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Empirical literature on two types of hearings, and their applicability in evaluating educational programs, is reviewed. An introduction describes the use and nature of hearings and distinguishes adversary hearings, in which two parties argue opposing sides of an issue, from committee hearings, in which a variety of positions are presented to a panel of decision-makers. Adversary hearings, the type primarily used in evaluation, are the main focus of the paper. Following a brief overview of literature on adversary hearings, the discussion covers strengths of the adversarial approach, hearing procedures (including a table illustrating basic steps and variations), applications (including a table showing recent uses of adversary hearings in evaluation), and problems and limitations of the approach. Committee hearings and their uses, for which much less literature is available, are then briefly examined. The paper concludes that (1) adversary hearings effectively involve large groups in complex issues, and (2) committee hearings "might provide some of the benefits of adversarial hearings without the same problems," and (3) "much more public trial, testing, and revision are needed" for both hearing types. (MCG)
PREFACE

The Research on Evaluation Program is a Northwest Regional Educational Laboratory project of research, development, testing, and training designed to create new evaluation methodologies for use in education. This document is one of a series of papers and reports produced by program staff, visiting scholars, adjunct scholars, and project collaborators—all members of a cooperative network of colleagues working on the development of new methodologies.

Adversary and committee hearings have been advocated as procedures which can effectively involve large numbers of people in clarifying issues and examining human testimony in the evaluation of complex, highly politicized programs. This report reviews the strengths, procedures, and applications of these two methods over the last fifteen years, summarizing their problems and limitations as evidenced in field trials to date. An extensive bibliography is included.

Nick L. Smith, Editor
Paper and Report Series
Hearings are a common inquiry and information presentation device in our society. They are used in diverse applications such as to render judgments under the law, to review proposed legislation in Congress, to assess the impact of planned environmental changes, to make decisions about the release of individuals from prisons and mental hospitals, to provide public accountability for administrative actions, and for numerous other applications.

In this report, I focus more narrowly on the use of hearings as a tool in conducting evaluations. Although the examples cited here concern primarily the evaluation of educational programs, the principles, procedures, problems, and benefits of the hearings process are probably applicable to a wider range of evaluation settings and topics.

By "hearings," I am referring to the structured, oral presentation of information, evidence, and argument in a group setting with representatives of the primary audience in attendance. There are many variations possible within this broad definition, however; for example, (1) the presentation may be highly structured and rule-governed (e.g., using a legal trial format) or more informal (e.g., a committee briefing); (2) the evidence and information presented may be anecdotal and testimonial (e.g., participants' perceptions) or formal and inquiry-based (e.g., from controlled studies or replicable analyses); (3) the purpose of the hearing may be simply to share descriptive information (e.g., presentation of alternative plans) or to arrive at a decision (e.g., to render a verdict or make a
final administrative determination); and (4) the audience may be a large public body (e.g., school district parents), a representative group (e.g., a grand jury), or an empowered official (e.g., a judge or an agency chief administrator).

Although innumerable variations of the hearings process are possible for the sake of this review, I have defined two subcategories:

(1) adversarial hearings, in which two opposing sides argue the merits of the case or problem at hand within a competitive and adversarial format. Civil and criminal trials are popular models for this type of hearing.

(2) committee hearings, in which a number of positions (not just pro and con) are presented, often by representatives of a variety of interest groups. Congressional committee hearings, public policy hearings, presentations to boards of directors and advisory councils are models for these hearings.

In practice, these distinctions are, of course, not always clear. Indeed, evaluation uses of hearings are marked more by their diversity than their similarity. To hazard an oversimplification, however, one might say that adversarial hearings tend to be more formalized and focused, with considerable attention to reaching a definitive conclusion. Committee hearings are more open to consideration of a range of alternative positions, with less focus on issue resolution and more on issue examination and information sharing.

This report provides an introductory overview to the use of hearings in evaluation. I touch upon the strengths, procedures, and applications of evaluative hearings over the last fifteen years. Since my purpose is to provide a brief "state of the method" review, I have included an exhaustive identification of the literature and devote most attention to the problems and limitations of hearings as an evaluation method. This paper should provide those researchers considering the use of hearings with a solid, but concise, introduction.
By far the most applications of evaluative hearings have employed the adversarial approach. I therefore begin with that model and conclude with a summary of the few applications of the committee hearings approach. In both cases, my focus is more on the actual uses of these methods than the theory of how they are supposed to work.

