Methodology for input evaluation, as defined by Daniel L. Stufflebeam, is relatively nonexistent. Advocate teams have recently become a popular means of generating and assessing alternative strategies for a set of objectives. This study was undertaken to develop and evaluate methodology for advocate team use in input evaluation. Steps taken included conducting a series of four case studies where advocate teams were used, development of a conceptualization and exemplary operationized procedures for advocate team use, and an evaluation of the proposed methodology through written critiques and empirical application. The methodology was revised, based on the evaluation results. (Author)
Methodology Development
For Advocacy Team Use
For Input Evaluation

by

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INTRODUCTION

Major breakthroughs have been made in educational evaluation theory development during the past ten years. However, a great need still exists for evaluation methodology. This paper describes a study in which methodology for input evaluation using advocate teams was created and evaluated.

Input evaluation is the "I" in the CIPP evaluation framework developed by Daniel L. Stufflebeam. Specifically, input evaluation provides

...information for determining how to utilize resources to meet program goals. This is accomplished by identifying and assessing 1) relevant capabilities of the responsible system, 2) strategies for achieving program goals, and 3) designs for implementing a selected strategy.

The value of input evaluation in education is evident. Often in the past a person or perhaps a group of people have designed a program based solely on their past experience and common sense. There is no systematic look at the resources of the agency, nor is any effort made to identify or develop alternative programs, let alone assess the alternative programs in terms of pre-determined criteria.

The input evaluation framework can be used to identify and assess known available alternatives. However, sometimes known alternatives do not exist and therefore must be created.

When this happens, advocate teams provide a vital function in the input evaluation framework, in that they create alternative means for accomplishing a given set of objectives.

Advocate teams generally refer to groups of people specifically selected and oriented to develop alternative strategies. The term "advocate," however, needs further explanation. A criterion for selection of team members may be that the members hold a certain philosophy or "advocate" a particular position before they engage in strategy development. For example, in the development of an elementary school program for migrant students, one team may consist of experts who advocate behavior modification, while a competing team may be composed of "British infant school" advocates. The advocate team idea and the input evaluation framework provided the boundaries within which methodology was created.

The study described in this paper contained three major parts. First, a "state of the art" picture of advocate team use was obtained by conducting four case studies on previous uses of advocate teams. The case results were analyzed and relevant literature was surveyed. Second, a technical manual was developed which included a basic conceptualization as well as exemplary operationalized procedures for doing input evaluation using advocate teams. Third, the manual was evaluated in terms of its conceptual adequacy and practical utility. Each of these three activities—the case studies,
development of the technical manual, and evaluation of the manual—will be described in the following sections.

CASE STUDIES

The case study approach is extremely valuable when relatively little is known about the area—in this case, how advocate teams really work or how one would actually go about doing input evaluation. The four cases selected for study satisfied the criteria of relevance and feasibility. In addition, the four case studies were, at the beginning of this study, the only major efforts to use advocate teams that have been identified. The four cases were:


2. Planning Grant for the Development of The Ohio State University Model Training Program, conducted by The Ohio State University Evaluation Center, 1970.

3. Design of a Planning and Assessment System for the Division of Manpower and Institutions, conducted by The Ohio State University Evaluation Center, 1971.

4. A Replanning Study of the Illinois Plan for Program Development for Gifted Children, conducted by The Ohio State University Faculty of Educational Administration.

The procedures used in conducting the case studies will be presented, followed by a summary of the analysis.
Procedures

In order to set boundaries for the case analysis and collection of data, the following dimensions were specified prior to conducting the case studies.

1. Substantive content - The case studies provided a tracing of ideas and events relating to advocate team use. The content included an intensive look into identification of the methodology used, how it was developed, and the participants involved.

2. Time durations - A historical retrospective time line was used. It began when the decision was made to use the advocate team approach and ended when the strategies developed were at the point of being implemented. A section at the beginning of the study summarized relevant antecedent events. A brief section at the end of the study, labeled "Aftermath," summarized relevant events during implementation.

3. Richness of detail - Within the case studies, richness of detail was less for historical events which were not directly related to development of the methodology itself and how it was used. In like manner, processes not directly related to the delineation of the methodology and its use were treated more superficially.

