980) Multi-campus System Approaches to Academic Program Evaluation. New Directions for Institutional Research, 27 (Academic Program Evaluation); 7(3), 43-67.

Multi-campus systems should proceed carefully in the process of academic program review with an eye toward asking and answering questions mostly likely to cause institutions to confront the more fundamental questions of purpose and coherence

Smith, N. L. (1981). Evaluation design as preserving valid qualities in evaluation studies. Studies in Educational Evaluation, 7(3), 229-37.

The evaluation design is seen as an important factor in determining the quality of an evaluation; values and valued qualities permeate the evaluation design. Mechanisms for evaluations (in process reviews, follow-up studies, etc.) are dealt with and familiarity with financial, managerial and ethical procedures are stressed in the evaluation design.

Smith, Nick L. & Caulley, Darrel N. (1979) Post-evaluation Determination of a Program's Generalized Ability. Evaluation of Program Planning: an International Journal; 2(4), 297-02.

Literature on the generalizability of program effects focusses on the priori development of evaluation designs which enables certain generalizations to be made. Secondary analysis procedures which can be employed using existing evaluation data to estimate a program's generalizability when follow up studies are not feasible are suggested.

Talmadge, G. Kasten. (1979) Avoiding Problems in Evaluation. Journal of Career Education; 5(4), 300-08.

Discusses the need for awareness of real and potential problems in educational evaluation approaches. Kinds of problems there are with true experimental designs and with quasi experimental designs and the criteria applied by the Joint Dissemination Review Panel to which review of educational programs.

Tyler, Ralph W. (1980) A brief overview of program evaluation. Journal of Cooperative Education; 16(3), 7-15.

Critical issues in the process of program evaluation are (1) identification and definition of objectives and outcomes, (2) development of valid and reliable forms of assessment, (3) development of methods, data analysis and interpretation, and (4) extension of the use of evaluation results.

Voeltz, Luann A. et al. (1979) A Needs Assessment of Special Education In-service Training Priorities for Teachers. Educational Perspectives; 18(4), 12-17.

The University of Hawaii, and the State Department of Education have already identified a service delivery model called Ho'okoho to meet the personnel training requirements of PL 94-142. This article reports results of the program's first survey to assess in-service training priorities of both regular and special educators.

Wilcox, B. (1982). School self-evaluation: The benefits of a more focused approach. Educational Review, 34(3), 185-93.

This paper outlines some of the general characteristics of current public school self-evaluation schemes and suggests that they may be useful from an organizational standpoint. The construction and use of a self-evaluation instrument which was formed by using this approach is briefly described.

Windoe, Charles. (1979) Developmental Trends in Program Evaluation. Evaluation and Program Planning: an International Journal; 2(3), 193-96.

It suggested that the developmental phases of program evaluators replicate those of the profession of program evaluation. A trend in program evaluation from program amelioration to program advocacy and ultimately to program accountability is projected.

Wolf, Robert L. (1979) The Use of Judicial Evaluation Methods in the Formulation of Educational Policy. Educational Evaluation and Policy Analysis; 2(3), 19-28.

The judicial evaluation model JEM, is useful for aiding decision-making bodies to formulate policies. Broad public participation in complex issues is provided by JEM. The conceptualization policy, formulation stages and participant roles are identified and the model is applied to two case studies.

Young, Kenneth E. & Chambers, Charles M. (1980) Accrediting Agency Approaches to Academic Program Evaluation. New Directions for Institutional Research, 27 (Academic Program Evaluation); 7(3), 89-103.

Nongovernmental accreditation of institutions and programs are uniquely American process is discussed. Institutions are shown to bear a large responsibility for making accreditation work as a major tool for improvement. Deaccreditation process specialized accreditation and future developments are described.