**Adversary Hearings**

Levine (1982) summarizes the adversarial hearings approach as follows:

In essence, the adversarial model operates with the assumption that truth emerges from a hard, but fair fight, in which opposing sides, after agreeing upon the issues in contention, present evidence in support of each side. The fight is refereed by a neutral figure, and all the relevant evidence is weighed by a neutral person or body to arrive at a fair result.

(Levine, 1982, 270)

Early writings on the theory, use, and conduct of adversary hearings in evaluation included that of Owens (1973), Wolf (1973), and Levine (1974). Subsequent writings have urged the expansion of adversary approaches (Wright and Sachse, 1977), summarized case studies of adversary evaluations (Owens and Hiscox, 1977), proposed criteria for judging the quality of adversary hearings (Worthen and Owens, 1978), and discussed adversary hearings as an example of one of several evaluation improvements possible by adapting procedures from the law (Owens and Owen, 1981). (Additional writings have included Kourilsky and Baker (1976), West (1976), Shore (1977), Worthen and Rogers (1977), Levine and Rosenberg (1979), and Nadler and Shore (1979).

In passing, it should be noted that there have also been discussions and applications of adversarial procedures which have not employed the hearings process. For example, Levine (1973a) has suggested the assignment of a staff "adversary" to a research project to cross-examine each piece of evidence as it is collected. Kourilsky (1973a) described a procedure in which arguments for and against a particular program or policy are
presented to a decision maker who questions the presenters and synthesizes a decision. Stake and Gjerde (1971) incorporated advocacy and adversarial statements in the final evaluation report of a summer institute. An advocate summarized the most favorable arguments in support of the institute, while the adversary summarized the most damaging criticisms. Criticisms of these approaches have also been made (cf. Kourilsky, 1973b; Levine, 1973b).

**Strengths**

A number of strengths or benefits of conducting adversary hearings have been suggested in the literature, including that adversary hearings:

- permit the various persons affected by a program to be involved in its evaluation and thus incorporate a variety of perspectives (Wolf, 1975; Wolf, 1979);

- foster alternative interpretations of evidence prior to reaching a conclusion (Wolf, 1975);

- admit human testimony and judgment as evidence, in contrast to more traditional evaluation approaches (Wolf, 1975; Wolf, 1979);

- present both pro and con evidence and provide for cross-examination of testimony (Owens et al., 1976);

- respond more directly to audience information needs (Owens et al., 1976);

- incorporate the use of a wide variety of data while preserving the complexity of the program and its social setting (Wolf, 1975; Levine et al., 1979);

No one suggests, of course, that adversary hearings are always the most desirable method. Worthen and Owens (1978), and Madaus (1982) suggest conditions under which adversary hearings are most appropriate; for example, when the program is controversial and public opinion regarding its value is polarized, when decisions must be made about terminating a large program that affects many people, and so on.

Experiences in actually applying adversary hearings tend to support these claims of the benefits of the process.
Procedures

For detailed examples of the procedures for conducting adversary hearings, see the application reports listed below in Table 1. Wolf (1979) provides a generic structure for conducting adversary hearings, which includes:

Issue_generation, in which possible specific issues to be addressed in the hearing are identified and developed;

Issue_selection, in which issues not in dispute are set aside and those to be "tried" are prioritized and further developed;

Argument_preparation, in which the pro and con cases concerning the issues to be tried are developed through collection of evidence and the building and testing of arguments;

Clarification_forum, in which the actual hearing is held to present the pro and con cases, to evaluate the collective evidence and arguments, and to render decisions or recommendations.

Many variations within this general structure are possible, some of which are outlined below.

