

One of the problems associated with program evaluation is the selection of appropriate evaluation procedures. Given the existence of multiple evaluation models, counselors would benefit by having a systematic means for identifying the evaluation model best suited for the task at hand. This article responds to that need by presenting a conceptual framework or meta-model for appraising the utility of existing evaluation models and for identifying the evaluation procedure best suited to any particular situation.

M. HARRY DANIELS
ROBERT MINES
CHARLES GRESSARD

A Meta-Model for Evaluating Counseling Programs

Determining the effectiveness of counseling programs has been a continuing source of concern for counselors. In the last decade, however, the emphasis on program evaluation has steadily increased and has been paralleled by a proliferation of evaluation models. Instead of adding clarity and direction to an essential professional concern, the extra emphasis on evaluation in combination with the availability of multiple evaluation models has tended to complicate the evaluation issue.

Two general factors that contribute to the complication of program evaluation may be identified. One factor is the public's increased concern for financial responsibility, frequently referred to as accountability. Due to the reality of externally

imposed fiscal responsibility, program evaluation is rapidly being transformed from an issue of professional concern into a matter of professional necessity. For example, the Community Mental Health Centers Amendments of 1975 (PL 94-63) included a mandate for evaluation at federal and center levels. In the future all counselors may have no choice but to evaluate their programs if they expect to receive public funds. Moreover, economic and social indicators point toward an escalation of the taxpayers' revolt, which suggests that competition for available funds will increase. In short, counselors soon may be faced with the responsibility of demonstrating the effective value of their programs or waiving their opportunity to offer the programs.

The second factor involves counselors' understanding of the evaluation process. Despite the increased emphasis on accountability, counselors lack a basic understanding of eval-

M. HARRY DANIELS is an assistant professor in the Department of Guidance and Educational Psychology, Southern Illinois University, Carbondale. ROBERT MINES is an assistant professor in the Counseling Psychology Program of the School of Education, University of Denver, Denver, Colorado. CHARLES GRESSARD is an assistant professor in the Department of Counselor Education, University of Virginia, Charlottesville.

TABLE 1
A Taxonomy of Major Evaluation Models

Classes of Models	Major Audiences	Outcome	Consensual Assumption(s)	Methodology	Typical Questions	Selected References
Systems analysis	Economists, managers	Program efficiency	Goals, known cause and effects, quantified variables	PPBS, cost benefit analysis	Are the expected effects achieved? What are the most efficient programs?	Bergland & Quatrano, 1973; Rivlin, 1971
Behavioral objectives	Managers, psychologists	Productivity, accountability	Prespecified objectives, quantified variables	Behavioral objectives, achievement tests	Are the students achieving the objectives? Is the teacher producing?	Krumboltz, 1974; Popham, 1975; Thompson & Borsari, 1978
Decision-making	Administrators	Effectiveness, quality control	General goals, evaluation criteria	Surveys, questionnaires, interviews, natural variation	Is the program effective? What parts are effective?	Burck & Peterson, 1975; Stufflebeam et al., 1971
Goal free	Consumers	Consumer choices, social utility	Consequences, evaluation criteria	Bias control, logical analysis	What are all of the effects of the program? Would a critic approve this program?	Leviton, 1977; Scriven, 1975, 1976
Art criticism	Connoisseurs, consumers	Improved standards	Critics, standards of criticism	Critical review		Eisner, 1979
Accreditation	Professional peers, public	Professional acceptance	Panel of peers, procedures & criteria for evaluation	Review by panel, self-study	How would professionals rate this program?	Berven & Wright, 1978
Adversary	Jury, public	Resolution	Procedures, judges	Quasi-legal procedures	What are the arguments for and against the program?	Kelly, 1976
Transaction	Client practitioners	Understanding	Negotiations, activities	Case studies, interviews, observations	What does the program look like to different people?	Schmidt, 1974; Stake, 1975

Source: Adapted from House (1978).

uation (Burck & Peterson, 1975; Oetting & Hawkes, 1974; Renzulli, 1972; Warner, 1975). The reasons cited for this lack of understanding are many and varied. Four categories of reasons may be identified: (a) the lack of an intrinsic rationale for conducting evaluations, (b) the goals of program evaluation are vague and undefined, (c) the methods and procedures for conducting program evaluation are new and unfamiliar, and (d) the programmatic benefits of conducting evaluations are doubtful and unverified. While each of these reasons is important, the cumulative effect of the reasons is that counselors are not responding to the call to demonstrate the value of their programs.