Bibliography

- Adams, Ronald D., et al. Program Evaluation and Program Development in Teacher Education: A Response to Katz et al. (1981). Journal of Teacher Education; 32(5), 21-24.
- Alkin, M. C. (1985). A guide for evaluation decision makers. Beverly Hills, California: Sage Publications.
- Anderson, S. B., Ball, S., Murphy, R. T. & Associates. (1976). Encyclopedia of educational evaluation. San Francisco: Jossey Bass.
- Andrews, Hans A. and Marzano, William A. Faculty Evaluation Stimulates Expectations of Excellence. Community and Junior College Journal; 54(4), 35-37.
- Apple, M. W., Subkoviak, M. J. & Lufler, H. S. (1974). Educational evaluation: Analysis and responsibility. Berkeley, California: McCutchan Publishing Corporation.
- Assessing Student Outcome as Part of the School Self-study. (1985) North Central Association Quarterly 60(1), 14-20.
- Austin, M. J. (1982). Evaluating your agency's programs. Beverly Hills, California: Sage Publications.
- Backer, Thomas E., et al. (1980) Information Resources for Program Evaluators. Evaluation and Program Planning: an International Journal; 3(1), 25-33.
- Baker, Octave, V. Criteria for the Evaluation of Career Education Activities. (1980) Journal of Research and Development in Education; 12(3), 9-13.
- Ball, S. (1982). The perils of program evaluation. Contemporary Education Review, 1(3), 166-73.
- Ball, S. (Ed.). (1981). Assessing and interpreting outcomes. New Directions for Program Evaluation, Number 9. San Francisco: Jossey Bass.
- Ball, Samuel. (1981) Outcomes: The Size of the Impacts and Program Evaluation. New Directions for Program Evaluation 9, 71-86.
- Barak, R. J. (1982). Program review in higher education. Boulder, Colorado: National Center for Higher Education Management Systems.
- Barak, Robert J. (1977) Program Reviews by State-wide Higher Education Agencies. New Directions for Institutional Research, 16 (Increasing the Pro- accountability of Higher Education); 4(4), 67-90.
- Barnatte, J. Jackson. & Thompson, John C. III. (1979) A Descriptive Assessment of the Effect of Evaluations on Instruction. Studies in Educational Evaluation; 5(1), 77-86.

- Bloom, B.S. (1961) Quality Control in Education. Tomorrow's Teachings; 65-61.
- Bogue, E. Grady. (1980) State Agency Approaches to Academic Program Evaluation. New Directions for Institutional Research, #27 (Academic Program Evaluation). 7(3), 69-87.
- Borich, Gary D. Evaluation Models: A Question of Purpose Not Terminology. Educational Evaluation and Policy Analysis; 5(1), 61-63.
- Boruch, Robert F. (1979) Educational Program Evaluations: Some Implications for Evaluation Policy, a Summary. American Behavioral Scientist 4; 23(2), 275-96.
- Brinkerhoff, R. O. (1981). Making evaluation more useful. Training and Development Journal, 35(12), 66-70.
- Brinkerhoff, R. O., Brethower, D. M., Hluchyj, T. & Nowakowski, J. R. (1983). Program evaluation: A practitioner's guide for trainers and educators-sourcebook/casebook. Boston: Kluwer-Nijhoff Publishing.
- Brinkerhoff, R. O., Brethower, D. M., Hluchyj, T. & Nowakowski, J. R. (1983). Program evaluation: A practitioner's guide for trainers and educators-a design manual. Boston: Kluwer-Nijhoff Publishing.
- Burstein, Leigh. (1984) The Use of Existing Data-Bases and Program Evaluation in School Improvement. Educational Evaluation and Policy Analysis 7(2), 307-18.
- Caro, F. G. (Ed.). (1971). Readings in evaluation research. New York: Russel Sage Foundation.
- Caulley, D. N. (1983). Document analysis in program evaluation. Evaluation and Program Planning: An International Journal, 6(1), 19-29.
- Chen, Huey-Tsyh and Rossi, Peter H. Evaluating with Sense: The Theory-Driven Approach. Evaluation Review; 7(3), 283-302.
- Cietz, James E. (1981) Program Reassessment, Reduction and Re-directions. New Directions for Community Colleges; 9(1), 59-67.
- Clowes, D. A. (1981). Community college program review: A model. Community College Review, 9(2), 3-9.
- Commission on Higher Education. (1984). Postsecondary Institutions and the Adult Learner: A Self-study Assessment and Planning Guide. Washington, D. C.: American Council on Education.
- Connor, R. F. (Ed.). (1981). Methodological advances in evaluation research. Beverly Hills, California: Sage Publications.
- Cook, T. D. & Reichardt, C. S. (1979). Qualitative and quantitative research methods in evaluation research. Beverly Hills, California: Sage Publications.

