

Evaluation in the Student Services: A Metamodel

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The student service practitioner is faced with a growing demand for accountability through evaluation. A review of the literature indicated that there was little information regarding merits, limitations, or utility of various evaluation models. This article presents a metamodel framework for selecting evaluation models.

The student services professional of the 1980s is faced with the prospect of shrinking budgets, declining enrollments, and an increasing need to demonstrate the effectiveness and utility of their programs for the sake of survival. Satryb (1974) noted that it was once possible to justify student services expenditures on the basis of the "invisible return" of the services being provided. Because higher education has entered a period of fiscal austerity, "invisible returns" are no longer acceptable and the student services professional must demonstrate accountability through evaluation. The emphasis on program evaluation has steadily increased and has been paralleled by a proliferation of evaluation models (e.g., House, 1978).

In conducting the evaluation process, the basic question that practitioners and administrators must ask is, How do we choose a model to be used in evaluating a particular

student service agency or program? The first option available is to review the student services literature to ascertain which evaluation models are available and what are the merits and limitations of the models. A review of the literature in the three major student services journals, *Journal of College Student Personnel*, *The National Association of Women Deans, Administrators and Counselors Journal*, and *The National Association of Student Personnel Administrators Journal* (see Table 1), indicated that most of the articles were primarily concerned with reporting the results of an evaluation or the presentation of a model. There were only four evaluations of specific models (Bachhuber, 1975; Berman, 1978; Hoehnack, 1975; Kelly & Nolan, 1977). Thus the student services practitioner has little or no information in the journals regarding the utility, merits, or limitations of specific evaluation models. It would be difficult for the practitioner or administrator to select an evaluation model based on evidence of demonstrated effectiveness.

The second option available would be to use a metamodel, described later in this article, to make the selection of an evaluation model that would be most appropriate for a particular program or agency. At the present time such a comprehensive conceptual framework for evaluating and selecting an evaluation model does not exist in the student services literature. This article presents such a conceptual framework through the introduction of a metamodel of evaluation.

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TABLE 1
A Review of Evaluation Articles Published in Selected Student Personnel Journals 1968-1980

Author(s)	Year	Model	Type of Article
Holland & Gillingham	1980	Decision Making	Evaluation Report
Gillingham & Lounsbury	1979	Decision Making	Evaluation Report
Magnarella	1979	Decision Making	Evaluation Report
Peterman, Pilato, & Upcraft	1979	Decision Making	Evaluation Report
Aaron, Ade, & Shobe	1978	Decision Making	Evaluation Report
Deaner	1978	Decision Making	Evaluation Report
Evans & Rector	1978	Decision Making	Evaluation Report
Blimline & New	1975	Decision Making	Evaluation Report
Smith & Hurst	1974	Decision Making	Evaluation Report
Collins, Gelson, Kimball, Sedlacek	1973	Decision Making	Evaluation Report
Hurst & Morrill	1971	Decision Making	Evaluation Report
Gibbs	1968	Decision Making	Evaluation Report
Kapraun & Coldren	1980	Decision Making	Model Presentation
Kramer	1979	Decision Making	Model Presentation
Crabbs & Crabbs	1978	Decision Making	Model Presentation
		Behavioral Objective	
		Systems Analysis	
		Transactional	
		Art Criticism	
Nordval	1977	Decision Making	Model Presentation
		Behavioral Objective	
Harpel	1976	Decision Making	Model Presentation
Trembley & Sharf	1975	Decision Making	Model Presentation
		Systems Analysis	
		Accreditation	
Kelly & Nolan	1977	Decision Making	Model Evaluation
		Behavioral Objective	
Cooper, Epperly, Forrer, & Inge	1977	Decision Making	Evaluation Tool
McDavis	1976	Decision Making	Evaluation Tool
Harshman & Harshman	1974	Decision Making	Evaluation Tool
Gildseth & Parker	1971	Behavioral Objective	Evaluation Report
Carranza	1978	Behavioral Objective	Model Presentation
		Transactional	
Boylan	1973	Behavioral Objective	Model Presentation
Fisher & Howell	1972	Behavioral Objective	Model Presentation
Berman	1978	Behavioral Objective	Model Evaluation
Saurman & Nash	1975	Behavioral Objective	Model Evaluation
Bachhuber	1975	Behavioral Objective	Model Evaluation
		Systems Analysis	
Casse, Gillis, & Mullen	1974	Systems Analysis	Evaluation Report
Peterson	1975	Systems Analysis	Model Presentation
Satryb	1974	Systems Analysis	Model Presentation
Hoenack	1975	Systems Analysis	Model Evaluation
King, Newton, Osterlund, Baber	1973	Transactional	Evaluation Report
Ravekes	1971	Transactional	Evaluation Report
Brown	1978	Transactional	Model Presentation
		Goal Free	
Laudicina & Laudicina	1972	Transactional	Need for Evaluation
Hull	1969	Goal Free	Evaluation Report
Canon	1978	None	Reaction
Coan	1976	None	Attitudes Toward Evaluation
Wallenfedt	1976	None	Assumptions of Evaluation
Chamberlain	1975	None	Assumptions of Evaluation
Levy & Schreck	1975	None	Need for Evaluation
Harpel	1975	None	Survey
Bishop	1975	None	Data System Criteria