With or without economic exigencies, the evaluation of counseling programs is a logical and necessary function of counselors' role responsibilities. Evaluation represents "the process of delineating, obtaining and providing useful information for judging decision alternatives" (Stufflebeam, Foley, Gephart, Guba, Hammond, Merriman, & Provus, 1971, p. 40). The key phrases of this definition are "useful information" and "decision alternatives." It is impossible to state in an all inclusive way what constitutes useful information. The determination of useful information in an evaluation study is largely a subjective decision and tends to be situation specific. Similarly, no uniform set of questions has been established to guide the evaluation process.

Due to the lack of uniformity among evaluation tasks, it has been difficult for practitioners to develop a systematic approach to program evaluation. The purpose of this article is to present a systematic model of program evaluation based on the analysis of existing evaluation models. The presentation focuses on three issues: the need for a comparative framework, the guidelines for selecting the appropriate evaluation model from available alternatives, and the advantages of the meta-model.

NEED FOR A COMPARATIVE FRAMEWORK

One consequence of the variability of "useful information" and "decision alternatives" is the existence of a variety of evaluation models that might be used by counselors. Although each of these models is unique, classes of models may be identified. These classes of models include systems analysis, behavioral objectives, decision making, goal free, art criticism, accreditation, adversary, and transactional. The focus of this article is on differences between classes of models. Because of that focus, the terms *classes of evaluation model(s)*, *evaluation model(s)*, and *model(s)* are used interchangeably.

Differences among the models are defined by the nature of the critical dimensions of each model (House, 1978). Five such dimensions have been identified. They are: (a) the intended audience of the evaluation, (b) the consensual assumptions on which the evaluation is based—that is, the elements of the evaluation process about which there needs to be agreement, (c) the methods employed to conduct the evaluation, (d) the intended outcome of the evaluation, and (e) the questions the evaluation proposes to answer. A comprehensive representation of the critical dimensions and selected references for finding further information about each model is presented in Table 1.

It should be evident after looking at Table 1 that each model is unique in its own right, and that each may be of assistance in helping practitioners to determine the effectiveness of their programs. It may also be observed that because the intended outcome of an evaluation varies from model to model, program effectiveness may be demonstrated in various ways. Thus, responsible practitioners must evaluate their programs, but they must also determine which evaluation model is the most appropriate for the circumstances. To make such determinations, counselors must make evaluations about evaluation models—that is, they must make a meta-evaluation of avail-

able evaluation models. Guidelines for making such evaluations are outlined in the following section.

SELECTING AN APPROPRIATE MODEL

Determining the appropriateness of an evaluation model requires the consideration of the utility of the model. By employing the common sense definition of utility, the utility of an evaluation model may be defined as the useful and advantageous features or elements of the model. By definition, different evaluation models would exhibit different utility characteristics. If counselors had knowledge of the utility characteristics of the different evaluation models, then they would have a frame of reference to determine the appropriateness of each model for any specific situation.

According to House (1978), program evaluation has had a thoroughly empiricist orientation. In keeping with that tradition, it may be reasoned that decisions concerning the utility of evaluation models must also be based on experience, either direct or vicarious. Three sources may be considered: (a) practitioners' personal experience with each of several different models, (b) reports of other evaluators' experiences with different models, and (c) a meta-model conceptualization from which the potential utility of each evaluation may be considered (Phillips, 1975).

Examination reveals that the contribution made by any of these three sources to the determination of model utility has been scant, if not almost nonexistent. For example, there is little evidence to suggest that counselors are systematically evaluating their programs with any single evaluation model (Bardo & Cody, 1975), let alone using multiple evaluation methods. It is the exception rather than the rule that a counselor is knowledgeable about more than one evaluation model.

Similarly, a review of the recent literature located few reports of program evaluations. Instead of evaluation reports, or evaluations of evaluation methods, the literature is oriented toward providing articles that promote the beneficial qualities of different evaluation models (cf. Berven & Wright, 1978; Burck & Peterson, 1975; Hosford & Ryan, 1971; Kelly, 1976; Krumboltz, 1974; Leviton, 1977; Pulvino & Sandborn, 1972; Schmidt, 1974). While such articles provide practitioners with helpful information, there is also a need for critiques and comparisons of the various evaluation models if the counselor/evaluator is to make an informed choice. Without the ability to obtain more complete appraisal of evaluation methods, it is unlikely that practitioners will be inclined to modify their evaluation practices.