- Cooley, William W. Improving the Performance of an Educational System. Educational Researcher; 12(6), 4-12.
- Cowperthwaite, Margaret. Academic Program Accreditation: A Selective Bibliography. Association for Communication Administration Bulletin; 44, 47-51.
- Crabbe, Larry, et al. These Two Real Life Examples Prove How Effective Evaluation Offices Can Be. American School Board Journal; 171(3), 45-46.
- Craven, E. C. (Ed.). (1980). Academic program evaluation. New Directions for Institutional Research, Number 27. San Francisco: Jossey Bass.
- Crook, Joan; et al. A Question of Timing: When Is the Best Time to Survey Graduates to Obtain Feedback about an Educational Program? Assessment and Evaluation in Higher Education; 7(2), 152-58.
- Cronbach, L. J. (1982). Designing evaluations of educational and social programs. San Francisco: Jossey Bass.
- Cronbach, L. J. and Associates. (1980). Toward reform of program evaluation. San Francisco: Jossey Bass.
- Curtius, Carl Friedrich. Evaluation in the Higher Education System: How Efficient Are Curricula and Persons? Merely an In-word or Tomorrow's Method? Western European Education; 14(1-2), 52-69.
- Czebisesi, Michael. (1984) Program Evaluation: A Qualitative Planning Tool. Planning and Changing; 15(3), 144-51.
- Delves, A.R. & Watts, John. (1979) A Year of Evaluation. Forum for the Discussion of New Trends in Education; 22(1), 27-29, 25.
- Deshler, D. (Ed.). (1984). Evaluation for program improvement. New Directions for Continuing Education, Number 24. San Francisco: Jossey Bass.
- Deshler, David. An Alternative Approach to Evaluation in Continuing Education. New Directions for Continuing Education; 23, 3-14.
- Diamond, Esther. (1985) Development of the Joint Committee's Standards for Evaluations of Educational Programs, Projects and Materials. Measurement and Evaluation in Counseling and Development; 18(2), 51-57.
- Diamond, Joan. School Evaluation and Accreditation: A Bibliography of Research Studies. North Central Association Quarterly; 56(4), 427-37.
- Dillon, J. T. & Starkman, S. S. (1981). A "Model" Approach to Evaluation of Teacher Education Programs. Education, 101(4), 366-371.
- Donald, Janet Gail. A Critical Appraisal of the State of Evaluation in Higher Education in Canada. Assessment and Evaluation in Higher Education; 7(2). 108-26.

- Drew, David E.; Karpf, Ronald. Ranking Academic Departments: Empirical Findings and a Theoretical Perspective. Research in Higher Education; 14(4), 305-20.
- Eichelbergerr, Tony. 1979) Evaluating Educational Programs, Some Basic Considerations and Criteria. C3DR-Quarterly; 12(1), 16-19.
- Feather, John. Using Macro Variables in Program Evaluation. Evaluation and Program Planning: An International Journal; 5(2), 141-48.
- Fink, A. & Kosecoff, J. (1978). An evaluation primer. Beverly Hills, California: Sage Publications.
- Fink, A. & Kosecoff, J. (1978). An evaluation primer workbook: Practical exercises for health professionals. Beverly Hills, California: Sage Publications.
- Fortune, J. C. & Forbes, R. (1982). Utilization of evaluative information. Education, 103(2), 179-82.
- Friedman, Myles I. & Anderson, Lorin W. (1979) Evaluating to Solve Educational Problems: an Alternative Model. Educational Technology; 19(9), 16-23.
- Good H.M., et al. (1980) Modeling and Evaluation. Studies in Higher Education; 5(1), 33-43.
- Gordon, Sheila C. & Heinemann, Harry N. (1989) Structuring an Internal Evaluation Process. Journal of Cooperative Education; 16(3), 47-54.
- Groteleuschen, A. D., Gooler, D. D. & Knox, A. B. (1976). Evaluation in adult basic education: How and why. Danville, Illinois: The Interstate Publishers and Printers, Inc.
- Guba, E. (1978) Toward a Methodology of Naturalistic Inquiry in Educational Evaluation. CSE Monograph Series in Evaluation; 8.
- Gunn, Bruce. Evaluating Faculty performance: A Holistic Approach. Journal of the College and University Personnel Association; 34(4), 23-30.
- Guttentag, M. & Struening, E. L. (Eds.). (1975). Handbook of evaluation research; Volume 2. Beverly Hills, California: Sage Publications.
- Halasz, I. M. (1982). Evaluating vocational education programs in correctional institutions. Journal of Correctional Education, 33(4), 7-10.
- Hanson, Alan L. (1981) Use of "Standards of Practice" in the Design and Evaluation of the Continuing Education Program. American Journal of Pharmaceutical Education 44(1), 56-60.
- Harris, Walter E. and Holdaway, Edward A. Systematic Reviews of University Programs and Units. Canadian Journal of Higher Education; 13(3), 55-76.
- Hatch, J. A. (1983). Application of qualitative methods of program evaluation in education. Viewpoints in Teaching and Learning, 59(1), 1-11.