Basic Procedure Variations

1. Issue(s) to be addressed are clarified and selected prior to hearing
   Issues emerge as each side attempts to make its best case

2. Two sides gather evidence to best make their own case; the evidence is collected, organized, and weighed, using interviews, observations, document review, summaries of quantitative data
   The same initial set of data is shaped by both sides who subsequently use it to argue pro or con

3. Persons affected by the program being studied are involved in the process of shaping issues and identifying evidence
   Representatives of affected parties participate, or affected parties serve essentially only as audiences

4. Hearing is held: evidence presented, witnesses testify and are cross-examined
   Some points may be conceded prior to hearing
   Expert testimony or documentary evidence may be admitted prior to the hearing
5. Cases for and against are presented
   Only case for or against is presented, other side challenges arguments and evidence

6. Jury reaches decision
   No decision reached, only information for decision provided
   No jury; general audience serves as jury
   No jury; judge (or decision-maker) makes decision

Applications

Probably the first formal application of an adversary hearing approach in educational evaluation was in 1970 (Owens, 1971). Since then, there has been a variety of applications; adversary hearings have been used to evaluate school curricula, teacher training programs, graduate professional programs, and school policy in special education. Table 1 below contains a brief summary of nine formal applications of the adversary hearings procedure made to date. These applications range from nationally televised external studies to small-scale, in-house reviews. They evidence a variety of contexts, purposes, and procedures.

Problems and Limitations

Generic problems. Because hearings are a relatively new approach to the conduct of evaluation, considerable attention has been given to their limitations and to the problems of conducting them. Some of these difficulties have to do with the competitive nature of the adversarial process; for example, the qualifications and abilities of the adversaries may not be balanced (Wolf, 1975; Owens et al., 1976), the audience may be influenced more by the persuasiveness of the individual adversaries than by the evidence presented (Owens, 1973; Owens et al., 1976), or "winning" may become more the goal of the participants than clarifying and deciding issues (Levine et al., 1978; Wolf, 1979)—which may result in a distorted and unhelpful polarization of viewpoints (Worthen and Owens, 1978).
Table 1
Applications of Adversary Hearings

<table>
<thead>
<tr>
<th>Year</th>
<th>Focus of Evaluation</th>
<th>Issue(s) Addressed</th>
<th>Highlights of Design Employed</th>
<th>References</th>
</tr>
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<tbody>
<tr>
<td>1970</td>
<td>Hearing process itself was primary focus of evaluation</td>
<td>Should the curriculum &quot;Man: A Course of Study&quot; be adopted in the Hawaii public schools?</td>
<td>Used an &quot;administrative-adversary hearing&quot; model; Hearings officer, two adversaries; Three audience representatives as judges; Two-hour public hearing; Ground rules explicated in advance; Witnesses, charges, rebuttals, and redirect examination</td>
<td>Owens (1971) Owens (1973)</td>
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<tr>
<td>1974</td>
<td>Experience-based career ed. program for high school students</td>
<td>Should this program be adopted by your school?</td>
<td>Video-taped hearing; Witnesses for and against adoption; Cross-examination of testimony; External professors hired as adversaries</td>
<td>Hiscox &amp; Owens (1975) Owens et al. (1976)</td>
</tr>
<tr>
<td>1975</td>
<td>University broad-based teacher educa- tion program</td>
<td>What impact has the new teacher education division had on the improvement of teacher preparation?</td>
<td>After 6 months' preparation, a 2-day, videotaped hearing was held before a 13-member national jury panel; 32 witnesses testified, testimony cross-examined, documents entered as evidence; Jury could ask questions, and rendered judgments on issues, including recommendations for program modification</td>
<td>Arnstein (1975) Wolf (1975) Stenzel (1975) Bullock (1976)</td>
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<td>1976</td>
<td>Doctoral candidacy procedures in a clinical and community psychology program</td>
<td>Is the program, as operated, violating its stated standards and purposes?</td>
<td>A hearings process was used to establish program purpose and standards; A 1-1/2 day public hearing followed jury trial procedures closely except rules of admissible evidence were relaxed; Jury had 4 hours to deliberate, reached near-unanimous decisions and program reform recommendations; Extensive meta-evaluation of the study conducted</td>
<td>Garvey &amp; Levine (1976) Levine (1976) Levine et al. (1978)</td>
</tr>
<tr>
<td>1976</td>
<td>Statewide primary grade team teaching program (3 on 2 Program)</td>
<td>Is the program successfully meeting its goals?</td>
<td>Ten evaluators jointly designed study; data collection and analysis; Two 4-person evaluator teams randomly assigned to pro or con positions; other 2 evaluators served as arbiters/facilitators</td>
<td>Nafziger et al. (1977)</td>
</tr>
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(28)
(Table 1 continued)