Both of the preceding sources provide potential but unfulfilled means of selecting an appropriate evaluation model from available alternatives. The remaining possibility, the meta-model conceptualization of program evaluation, provides practitioners with a method for selecting an evaluation model based on a comprehensive comparison of available models. That is, a meta-model outlines the basic structural characteristics or assumptions of each evaluation model and thus allows for the comparison of selected models.

Having a framework from which to evaluate the assumptions and underlying structure of specific evaluation models is particularly beneficial when there is little empirical information regarding the utility of the models on which counselors may rely. The use of meta methods to evaluate evaluation models represents a tenable method for reviewing and integrating accumulated evidence (Glass, 1976). Such methods have been used by Glass (1976) and others (Smith & Glass, 1977) in the analysis of counseling research. Given the accumulation of program evaluation models, counselors will benefit by having a meta-model that will enable them to discover meaning and purpose in the evaluation process.

House (1978) has shown that one way to provide a comprehensive comparison is to compare the philosophical assump-

tions of each model. Practitioners, however, are more concerned with the utility of evaluation models, and would receive more benefits from a meta-framework that addresses the comparative utility of the respective models—for example, the models mentioned by House. Such a framework is now presented.

THE META-MODEL

Selecting the appropriate evaluation model for any particular evaluation problem may be accomplished by providing answers to six questions. Five of the questions are restatements of the critical dimensions of evaluation models as presented in House's (1978) evaluation taxonomy. The sixth question considers the expertise of the would-be evaluator. The questions are:

- 1 What is the purpose of the evaluation?
- 2 What question(s) does the evaluation intend to answer?
- 3 What consensual assumptions is the evaluator willing or able to make?
- 4 For whom is the evaluation intended?
- 5 What is (are) the best available method(s) for obtaining answers to the questions asked?
- 6 Does the counselor/evaluator have the knowledge and technical capability to complete the evaluations?

Considered in another way, the meta-model allows the would-be evaluator to identify the parameters that provide meaning and purpose to the evaluation. The parameters represent the restrictions within which the evaluator must work. Two types of restrictions may be identified: restrictions inherent in the evaluation model and restrictions natural to the setting in which the evaluation will occur. The first type of restrictions are internal; the second type are external.

Intrinsic to each model are specific restrictions that define the limits to which each model may be effectively applied. Those limitations are represented by the following critical dimensions (refer to Table 1): (a) the purpose for the evaluation, (b) the question(s) the evaluation hopes to answer, and (c) the consensual assumptions of the model. Taken individually these critical dimensions shape the meaning of any evaluation model. When considered collectively, however, the dimensions structure the limits of applicability of each model. For example, if a counselor wishes to determine the effectiveness of a particular program, the decision-making evaluation model must be used because it is the only model designed to answer questions concerning program effectiveness. If a different evaluation model were used, different questions would have to be posed and the outcome of the evaluation would not provide answers to the question of effectiveness. In short, each evaluation has limits to its applicability, limits that are set by the internal restrictions of each model. It is the counselor's responsibility to determine which evaluation model is applicable for each specific evaluation.

External restrictions, on the other hand, are defined by the limitations of the setting in which the evaluation will occur and/or by the limitations of the evaluator. The external restrictions include (a) available data collection methods, (b) the intended audience of the evaluation, and (c) the technical knowledge and ability of the evaluator. While the external restrictions complement the internal restrictions in defining the characteristics of the respective models, they also determine the usability of each model. For example, the systems analysis evaluation model utilizes sophisticated methods to collect and analyze pertinent data. Many counselors lack the technical ability to implement the methodological procedures required by such a model and, furthermore, do not have ready access to individuals with such expertise. Given this set of circumstances, the systems analysis model is not very usable. Moreover, if the model were used in such circumstances, the

results would be questionable at best, and they could possibly be damaging. It is to the practitioners' advantage prior to selecting an appropriate evaluative model to assess their own abilities to implement that model and to interpret its results.

