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ABSTRACT

The main purposes of this study were to identify the evaluation needs of students, teachers, and principals, and to develop recommendations for an evaluation system within the school building. Students, teachers, and principals were surveyed to depict the availability and importance of eight different categories of evaluative information derived from theoretical framework suggested by Stufflebeam (The CIPP Model) and by Scriven (formative and summative evaluation). The study showed that while information on outcomes is the most available evaluative information in school, school people show a great concern for other kinds of evaluative information. Students and principals showed preference for formative rather than summative evaluation. (Author)

Evaluation Priorities of Students, Teachers, and Principals

by

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INTRODUCTION

School staffs have usually evaluated their work by testing their students. As argued in the evaluation literature, test scores, while important, are insufficient to fully serve evaluation purposes. To identify one basis for expanding the scope of school-based evaluation, this study asked students, teachers, and principals to assign priorities to alternative information items that are theoretically important for evaluating schooling.

The initial lists of potential information needs were derived from a matrix that combines evaluation concepts suggested by Scriven[1] and Stufflebeam[2]. The row headings of the matrix (see Figure 1) are Scriven's well-known concepts of formative and summative evaluation--which are purposes to be served by evaluation findings. The column headings are Stufflebeam's concepts of context, input, process, and product evaluation--which denote different types of information. This 2x4 matrix suggests eight types of evaluative information that are potentially important in assessing school programs.

The first is formative-context evaluation. It involves needs assessment; but it also searches for opportunities, such as advances in technology and special funding sources, that are potentially available for meeting the needs. Finally, it diagnoses problems that must

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[1]Michael Scriven, "The Methodology of Evaluation" in Robert E. Stake (Ed.), Perspectives of Curriculum Evaluation, AERA Monograph Series on Evaluation, No. 1 (Chicago: Rand McNally, 1967).

[2]Daniel L. Stufflebeam, et al., Educational Evaluation and Decision Making (Itasca, Ill.: Peacock Publishers, 1971).

Roles of Evaluation	Types of Information			
	Context	Input	Process	Product
Formative	1	3	5	7
Summative	2	4	6	8

Figure 1: Eight Categories of Evaluative Information

be solved before the opportunities can be used to serve the needs. The main use of formative-context evaluation is to assist in the formulation of goals and objectives.

A second type of information is summative-context evaluation. It assesses the merit of goals that were chosen as compared with other possibilities. Key criteria concern the goals' situational relevance, adherence to democratic ideals, and clarity. A main use of summative-context evaluation is to aid persons or groups to be accountable to their publics, but it also aids these publics to draw conclusions about whether an effort was well-intentioned.

Formative-input evaluation, the third kind of information, identifies and assesses the potential costs, benefits, and feasibility of alternative plans for achieving specified objectives. The main function of formative-input evaluation is to assist in the development and adoption of cost/effective plans.

The fourth kind of information comes from summative-input evaluation. It identifies and judges a plan that was previously chosen, especially in comparison to other possibilities. Summative-input evaluation aids persons or groups to defend their past choices of plans, and it provides interested audiences with a basis for judging whether the choice of a particular plan was warranted.

The fifth kind of information is formative-process evaluation. It provides continual feedback about how well a plan is being implemented. This feedback concerns limitations in both the plan under operating conditions, and its execution. The purpose of formative-process evaluation is to aid persons to carry out their plans.

Summative process-evaluation denotes the sixth kind of information. It involves retrospective descriptions and judgments of the actual process that was implemented in a completed enterprise. This information assists persons to defend their past actions in carrying out their responsibilities; and it assists them and their audiences to determine whether the conceptual plan had a complete and fair operational trial. It also helps them to interpret outcomes.

Formative-product evaluation, the seventh kind of information, provides continual feedback about results. Are needs being met? Are the opportunities being used? Are problems being solved? Are objectives being achieved? Answers to these questions aid persons to recycle their activities toward the end of continually obtaining a better effect.