DEFINITION AND RATIONALE

A *metamodel* provides a broad framework or overview from which evaluation models can be considered. A metamodel outlines the basic structural characteristics or assumptions of each evaluation model and thus allows for a comparison of selected evaluation models. Having a framework from which to evaluate the assumptions or underlying structure of a model is beneficial when there is little information regarding the utility or effectiveness of a given model.

A metamodel could be used by the student service practitioner and administrator to select the appropriate evaluation model. House (1978) developed a metamodel for evaluating the philosophical assumptions of existing evaluation models. He delineated the differences among the various models along five dimensions. The five dimensions are—

1. The intended audience of the evaluation;
2. The consensual assumptions on which the evaluation is based;
3. The methods employed to conduct the evaluation;
4. The intended outcome of the evaluation;
5. The questions the evaluation proposes to answer.

House (1978) analyzed a variety of evaluation models along these five dimensions. The models evaluated were systems analysis, behavioral objectives, decision making, goal free, art criticism, accreditation, adversary, and transactional. A comprehensive representation of the critical dimensions for each model is presented in Table 2.

House (1978) demonstrated that one way to provide a comprehensive comparison of evaluation models was to compare the philosophical assumptions of each model. Practitioners, however, are more concerned with the utility of evaluation models and would benefit from a metamodel that addresses the comparative usefulness of each model (i.e., the models analyzed by House, 1978). Such a metamodel follows.

THE METAMODEL

The student service practitioner and administrator can select an appropriate evaluation model for a particular evaluation problem by answering the following six questions (Daniels, Mines, & Gressard, 1981). The first five questions are restatements of House's (1978) critical dimensions underlying all evaluation models; the sixth question considers the expertise of the evaluator:

1. What is the purpose of the evaluation?
2. What question(s) does the evaluation intend to answer?
3. What are the conceptual assumptions the evaluator is willing to make?
4. For whom is the evaluation intended?
5. What is (are) the best available method(s) for finding answers to the questions asked?
6. Does the student service practitioner or administrator have the knowledge and technical capability to complete the evaluations?

The *metamodel* provides the framework in which the student service professional can identify the parameters that provide meaning and purpose to the evaluation. These parameters provide the restrictions inherent in each evaluation model and in the setting where the evaluation will occur. There are two types of restrictions, internal and external.