The selection of an appropriate evaluation model necessitates the consideration of the applicability (i.e., the internal restrictions) and the usability (i.e., the external restrictions) of available alternatives. As represented in Figure 1, this meta-model assesses both the internal and external restrictions that must be considered. That is, after a practitioner decides to evaluate a program (box 1), a decision about the appropriate method of evaluation (box 2) must be made. In making that decision, the would-be evaluator considers both the internal restrictions (box 3) and the external restrictions (box 4) that impinge on the evaluation problem and answer the relevant questions (boxes 3a, 3b, 3c, 4a, 4b, and 4c). Based on the answers to the questions, the evaluator will be able to select the evaluation model that is most appropriate for the specific circumstance (box 5). The final steps involve the implementation of the appropriate evaluation model (box 6) and program modifications based on the evaluation (box 7), which may require another decision to evaluate the program (box 1).

ADVANTAGES OF THE META-MODEL

The advantages of this particular meta-model framework are associated with the benefits that practitioners would realize by using the model in actual situations. Two such benefits seem apparent. First, the meta-model affords practitioners an alternative to the practice of adjusting evaluation questions and problems to fit a single technique (Hastings, 1969).

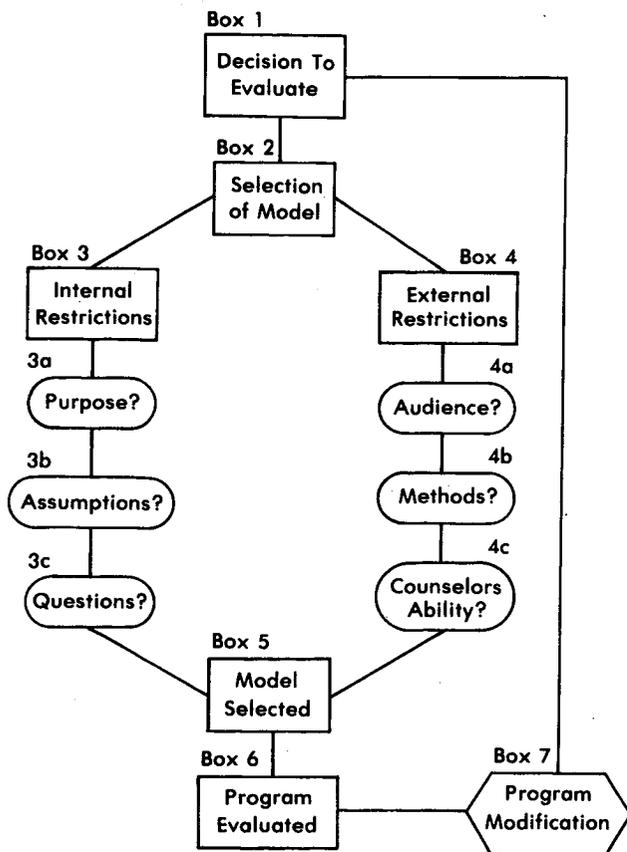


FIGURE 1

A Meta-Model Schema of Program Evaluation

Instead, evaluators will be able to select the model best suited to the problem being studied, leaving them better equipped to respond to the demand for evidence associated with the allocation of public funds. Second, counselors' understanding of evaluation models and the evaluation process would be refined, which could lead to the formulation of new methods, procedures, and theories of program evaluation that are superior to existing ones.

SUMMARY

Program evaluation is an important concern for practitioners of counseling, and in all likelihood its importance will increase. Counselors cannot afford, either financially or professionally, to be unaware of the importance of evaluation. Similarly, they cannot afford the luxury of addressing evaluation issues in a casual or reactive manner. If practitioners are to meet the socio-political-economic demands for demonstrating the effective value of their programs, the evaluation issue must be approached in a more comprehensive and systematic manner.

The purpose of this article has been to present a meta-model conceptualization of program evaluation. The meta-model was based on the comparison of the critical dimensions of any evaluation model. House (1978) has identified five such dimensions that collectively determine the utility of any evaluation model. It was suggested that by restructuring the critical dimensions to form questions and then answering the questions, practitioners could initiate a systematic evaluation system in which the most appropriate evaluation model could be used for any specific evaluation problem.

Admittedly, the meta-model presented here was oriented for the practitioner and was constructed at a practical level of abstraction. Other meta-models may be constructed at other levels of abstraction. The advantages of such constructions are clear: they provide practitioners with a technique to solve some of the problems associated with the evaluation of counseling programs, and they allow for the refinement of evaluation as a professional tool. The utilization of the meta-model presented here will assist in providing new information and clarity to the rapidly growing body of evaluation literature.