The eighth and final kind of information denoted by our matrix is summative-product evaluation. It describes, interprets, and judges the end results of a class, school year, etc. This information is the

ultimate basis for accountability and conclusions related to the success of an effort.

We believe these categories of evaluation provide a comprehensive view of the information that might be included in school evaluation programs. However, there is very little evidence to suggest which of the kinds of information should receive the highest priority in efforts to expand school evaluation work.

We investigated this issue in terms of two main questions:

1) What information is presently available to school personnel?

2) What information do they perceive to be most important?

STUDY PROCEDURES

To address the questions of this study, we surveyed students, teachers, and principals, using questionnaires designed to depict their perceptions of the availability and importance of different kinds of evaluative information.[3] For feasibility reasons the survey was limited to the high schools of Michigan, and the study has not been replicated. For these and related reasons, our results must be considered tentative, and we hope they will lead to further related research.

We drew three samples. The first included 185 high school teachers who were randomly drawn from the Michigan Professional Personnel Register, which is prepared annually by the Michigan State Department of

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[3]For a complete description of the study procedures and an itemized presentation of its findings see: David Nevo, "Evaluation Priorities of Students, Teachers, and Principals." Ph. D. Dissertation, The Ohio State University, 1974.

Education and lists information concerning all professional personnel in Michigan's public schools. The second sample included 164 high school principals randomly drawn from a list of all Michigan public high school principals provided in the 1973-74 Michigan Educational Directory. Thus, representative samples were obtained for teachers and their principals. However, no representative sample was obtained for students, since this sample was constrained by our ability to obtain the cooperation of schools in administering questionnaires to their students. Three local school districts agreed to participate in the study, providing a total of five high schools. A random sample of 100 students was drawn from a group of 228 students in the tenth and eleventh grades who returned usable questionnaires in those five schools.

Three parallel questionnaires--for students, teachers, and principals--were the main measurement tools of this study. Each questionnaire contained forty items, including five for each of eight categories of evaluative information (context, input, process, and product information, as differentiated by formative and summative purposes).

The questionnaires were developed according to the following procedures:

(a) A pool of 214 items was developed describing information on the context, input, process, and product of educational activities that would be intended to serve either formative or summative purposes. The pool included 74 items for students; 69 for teachers; and 71 for principals.

(b) Eight judges critiqued the initial items and classified them into the study's eight information categories.

(c) Based on the judges' classification, five items were chosen for each of the eight categories of evaluative information, and this was done for each of the three instruments.

(d) For each instrument the forty selected items were arranged in random sequence, and the final instruments were prepared, such that respondents would rate each item, according to a five-point scale, for both availability and importance, with 1 as low (availability or importance) and 5 as high.

Once prepared, the questionnaires were administered to students in their classrooms; while the 185 teachers and 164 principals received their questionnaires by mail. A follow-up mailing to non-respondents was conducted two weeks after the first mailing. Ultimately 92 (50%) of the teachers and 85 (52%) of the principals returned their questionnaires.

Separate analyses were done for availability and importance, and for each study group. Within each analysis, mean scores were obtained for each information category in our theoretical matrix, based on the scores obtained for the items included in each category. These means could range from 1 to 5, referring to the following descriptive scale applied separately for availability and importance:

1 - never available or of no importance
2 - rarely available or of minimal importance
3 - sometimes available or of moderate importance
4 - frequently available or of high importance
5 - very frequently available or of very high importance

The differences among means were assessed by a two-factor analysis of variance with repeated measures. Significant F ratios were further investigated with Tukey's Honestly Significant Difference (HSD) procedure.

FINDINGS

Overall, the subjects in all three groups indicated that all types of information were "rarely" or "sometimes" available to them as can be seen from the cell means in Table 1 ranging from 2.2 to 3.1 on our five-point scale. Little difference among groups was observed, as noted by the gross averages to the mean scores: 2.5 for students, 2.4 for teachers, and 2.7 for principals.