4. Perspective of the narrator - Within this dimension, there were differences within case studies. For two of the cases the investigator played the role of an outside observer, coming on the case after it was completed. For the remaining two case studies, the investigator played a part during the usage and thus may be termed an insider, conducting the case after its use.

5. Style of reporting - The style of reporting selected for the case studies included narrations, summary presentations, and exhibits.

6. Framework - Culbertson, Jacobson, and Reller have listed and described five perspectives that can be
used, either singly or in combination, in
developing a case.\textsuperscript{2} A combination of frameworks was selected as most appropriate for this case study methodology. The framework was \textit{historical}, in that case events were described in a chronological series. The case studies were \textit{thematic}, in that the case was built around the particular theme of advocate team methodology and use. Finally, the case approach included the \textit{process} framework, as it focused upon group and individual interactions in the development and use of advocate team methodology.

In addition to determining dimensions of the case studies, a systematic sequence of activities was outlined. A work breakdown schedule and a checklist of activities were developed prior to the initiation of the case studies and were used as guides for each case study.

Various procedures were used to increase the case study validity and reliability; e.g., a variety of sources of data were used; primary and original sources were used when possible, as opposed to second-hand data sources; a system for identification and solution of data discrepancies was developed and used.

The case studies were derived following the framework just described. Over two hundred fifty documents were analyzed, and extensive interviews were conducted with approximately thirty persons.

\textbf{Case Study Analysis}

Looking across case studies in terms of general characteristics, several things were observable. First, two uses of

\begin{itemize}
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advocate teams were sponsored at the state level, two at the federal level. Second, all advocate teams were used to create strategies for an area in which acceptable alternatives were not available. Third, the programs created by advocate teams in these case studies were to be implemented in a variety of settings: a research and development laboratory, a university, a state department, and a federal agency.

When roles across the case studies were analyzed, several things were noticeable.

1. All cases had a group or team of people directly responsible for selecting, orienting, and running advocate teams.

2. All cases involved the system decision makers in some fashion; however, degree of involvement varied.

3. In all cases a group of people assessed the strategies through some procedure, although the procedures used varied greatly. In all cases assessment results were provided to system decision makers. Actual decisions about selection of strategies or convergence of strategies were made by these decision makers.

4. All cases used advocate teams. One case used advocate teams twice for two different purposes. Only one of the cases studied selected team members because they advocated different positions prior to program development. Knowledge of these facts had a direct impact on how advocate teams were defined in the technical manual.

Since the purpose of this study was to design a technical manual for input evaluation using advocate and design teams, analyses of the case studies in terms of how activities related to input evaluation functions was critical. First, there was
variance in the degree to which advocate teams followed an input evaluation framework. One case study contained almost all of the functions within input evaluation, whereas two others contained only a few elements (identification of capabilities and identification of alternative strategies). Second, most of the information obtained on advocate team use in all cases centered around the identification responsibilities of advocate teams. Although some information on assessing strategies was obtained, little information on system capabilities was identified. Also, the design function of input evaluation was present in only one case study.

Information obtained about the identification aspect of advocate team use can be further delineated into a series of generalizations across case studies, which were taken into consideration in development of the technical manual. These generalizations were as follows:

1. Selection of advocate team members was viewed as an extremely important process because it directly affects the output from the teams.

2. Use of documents presented problems—generally, too many were used and often the documents were not viewed as relevant by team members.

3. An orientation session was viewed as a useful way to orient team members. However, orientation sessions should provide added information to advocate team members and allow time for questions and answers.

4. Advocate team sessions ranging from three to five days were cited as appropriate.
5. Writing sessions should be located where interruptions are not possible. Some, but not all, persons interviewed preferred a motel location to an office location.

6. Assistance of administrative personnel during actual writing sessions will increase the effectiveness of the team.

7. Developers of specifications for advocate team use were concerned about the degree of specification--they wanted creative responses and yet they were concerned that the strategies would not be useful if no structure was provided.

8. All advocate teams felt free to deviate from the specifications if they could establish a rationale for the deviation, and often they did.

9. The number of team members cited as appropriate ranged from three to six.

In addition to generalizations across case studies, strengths and weaknesses within each case study provided additional information for manual development. The strengths of the individual case studies were often included in the manual. For example, one of the strengths cited was the development of dissemination materials through which many reference groups could provide evaluative input about the three plans developed by advocate teams. Descriptions of these activities were presented in the manual as a possible assessment procedure.