<table>
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<tr>
<th>Year</th>
<th>Focus of Evaluation</th>
<th>Issue(s) Addressed</th>
<th>Highlights of Design Employed</th>
<th>References</th>
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</thead>
<tbody>
<tr>
<td>1977</td>
<td>Public Law 94-142: Education for all Handicapped Children Act</td>
<td>Will use of procedural documents be limiting? Will standardized procedures facilitate implementation? Will requirements increase quality of education?</td>
<td>Modified debate hearing procedure used in closed meeting with school officials and legislators. One-hour, videotaped version shown on statewide television with audience input encouraged. Three-day hearings held in each of 4 states. Two teams organized in each state. Several hundred persons interviewed in each state during 5 rounds of interviews. Written recommendations from hearings were used in final drafting of federal regulations.</td>
<td>Wolf &amp; Tymitz (1977) Wolf (1979)</td>
</tr>
<tr>
<td>1978</td>
<td>How public schools are governed</td>
<td>What are the policy alternatives for school governance in this district?</td>
<td>Community-wide participation in process. Hearing held over 3 consecutive evenings after several months of field interviews. Recommendations from citizen panel presented to school board and in local media.</td>
<td>Wolf (1978) Wolf (1979)</td>
</tr>
<tr>
<td>1984</td>
<td>Textbooks for an evaluation seminar</td>
<td>Should last semester's texts continue to be required for this semester?</td>
<td>Adversaries were previous student users of the texts. Judge and jury members were departmental colleagues of the instructor. Teams had access to each other's data. Jury could ask questions and had 30 minutes to render a verdict.</td>
<td>Brown &amp; Palmere (1984)</td>
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References

Wolf & Tymitz (1977)
Wolf (1979)
Wolf (1978)
Wolf (1979)
Herndon (1980)
Bourexis (1982)
Drennan & Stalford (1982)
Estes & Demalone (1982)
Other problems have to do with managing the hearing process itself. For example, adversarial hearings require extensive preparation time (Owens, 1973). Cost estimates from Levine et al. (1978) suggest that only 16 percent of their total effort went into the hearing itself, over 80 percent went into preparation, case building, and managing the process. Further, time limitations can force a focus on only a few issues with important evidence being omitted from the proceedings (Wolf, 1975; Owens et al., 1976, Levine et al., 1978).

Lack of experience with the hearing process also creates problems. It is difficult to clearly present complex quantitative data in a hearing format (Levine et al, 1978), and issue framing, selection, and presentation is a most time-consuming and troublesome task (Arnstein, 1975; Levine et al., 1978; Wolf, 1979). (I will return to this problem in a moment.)

Finally, few individuals are adequately prepared to participate in adversarial evaluations. It is difficult for citizen panels to produce recommendations that are specific, operational, and helpful. The issues, evidence, and arguments presented to them must be detailed and specific (Wolf, 1979). It is also difficult to identify persons with proper skills and characteristics to function effectively in roles of panel member, adversary team leader, proceedings moderator, etc. Experience gained from the studies listed in Table 1 does suggest, however, that clear charges, explicit instructions, shared expectations, and some training are effective in improving the quality and impact of the proceedings (Wolf, 1975; Levine, 1978; Wolf, 1979; Braithwaite, 1980).

Specific studies. The 1976 study of a statewide team teaching program—the Hawaii 3 on 2 Program (Nafziger et al., 1977), and the 1981 hearings on minimum competency testing—the MCT Clarifications Hearings (Herndon, 1980; Drennan and Stalford, 1982; Estes and Demaline, 1982) have been the most widely publicized and criticized applications of adversary hearings procedures to date. Brief summaries of the criticisms of each follow.
The Hawaii 3 on 2 Program was a statewide team-teaching program in which three teachers worked with two classrooms. Two of the evaluators participating in the adversary process (see Table 1), James Popham and Dale Carlson, subsequently published a highly critical assessment of the method based on their experiences (1977). Of their six major criticisms, three were similar to problems previously identified: the imbalance in the skills of the adversaries, the difficulty in framing issues, and the the expensiveness of the process. In addition, they charged that too much confidence was being placed in the power of the adversarial process, that the intent of a fair, unbiased hearing process could be subverted by an unscrupulous decision maker, and that fallible judges or hearing moderators could severely damage the outcome of the proceedings. In response, Jackson (1977) criticized Popham and Carlson for failing to mention that their criticisms were equally applicable to other available evaluation procedures, for ignoring the possible benefits of the adversary approach, and for reaching a premature judgment based on limited experience. Thurston (1978) similarly charged that the Popham and Carlson criticisms were irrelevant, unfair, and failed to adequately address two serious shortcomings in the model, the definition of issues and the use of the jury.