- Health, R. W. & Brandon, P. R. (1982). An alternative approach to the evaluation of educational and social programs. Educational Evaluation and Policy Analysis, 4(4), 477-86.
- Hengstler, Dennis D., et al. Faculty Ratings as a Measure of Departmental and Administrator Quality. Research in Higher Education; 14(3), 259-75.
- Holdaway, Edward A. The Review Process in Universities. Australian Journal of Education; 25(2), 106-20.
- Hoole, F. W. (1978). Evaluation research and development activities. Beverly Hills, California: Sage Publications.
- Holt, Margaret E., Courtenay, Bradley C. An Examination of Impact Evaluations. Continuum; 49(1), 23-35.
- House, E. R. (1973). School evaluation: The politics & process. Berkeley, California: McCutchan Publishing Corporation.
- House, E. R. (1978). Assumptions underlying evaluation models. Educational Researcher, 7, 4-12.
- House, E. R. (1980). Evaluating with validity. Beverly Hills, California: Sage Publications.
- House, E. R. (1982). Alternative evaluation strategies in higher education. New Directions for Higher Education, Number 37. (Designing Academic Program Reviews) 10(1), 5-15.
- Huffman, J. & Harris, J. (1981). Implications of the "input-outcome" research for the evaluation and accreditation of educational programs. North Central Association Quarterly, 56(1), 27-32.
- Jacobson, Harvey K. (1978) Framework for Evaluation Indicators of Effort, Performance, Effects. New Directions for Institutional Advancement (Evaluating Advancement Programs); 1, 17-63.
- Jung, Stevens M. and Schubert, June G. Evaluability Assessment: A Two Year Retrospective. Educational Evaluation and Policy Analysis; 5(4), 435-44.
- Kenmis, S. (1982). Seven principles for program evaluation in curriculum development and innovation. Journal of Curriculum Studies, 14(3), 221-40.
- Kennedy, M. M. (1983). The role of the in-house evaluator. Evaluation Review, 7(4), 519-41.
- Kennedy Mary M. Assumptions and Estimates of Evaluation Utility. Educational Researcher; 10(10), 6-9.
- Knox, A. B. (Ed.). (1979). Assessing the impact of continuing education. New Directions for Continuing Education, Number 3. San Francisco: Jossey Bass.
- Knox, Alan, B. Conclusions about Impact Evaluation. New Directions for Continuing Education; 3, 117-121.