The weaknesses cited within cases were also used, in that processes were included which hopefully would prevent the occurrence of the weakness in other uses of advocate teams. For example, in several case studies, a large amount of
information pertinent to the task assigned to advocate teams was not used. In order to provide this needed information to advocate teams without placing unrealistic reading expectations on team members, the role of input evaluation resource person was created. This person would work with advocate teams and retrieve and summarize needed information upon request. A large number of ideas, as well as actual content for the manual, was derived from the case study analysis of strengths and weaknesses.

Finally, the case studies were analyzed for another purpose, i.e., identification of areas where additional literature was needed.

TECHNICAL MANUAL

The technical manual was developed after completion of the analysis of case studies and the review of literature. The three major activities involved in the manual development were as follows: selection of a logical framework; identification of key elements to be included in the manual; and writing and rewriting. Each of these is described briefly.

A number of possible frameworks were surveyed for possible use in development of the manual. These included the framework which Guba and Stufflebeam used to describe an evaluation unit (capability, procedural accuracy, and credibility and
acceptance). Another possible framework was that provided by Gerald Nadler in his systems work. Both of these frameworks were rejected, as the investigator felt that the framework elements would need to be explicated and use of these frameworks might confuse the readers. Therefore, the investigator chose to use the rather simple framework of roles and functions. The roles and functions framework seemed to fit into the content of the manual without extensive explanation of terms to the potential user.

Key elements within the framework were derived from the case study analysis, related literature, and past experience of the investigator in use of advocate teams. Table 1 on page 11 provides summary information about the sources of various manual elements.

The manual was revised four times after the original draft, based upon the critiques of students and staff at the OSU Evaluation Center.

The manual was divided into three major parts, each of which answered specific questions. The first part answered the

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### TABLE 1

SUMMARY OF MANUAL ELEMENTS BY SOURCES OF INFORMATION

<table>
<thead>
<tr>
<th>Element</th>
<th>Sources of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Definition of input evaluation</td>
<td>5</td>
</tr>
<tr>
<td>2. Definition of advocate teams</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>3. Definition of design teams</td>
<td>2, 5, 6</td>
</tr>
<tr>
<td>4. Necessary conditions</td>
<td>1, 2, 3, 4, 5, 6</td>
</tr>
<tr>
<td>5. Role of System Decision Makers</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>6. Role of Input Evaluation Team</td>
<td>1, 2, 5, 6</td>
</tr>
<tr>
<td>7. Role of Advocate Teams</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>8. Role of Design Teams</td>
<td>2, 5, 6</td>
</tr>
<tr>
<td>9. Role of Technical Writers</td>
<td>2; 4</td>
</tr>
<tr>
<td>10. The problem of criteria</td>
<td>1, 2, 5, 6</td>
</tr>
<tr>
<td>11. Identification and assessment of capabilities</td>
<td>5</td>
</tr>
<tr>
<td>--need for this information</td>
<td>1, 5, 6</td>
</tr>
<tr>
<td>--procedural steps</td>
<td></td>
</tr>
<tr>
<td>12. Identification of alternative strategies</td>
<td>1, 2, 3, 4, 6</td>
</tr>
<tr>
<td>--selection of Advocate Teams</td>
<td>1, 2, 4, 6</td>
</tr>
<tr>
<td>--use of documents</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>--development of specifications</td>
<td>1, 2, 3, 6</td>
</tr>
<tr>
<td>--orienting the teams</td>
<td></td>
</tr>
<tr>
<td>--the actual writing session</td>
<td>2, 3, 4, 6</td>
</tr>
<tr>
<td>13. Assessment of alternative strategies</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td>--criteria identification</td>
<td></td>
</tr>
<tr>
<td>--weighting of criteria</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td>--identification of interpretation and decision rules</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td>--actual assessment procedures</td>
<td>2, 3, 4, 5</td>
</tr>
<tr>
<td>14. Identification of design</td>
<td>2, 6</td>
</tr>
<tr>
<td>15. Assessment of design</td>
<td>5, 6</td>
</tr>
</tbody>
</table>

Code: 1 - Case Study #1  
2 - Case Study #2  
3 - Case Study #3  
4 - Case Study #4  
5 - Related Literature  
6 - Professional Judgment of investigator
What are the prior conditions necessary for the use of input evaluation using advocate teams?