Even more has been written about the minimum competencies testing clarification process, including papers on its procedures, results, and evaluation (Herndon, 1980; NIE, 1981; Bourexis, 1982; Drennan and Stalford, 1982; Estes and Demaline, 1982). In addition, the substantive content of the hearings (Madaus, 1981b; Popham, 1981a; Shoemaker, 1981; Thurston and House, 1981) and the role of television in the evaluation (Herndon and Shoemaker, 1981; Shoemaker, 1982) have been discussed.

The leaders of the pro and con adversary teams of the MCT evaluation, James Popham and George Madaus, respectively, wrote critiques of the clarification process. Madaus (1982) reported that although the sponsoring agency, NIE, and the public were apparently pleased with the hearing process, that he would not
choose to repeat the experience. He cited such problems as the way the use of public television affected the proceedings (e.g., the selection of witnesses, the presentation of complex evidence, and the editing of 24 hours of material down to 3 hours), inadequate budget, insufficient hearing time for testimony, the labeling of teams as "pro" and "con," the intrusiveness of the sponsoring agency, and the difficulties of sharing data across the teams. Popham (1982) complained about the problems of team competitiveness in spite of attempts to be collaborative, the effect of the use of public television, and the high expense of the process. Popham concluded that he was more positive about adversary hearings after this study than after the 3 on 2 evaluation (e.g., Popham and Carlson, 1977), and that he would welcome the opportunity to repeat the experience. Madaus (1982) concluded that adversary hearings of this nature were probably better suited to state and local rather than national settings and that a documentary format would have done a better job of clarifying issues for television broadcast than an adversary hearing.

**Issues clarification.** One of the most difficult aspects of the adversarial hearings process seems to be the identification, selection, and presentation of issues for trial and resolution. Allowing issues to emerge as each side attempts to present its own best case is not only inefficient, but confuses participants, inhibits the presentation of clear, relevant evidence, and makes it difficult for the jury or panel to reach specific, useful recommendations and decisions.

A number of approaches to issue clarification have been tried. Wolf (1975) used a committee to review program complaints and to select issues to be tried. Levine et al. (1978) employed a "legislative hearing" process, prior to the actual trial, to establish a statement of program purpose and standards against which the program's performance could be tried. Thurston (1978) has suggested using a non-jury legal approach such as an appellate court model to better formulate issues. Under the appellate model, the educational court would precisely and
narrowly state what is at issue and then decide the issue based on standard educational practice and the evidence at hand. Perhaps other approaches such as Dillon's (1984) procedures for question formation could be applied to the identification and shaping of issues for adversarial hearings.

As a result of their experiences with the MCT clarification hearings, both Popham (1981b) and Madaus (1981a) have offered suggestions on how better to frame issues on adversary hearings of MCT programs: Popham arguing that issues ought to be phrased in terms of program effects, Madaus arguing that they ought to be in terms of program functions. House et al. (1984) pay considerable attention to the problem of issue specification in their analysis of the MCT process. They suggest that the vague specification of abstract issues was a primary cause of the confusion and lack of focused argument in the proceedings. In concert with most of the writers who have participated in adversary hearings, they strongly emphasize the necessity for a clear delineation of the contested issues which are then joined in argument by the adversary teams.

Summary

As Levine (1982) points out, the studies of adversary evaluation presented in the literature say little about how the jury or panel's verdict subsequently influenced the program under study. Much of the attention to date has focused on how to make the process work. The participants, and especially the organizers of these studies, report general satisfaction with adversarial hearings. While they acknowledge a number of problems (especially the considerable effort involved, the difficulty with issue clarification, and problems of the competitive nature of the process), they remain convinced that the procedure is an effective way to provide for public participation and scrutiny of human testimony in evaluating complex programs and policies. Levine's (1982) comments seem to
reflect the position of most advocates of the adversary hearing process:

The need to develop fair methods of fact-finding and dispute resolution, and convincing methods of presenting controversial findings is as important as the need to develop more powerful or efficient research methods. (Levine, 1982, 276-277.)