- Korr, Wynne Sandra. How Evaluators Can Deal with Role Conflict. Evaluation and Program Planning: An International Journal; 5(1), 53-58.
- Kosecoff, J. & Fink, A. (1982). Evaluation basics: A practitioner's manual. Beverly Hills, California: Sage Publications.
- Kowalski-Firestone, Beverly. Measuring Success and Maintaining Quality; Academic Program Planning and Review at the University of Wisconsin-Parkside. Planning for Higher Education; 11(1), 5-13.
- Law, A. I. & Fowle, C. M. (1979). Program evaluator's guide. Princeton, N. J.: Educational Testing Service.
- Lawrence, John E. and Cook, Thomas J. Designing Useful Evaluations: The Stakeholder Survey. Evaluation and Program Planning: An International Journal; 5(4), 327-36.
- Lee, Barbara. (1980) Statistical Conclusions Validity in Expost Factorial Designs, Practicality in Evaluation. Educational Evaluation and Policy Analysis; 7(1), 35-45.
- Legare, Thomas L. Evaluating Educational Programs When Experimental Design is Inappropriate, Educational Research Quarterly 5(2), 37-49.
- Levine, Arthur E. Quality on Baccalaureate Programs: What to Look for When David Riesman Can't Visit. Educational Record; 63(1), 13-18.
- Light, Richard J. (1980) Evaluation Methodology for Education Programs with Diffused Goals: Applications to Extension Evaluation. Education and Urban Society; 13(1), 109-34.
- Light, Richard J. (1984) Six Evaluation Issues That Synthesis Can Resolve Better Than Single Studies. New Directions for Program Evaluation; 24, 57-73.
- Lindquist, Everett F. (1950) Educational Measurement.
- Lindsay, Alan. Assessing Institutional Performance in Higher Education: A Managerial Perspective. Higher Education, 10 (6), 687-706.
- Lindvall, C. M. & Nitko, A. J. (1981). Basic considerations in assessing the validity of evaluation designs. Educational Evaluation and Policy Analysis, 3(4), 49-60.30
- Madaus, G. F., Scriven, M. & Stufflebeam, D. L. (Eds.) (1983). Evaluation models: Viewpoints on educational and human services evaluation. Boston: Kluwer-Nijhoff Publishing.
- Martin, Ann M. (1979) Program Evaluation, Some Federal Imperatives. Journal of Studies and Technical Careers; 1(2), 143-51.
- Martinan, Ann M. Program Evaluation: Some Federal Imperatives. Journal of Studies and Technical Careers; 1(2), 143-51.

- Mark, Sandra F. Faculty Evaluation in Community Colleges. Community/Junior College Research Quarterly; 6(2), 167-78.
- Mathis, William. (1980) Evaluating the Policy Implications. CEDR-Quarterly, 13(2), 3-6, 22.
- Matkin, R. E. (1982). Program evaluation strategies for private-for-profit rehabilitation. Rehabilitation Counseling Bulletin, 25(5), 268-277.
- Mitcham, Maralynne. Faculty Performance Evaluation: The CIPP-SAPS Model. Journal of Allied Health; 16(4), 260-66.
- Montagne, Michael. Evaluation Educational Programs: A Comparative Design. Evaluation and the Health Profession; 5(4), 477-88.
- Morris, L. L. & Fitz-Gibbon, C. T. (1978). Program evaluation kit. Beverly Hills, California: Sage Publications.
- Mullen, P. D. & Iverson, D. (1982). Qualitative methods for evaluative research in health education programs. Health Education, 13(3), 11-18.
- Munitz, Barry A. and Wright, Douglas J. (1980) Institutional Approaches to Academic Program Evaluation. New Directions for Institutional Research #27 (Academic Program Evaluation), 7(3), 21-42.
- Munro, B. H. (1983). A useful model for program evaluation. Journal of Nursing Administration, 13(3), 23-26.
- Nagel, Stuart S. Dealing with Unknown Variables in Policy/Program Evaluation. Evaluation and program Planning: An International Journal; 6(1), 7-18.
- Newman, I. & Deitchman, R. (1983). Evaluation-research: A suggested move toward scientific and community credibility. Journal of Studies in Technical Careers, 5(4), 289-98.
- Patton, M. Q. (1978). Utilization-focused evaluation. Beverly Hills, California: Sage Publications.
- Patton, M. Q. (1981). Creative evaluation. Beverly Hills, California: Sage Publications.
- Patton, M. Q. (1982). Practical evaluation. Beverly Hills, California: Sage Publications.
- Pauly, P. Ann, et al. A Systematic Approach to Increasing Use of Management-Oriented Program Evaluative Data. Evaluation and Program Planning, An International Journal; 5(2), 123-131.
- Popham, W. J. (1975). Educational evaluation. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Popham, W. J. (Ed.). (1974). Evaluation in education. Berkeley, California: McCutchan Publishing Corporation.