The second part answered the question: What personnel do I need in order to use input evaluation employing advocate teams? Specific needs are discussed in terms of five roles.

The third major part answered the question: How do you do input evaluation? It included a section on criteria, a flowchart, and a series of overall guidelines and procedural steps for each of the three functions of input evaluation.

EVALUATION

Evaluative data on the technical manual were obtained from a number of persons. Essentially, two major questions were answered through the evaluation:

1. What is the worth of the manual as it now exists?
2. How can the manual be improved?

The sections which follow describe the evaluation procedures used and present the results. Two separate groups provided evaluative information. The first group consisted of the staff of a project which was currently using advocate teams. The second group (the critique panel) consisted of people who had been involved in previous uses of advocate teams.
Procedures

On July 1, 1972, The Ohio State University Evaluation Center entered into a contract with the Ohio State Department of Education to generate and assess alternative accountability models for the State of Ohio. Since this project included use of advocate teams, it seemed appropriate for the project staff to use the technical manual and provide evaluative feedback to the investigator on the worth of the manual and how it could be improved. It should be noted that the project did not use the entire manual. In some cases suggestions made in the manual were implemented by the staff; in other cases it was not possible to implement sections of the manual because of the uniqueness of this specific contract and because the staff did not have a copy of the manual until after the project was underway.

Several means of data collection were used in the evaluation of the manual within the accountability project. First, tape recordings were made of the first day's meeting of each advocate team. In addition to providing information on clarification needed by the teams, how they used their time, and what document were referenced, the tapes provided a rich description of ways in which the three advocate teams worked. Second, the project staff was asked to keep a log of questions pertaining to the manual. Third, an extensive questionnaire was completed by accountability staff members.
A critique panel consisting of twelve members was identified to critique the technical manual. Members of this panel were selected from persons who had had some involvement with advocate teams in the past. An exception was one person who had completed previous conceptual work on input evaluation, but was not familiar with advocate teams and their use.

Members of this critique panel were categorized into four groups, each group having three members. The first group contained methodologists in general. Persons selected for this group had previously developed methodology for advocate team use or for input evaluation in general. The second group was composed of decision makers who had been involved in a previous use of advocate teams. The third group of persons were evaluators from previous uses of advocate teams. And the remaining group represented a selection of persons who had served on an advocate team in one of the previous uses.

The questionnaire completed by the critique panel was divided into two parts. The first part contained a series of sixteen items about the manual or the methodology within the manual. The critiquers were instructed to rate each item by placing an X in the box underneath the description which most closely described their attitude toward the manual or the methodology. A four-point scale was used containing ratings ranging from "very poor" to "very good." A description of each
rating was presented within the box to anchor the item. The second part of the questionnaire asked for information on how the manual could be improved in general and/or in relation to specific sections.

Results

Several points are noteworthy in responses to the question, "What is the worth of the manual?" A large number of high ratings were obtained from the accountability project staff (three persons) on the six sections of the manual which they attempted to implement. Those sections were viewed as very valuable to the staff. Results indicated that the staff considered the manual worthwhile and that they attempted to implement it whenever possible. They also viewed the manual as very instructive in using advocate teams.

The questionnaire results provided by the critique panel supported the accountability project staff's perceptions of the manual's value. Many more ratings of "good" or "very good" were obtained for the criteria used to evaluate the manual than ratings of "poor" or "very poor" (five to one ratio). The manual itself and its suggested methodology were seen as having utility to a potential user. However, examples used in the manual and the methodology adaptability need improvement. Overall findings indicated that there is a great need for a manual of this type.

"How can the manual be improved?" Data obtained from responses to this question were of great importance to the
investigator; it is the intent of the investigator to proceed with the developmental process of the technical manual and to revise it extensively. Suggestions were received such as: include more examples; use a less formal writing style; and provide suggestions on how elements of the input evaluation process could be adapted to meet unique individual needs.

CONCLUSION

The preceding paragraphs described a study in which methodology for input evaluation using advocate teams was created and evaluated. The manual is currently under revision by the investigator. A large number of areas surrounding input evaluation need additional investigation. Both conceptual and empirical work are needed. However, input evaluation using advocate teams has been performed successfully and appears to be a valuable alternative for educational program development and assessment.