Committee Hearings

There is much less writing and experience available on the use of committee hearings as an evaluation method. Levine et al. (1978) did employ a "legislative" hearing approach to clarify program purposes and standards prior to an adversarial hearing. They report that some participants felt that the purpose of the evaluation could have been met solely with the legislative hearing in which there were no clearcut sides and no teams acting in adversarial roles. Most witnesses felt more comfortable in the legislative hearing where they were allowed to give fuller versions of their own stories. Thurston (1978) has also suggested that administrative hearings (a variation of committee hearings) is an alternative model without certain problems of adversary hearings. Stenzel (1982a, 1982b) has written the most formal descriptions of the use of committee hearings in evaluation. His descriptions have been developed by using congressional committee hearings as an evaluation model.

Committee hearings (and variations based on administrative, legislative, or congressional hearing models) have much in common with the adversary hearings just reviewed. They consist of public hearings where a variety of persons affected by the program being evaluated may observe, provide testimony, and ask questions. Important differences are that committee hearings are not designed as adversarial procedures and a variety of positions are explored, not just pro and con. More emphasis is placed on issue clarification and information sharing and less on rendering a verdict, although recommendations and decisions might result from the deliberations.
The general procedures for conducting committee hearings are similar to those for adversary hearings:

- Parent body establishes a committee and chooses a chairperson;
- Council and professional staff are appointed;
- Professional staff clarify committee charges and issues, conduct research, and select witnesses;
- A hearing is held, moderated by the committee chairperson, with assistance from the counsel and staff;
- Opening statements and witness testimony are given;
- Committee members examine evidence and question witnesses;
- Professional staff prepare a preliminary report;
- Committee finalizes report and submits it to its parent body.

As with adversary hearings, many variations of this basic procedure are possible. For example, Stake and Balk's (1982) use of a hearing process to brief an ad hoc panel can be seen as a variation of a committee hearing. See Stenzel (1982a) and St. John (1984) for detailed discussions of procedures and role responsibilities of participants.

There have been two clear applications of committee hearings as an evaluation technique.

In 1975, the Illinois Office of Education established a 9-person examination committee to review the validity and recommendations of a commissioned evaluation. Third-party evaluators had been hired to evaluate 13 regional projects that provided services to low-incidence handicapped students in Illinois. The evaluators presented the report and findings to the committee which included representatives of private schools, public special education cooperatives, parent groups, and state office personnel. The committee examined the report, heard testimony, questioned the witnesses, and prepared a written report to the Office of Education (Illinois Office of Education, 1975; Jones, 1976; Stenzel, 1982a).

A textbook selection committee in an Illinois school district used the committee hearing process to select a history book for adoption. As the parent body, they appointed a committee of 5 history teachers who conducted a preliminary investigation (needs analysis, reading analysis, and pilot studies) of prospective texts. Three textbooks were chosen and a hearing was held at which sales representatives, teachers using the texts and their
students, and a reading consultant provided testimony. Committee members questioned the witnesses and recommended a single text for district adoption (Stenzel, 1982a).

Just as committee hearings share some of the advantages of adversary hearings (open participation of affected parties, cross-examination of evidence), they also share some of the same problems; they are expensive, time consuming, and include tasks for which participants have little training or experience. Unfortunately, there has been so little formal experience with committee hearings in evaluation to date, that we know little about the true strengths and limitations of this method as it might actually be applied. While experience with the adversary hearings process suggests possible benefits and problems of committee hearings, actual experience with the method is currently very limited.

Conclusion

Although the history of adversary and committee hearings in evaluation has been relatively brief (15 years), several applications have been highly public and their discussion lively. Much attention has been devoted to the problems of actually conducting adversary hearings, which is understandable, given their dramatic departure from the more traditional forms of evaluation. Experience with adversary hearings has highlighted problems of issue clarification and the costliness and competitive nature of the process. Although the number of applications is not large, advocates and critics of adversary hearings still seem to agree that the process is an effective way to involve large groups of people in the collection and examination of testimony and argument about complex, highly political programs. Committee hearings, a largely untried method in evaluation, might provide some of the benefits of adversary hearings without the same problems. For both methods, much more public trial, testing, and revision are needed before final judgments of their utility will be warranted.
REFERENCES


Popham, W. J. (1981). The case for minimum competency testing. Phi Delta Kappan, 63(2), 89-91. (a)