Internal restrictions are defined by limitations intrinsic to each model. These limitations are represented by the following critical dimensions (see Table 2): (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 student service practitioner 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

TABLE 2
A Taxonomy of Major Evaluation Models^a

Model	Major Audiences	Outcome	Consensual Assumption	Methodology	Typical Questions
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?
Behavioral objectives	Managers, psychologists	Productivity Accountability	Prespecified objectives, quantified variables	Behavioral objectives, achievement tests	Are the students achieving the objectives? Is the teacher producing?
Decision making	Administrators	Effectiveness, quality control	General goals, evaluation criteria	Surveys, questionnaires, interviews, natural variation	Is the program effective? What parts are effective?
Goal free	Consumers	Consumer choices, social utility	Consequences, evaluation criteria	Bias control, logical analysis	What are all of the effects of the program?
Art criticism	Connoisseurs, Consumers	Improved standards	Critics, standards of criticism	Critical review	Would a critic approve this program?
Accreditation	Professional peers, public	Professional acceptance	Panel of peers, procedure and criteria	Review by panel, self-study	How would professionals rate this program?
Adversary	Jury, public	Resolution	Procedures, judges	Quasi-legal procedures	What are the arguments for and against this program?
Transaction	Client practitioners	Understanding	Negotiations activities	Case studies, interviews, observations	What does the program look like to different people?

^aHouse (1978).

program effectiveness. If a different evaluation model were used, different questions would have to be posed first, and the outcome of the evaluation would not provide answers to those questions and not to the question of effectiveness. In short, each evaluation model has limits to its applicability, limits that are set by the internal restrictions of each model. The evaluator's responsibility is to determine which evaluation model is applicable for each specific evaluation question.

External restrictions, on the other hand, are defined by limitations of the setting in which the evaluation will occur 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 practical usefulness of each model. For example, the systems analysis evaluation model utilizes sophisticated methods to collect and analyze pertinent data. Many student services in the larger institutions have access to the computer hardware necessary to implement the methodological procedures required by such a model. For those practitioners in settings that do not have ready access to these resources or the necessary expertise, the systems analysis model is not practically feasible, despite its theoretical desirability. The practitioners must also assess the feasibility of each evaluation model during the selection process.

The selection of an appropriate evaluation model necessitates the consideration of the applicability (i.e., the internal restrictions) and the practical usefulness (i.e., the external restrictions) of each model. This metamodel incorporates both the internal and external restrictions that must be considered. That is, after a practitioner decides to evaluate a program, a decision about the appropriate method of evaluation must be made. In making that decision, the evaluator considers both the internal and the external restrictions that impinge on the evaluation problem and answers the relevant questions posed by the metamodel. Based on the

answers to the questions, the evaluator will be better able to select the evaluation model that is most appropriate for the specific circumstances. The final steps involve implementing the appropriate evaluation model and making any necessary program modifications based on the evaluation results, which may require another decision to evaluate the program.

When practitioners apply this metamodel to their respective problems, they are required (a) to specify the evaluation problem, (b) to consider alternative methods of completing the evaluation task, (c) to select the most appropriate model from available alternatives, (d) to implement the evaluation model selected, and (e) to examine critically the results of the evaluation. In this frame of reference, the metamodel provides a method for systematic and reflective thought about the evaluation process.

The advantages of this particular metamodel framework for student service practitioners and administrators result from using the model in actual situations. Four such benefits seem apparent. The metamodel provides the following: (a) a means for selecting the appropriate evaluation model for any specific evaluation task, (b) a systematic method for meeting their continuing evaluation needs, (c) a framework to assess and evaluate the usefulness of different evaluation models, and (d) the potential for practitioners and administrators to refine their understanding about the evaluation process by considering the issues of evaluation within a broad framework.

CONCLUSION

Program evaluation is an important concern for student service practitioners and administrators, and in all likelihood its importance will increase. The student services cannot afford, either professionally or financially, to be unaware of the importance of evaluation. Similarly, they cannot afford the negative professional implications of addressing evaluation issues in a casual or reactive manner. If student service professionals are to meet the socio-political-economic demands for demonstrating the

effective value of their programs, the evaluation component must be approached in a comprehensive and systematic manner.

The purpose of this article was to review the student services evaluation literature and present a metamodel for selecting evaluation models. The metamodel was based on the comparison of the common dimensions of all evaluation models. The House (1979) framework identifies five common dimensions that collectively determine the usefulness of any evaluation model. By restructuring the critical dimensions to form questions and then answering the questions, practitioners and administrators could initiate a systematic evaluation process in which the most appropriate evaluation model could be selected for any specific evaluation problem.

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