REFERENCES

- BARDO, H. R., & CODY, J. J. Minimizing measurement concerns in guidance evaluations. *Measurement and Evaluation in Guidance*, 1975, 8, 175-179.
- BERGLAND, B. W., & QUATRANO, L. Systems evaluation in counselor education. *Counselor Education and Supervision*, 1973, 12, 190-198.
- BERVEN, N. L., & WRIGHT, G. W. An evaluation model for accreditation. *Counselor Education and Supervision*, 1978, 17, 188-194.
- BURCK, N. L., & PETERSON, G. W. Needed: More evaluation, not research. *Personnel and Guidance Journal*, 1975, 53, 563-569.
- EISNER, E. W. *The educational imagination*. New York: Macmillan, 1979.
- GLASS, G. V. Primary, secondary, and meta-analysis of research. *Educational Researcher*, 1976, 10, 3-8.
- HASTINGS, J. T. The kith and kin of educational measures. *Journal of Educational Measurement*, 1969, 6, 127-130.
- HOSFORD, R. E., & RYAN, T. A. Systems design in the development of counseling and guidance programs. *Personnel and Guidance Journal*, 1971, 49, 221-230.
- HOUSE, E. R. Assumptions underlying evaluation models. *Educational Researcher*, 1978, 7(8), 4-12.
- KELLY, F. D. The counseling jury: A step toward accountability. *Counselor Education and Supervision*, 1976, 15, 228-232.
- KRUMBOLTZ, J. D. An accountability model for counselors. *Personnel and Guidance Journal*, 1974, 52, 639-646.
- LEVITON, H. S. Consumer feedback on a secondary school guidance program. *Personnel and Guidance Journal*, 1977, 55, 242-244.
- OETTING, E. R., & HAWKES, F. J. Training professionals for evaluative research. *Personnel and Guidance Journal*, 1974, 52, 434-438.

- PHILLIPS, D. C. *When evaluators disagree: Perplexities and perspectives*. Stanford, Calif.: Evaluation Consortium, Stanford University, 1975.
- POPHAM, W. J. *Educational evaluation*. Englewood Cliffs, N.J.: Prentice-Hall, 1975.
- PULVINO, C. J., & SANBORN, M. P. Feedback and accountability. *Personnel and Guidance Journal*, 1972, 51, 15-20.
- RENZULLI, J. S. The confessions of a frustrated evaluator. *Measurement and Evaluation in Guidance*, 1972, 5, 298-305.
- RIVILIN, A. M. *Systematic thinking for social action*. Washington, D. C.: Brookings Institution, 1971.
- SCHMIDT, J. A. Research techniques for counselors: The multiple baseline. *Personnel and Guidance Journal*, 1974, 52, 200-206.
- SCRIVEN, M. *Bias control systems in evaluation*. Paper presented at the annual meeting of the American Educational Research Association, 1976.
- SCRIVEN, M. *Evaluation bias and its control*. Kalamazoo: The Evaluation Center, Western Michigan University, 1975. (Occasional Paper 4)
- SMITH, M. L., & GLASS, G. V. Meta-analysis of psychotherapy outcome studies. *American Psychologist*, 1977, 32, 752-760.
- STAKE, R. E. *Some alternative presumptions*. Urbana, Ill.: Center for Instructional Research and Curriculum Evaluation, October, 1975.
- STUFFLEBEAM, D. I.; FOLEY, W. J.; GEPHART, W. J.; GUBA, E. G.; HAMMOND, R. I.; MERRIMAN, H. D.; & PROVUS, M. M. *Educational evaluation and decision making*. Itasca, Ill.: F. E. Peacock, 1971.
- THOMPSON, D. L., & BORSARI, L. R. An overview of management by objectives for guidance and counseling services. *School Counselor*, 1978, 25, 172-177.
- WARNER, R. W. Planning for research and evaluation: Necessary conditions. *Personnel and Guidance Journal*, 1975, 54, 10-11.

"Meta-analysis" is defined as a cross-discipline research method. Formally a form of literature review, its primary purpose is the synthesis of research studies already reported. It may be used for description or theory testing, and statistical tests may be applied to the units of analysis, termed effects, to estimate relationships between independent and dependent variables found in research studies.