- Ross, John A. (1980) Decision Rules and Program Evaluation. Evaluation Review; 4(1), 59-74.
- Rossi, P. H. & Berk, R. A. (1981). An overview of evaluation strategies and procedures. Human Organization, 40(4), 287-299.
- Rossi, P. H. & Freeman, H. E. (1982). Evaluation: A systematic approach. Beverly Hills, California: Sage Publications.
- Rossi, Robert J. & McLalghlin, Donald H. (1979) Establishing Evaluation Objectives. Evaluation Quarterly; 3(3), 331-46. Rutman, L. (1984). Evaluation research methods: A basic guide. Beverly Hills, California: Sage Publications.
- Rutman, L. & Mowbray, G. (1983). Understanding program evaluation. Beverly Hills, California: Sage Publications.
- Rutman, L. (Ed.). (1977). Evaluation research methods: A basic guide. Beverly Hills, California: Sage Publications.
- Ryan, Alan; Raivdhawa, Bikkar. Evaluation at the University Level: Responsive and Responsible. Assessment and Evaluation in Higher Education; 7(2), 159-66.
- Sadler, D. Royce. Apportioning Program Evaluation Resources to Maximize Information Yield. Evaluation Review; 6(6), 827-36.
- Saracho, Olivia (1982). New dimensions in evaluating the worth of a program. Education, 103(1), 74-78.
- Scott, Robertt A. (1980-81) Quality: A Program's Reviews Missing Link. College Board Review; 118, 18-21, 30.
- Scriven, M. S. (1967). The methodology of evaluation. In R. E. Stake (Ed.), Perspectives of Curriculum Education, American Educational Research Association Monograph Series on Curriculum Evaluation, No. 1. Chicago: Rand McNally.
- Scriven, Michael. The Evaluation Taboo, New Directions for Program Evaluation; 19, 75-82.
- Simpson, William A. (1985) Easing the Pain of Program Review, Departments Take the Initiative. Educational Record; 66(2), 40-42.
- Slimmer, V. M. (1983). Evaluating Programs in Higher Education: A Conceptual Process. Assessment and Evaluation in Higher Education, 8(1), 52-65.
- Slotnick, H. B. (1982). A simple technique for collecting, analyzing and interpreting evaluation data. Evaluation and Health Professions, 5(3), 245-58.
- Smartt, Steven. Linking Program Reviews to the Budget. New Directions for Higher Education; 48, (Financial Incentives for Academic Quality Person) 12(4) 43-56.

- Smith, Donald A. (1980) Multi-campus System Approaches to Academic Program Evaluation. New Directions for Institutional Research #27 (Academic Program Evaluation), 7(3), 43-67.
- Smith, N. L. (1981). Evaluation design as preserving valid qualities in evaluation studies. Studies in Educational Evaluation, 7(3), 229-37.
- Smith, N. L. (Ed.). (1981). Federal efforts to develop new evaluation methods. New Directions for Program Evaluation, Number 12. San Francisco: Jossey Bass.
- Smith, Nick L. Creating Alternative Methods for Educational Evaluation. New Directions for Program Evaluation; 12, 77-94.
- Smith, Nick L. Evaluating Evaluation Methods. Studies in Educational Evaluation; 7(2), 173-81.
- Smith, Nick L. & Caulley, Darrel N. Post-evaluation Determination of a programs generalized ability. Evaluation and Program Planning: An International Journal 2(4), 297-02.
- Sork, T. J. (1984). Evaluation in adult education: A critical analysis of the literature through 1983. Paper presented at the Twenty-fifth Annual Adult Education Research Conference, April, Raleigh, North Carolina.
- Stake, R.E. (1973). Program evaluation, particularly responsive evaluation. Paper presented at conference on New Trends in Evaluation. Goteborg, Sweden.
- Stake, Robert. (1967) "The Countenance of Educational Evaluation." Teachers College Record; 7(68).
- Steinmetz, A. (1976). The Discrepancy Evaluation Model. Measurement in Education; 1(7), 1-7.
- Stufflebeam, D.L. (1969). Evaluation as enlightenment for decision making. In A.B. Walcott (Ed), Improving Educational Assessment and an Inventory of Measures of Affective Behavior. Washington, D.C. Association for Supervision and Curriculum Development.
- Stufflebeam, D.L. (1971). The relevance of the CIPP Evaluation model for educational accountability. Journal of Research and Development in Education; Fall, 1971. Get full course.
- Struening, E. L. & Brewer, M. B. (Eds.) (1983). Handbook of evaluation research. Beverly Hills, California: Sage Publications.
- Struening, E. L. & Guttentag, M. (Eds.). (1975). Handbook of evaluation research; Volume 1. Beverly Hills, California: Sage Publications.
- Stufflebeam, Daniel L. (1971) The Relevance of the CIPP Evaluation Model for Education and Accountability. Journal of Research and Development in Education;