Table 1

Mean Scores for Availability of Evaluative Information in Three Study Groups

Study Group	Role of Evaluation	Type of Evaluative Information				
		Context	Input	Process	Product	All Types
Students	Formative	2.9	2.6	2.3	2.6	2.6
	Summative	2.4	2.4	2.2	2.6	2.4
	Both Roles	2.7	2.5	2.3	2.6	2.5
Teachers	Formative	2.6	2.2	2.3	2.5	2.4
	Summative	2.5	2.2	2.3	2.8	2.4
	Both Roles	2.6	2.2	2.3	2.7	2.4
Principals	Formative	2.8	2.5	2.6	3.0	2.7
	Summative	2.7	2.5	2.6	3.1	2.7
	Both Roles	2.8	2.5	2.6	3.0	2.7

However, analyses of variance revealed that all three groups perceived that some types of information are more available than others. Significant differences at the .01 level were found for all three groups as regards their perception of the availability of context, input, process, and product information. Also a significant F ratio indicated that the student group rated formative evaluation as more available than summative evaluation. But, superseding these findings were interaction effects for all three groups that were significant at the .01 level. The results from the Tukey tests for all three samples suggested that product and context evaluation information are the most available within the school.

As regards importance, all three groups viewed most of the information items, that might be made available to them, to be of "high importance." Students and principals rated the importance of information with an average rating of 3.7, and teachers followed with an average rating of 3.6 on our five-point scale (see Table 2). We infer that the three study groups believe that, while much of the information we described is relatively unavailable to them, it would be of much importance to them if they could get it.

Our further analyses of the ratings for all three groups revealed significant differences concerning the ratings of importance that were assigned to the eight categories of information. The F ratios for all three groups were significant at the .01 level as regards variances among the rated importance of context, input, process, and product information. For the student group and the principal group, the F ratio for the variance between formative

Table 2

Mean Scores for Importance of Evaluative Information in Three Study Groups

Study Group	Role of Evaluation	Type of Evaluative Information				
		Context	Input	Process	Product	All Types
Students	Formative	3.8	3.9	3.5	3.9	3.8
	Summative	3.8	3.5	3.3	3.7	3.6
	Both Roles	3.8	3.7	3.4	3.8	3.7
Teachers	Formative	3.9	3.4	3.4	3.6	3.6
	Summative	3.8	3.5	3.4	3.6	3.6
	Both Roles	3.9	3.4	3.4	3.6	3.6
Principals	Formative	3.9	3.7	3.7	3.8	3.8
	Summative	3.8	3.4	3.7	3.9	3.7
	Both Roles	3.8	3.5	3.7	3.9	3.7

and summative evaluation was also significant. Significant (.01 level) interaction effects were also found for the student and principal data.

Thus, the patterns of difference in ratings of importance must be considered differentially for the three groups. The data from teachers suggest that they perceive context and product evaluation to be more important than process and input evaluation with no

preference for summative or formative evaluation. Principals showed a statistically significant preference for formative-context evaluation and summative-product evaluation. Students showed a general preference for formative evaluation especially in regard to input and product evaluation.

SUMMARY

Overall, students, teachers, and principals perceive that evaluative information of the type described in our study is only occasionally available; and they perceive that context and product information is the most available. Compared to their low rankings for availability, they indicate that, overall, the information items considered in this study are of much importance to them. Teachers especially desire to have both formative and summative context and product information. Students especially want formative-input and formative-product information. And principals express a special need for formative-context and summative-product information.

Although the study's findings should be considered tentative and interpreted with caution, they might have significant implications for the development of an evaluation system within the school. The instruments devised in this study should be of use in replicating this study and in conducting further related research. Moreover, the instruments are potentially useful for school staffs that want to assess their needs for evaluative information, and they should provide a stimulus and frame of reference for in-service training in evaluation.

Overall, the study supports the contention that there is a need to expand and improve school-based evaluation programs, so that they will be of greater service to students, teachers, principals, and other involved personnel.