- Tallmadge, G. Kasten. (1979) Avoiding Problems in Evaluation. Journal of Career Education; 5(4), 300-08.
- Taylor, S. J. & Bogdan, R. (1984). Introduction to qualitative research methods: The search for meaning. New York: John Wiley & Sons.
- Tom, Alan R. An Alternative Set of NCATE Standards. Journal of Teacher Education; 32(6), 48-52.
- Trochim, W. M. (1984). Research design for program evaluation: The regression-discontinuity approach. Beverly Hills, California: Sage Publications.
- Turner, Susan Douglas. Observation Systems in Program Evaluation: Three Examples. Evaluation Review; 7(3), 373-83.
- Tyler, R. W. (Ed.) (1969). Educational Evaluation: New rules, new means. 68th Yearbook of the National Society for the Study of Education, Part III. Chicago: University of Chicago.
- Tyler, R.W. (1961) The Functions of Measurement in Improving Instruction. Educational Measurement; 47-67.
- Tyler, Ralph W. (1980) A Brief Overview of Program Evaluation. Journal of Cooperative Education; 16(3), 7-15.
- Voeltz, Luann A., et al. (1979) A Needs Assessment of Special Education In-service Training Priorities for Teachers. Educational Perspectives; 18(4), 12-17.
- Walvekar, C. C. (Ed.). (1981). Assessment of learning assistance services. New Directions for College Learning Assistance, Number 5. San Francisco: Jossey Bass.
- Wilcox, Brian (1982). School self-evaluation: The benefits of a more focused approach. Educational Review, 34(3), 185-93.
- Windoe, Charles. (1979) Developmental Trends in Program Evaluation. Evaluation and Program Planning: an International Journal; 2(3), 193-96.
- Wolf, R.L. (1974). Trial by jury. Phi Delta Kappan, November 1974.
- Wolf, R.L. (1978) Studying School Governance Through Judicial Evaluation Procedures. Bloomington, Indiana: Indiana Center for Evaluation.
- Wolf, R.L. & Tymitz, B.L., (1977) Enhancing Policy Formulation Through Naturalistic/Judicial Inquiry Procedures: A Study of the Individual Education Program Component of Public Law, 94-142. Bloomington, Indiana: Indiana Center for Evaluation.
- Wolf, Robert L. The Use of Judicial Evaluation Methods in the Formulation of Educational Policy. Educational Evaluation and Policy Analysis; 2(3), 19-28.

- Wooldridge, R. J. (Ed.). (1981). Evaluation of complex systems. New Directions for Program Evaluation, Number 10. San Francisco: Jossey Bass.
- Worthen, B. R. & Sanders, J. R. (1973). Educational evaluation: Theory and practice. Belmont, California: Wadsworth.
- Young, Kenneth E., Chambers Charles M. (1980) Accrediting Agency Approaches to Academic Program Evaluation. New Directions for Institutional Research, #27 (Academic Program Evaluation), 7(3), 89-103.