Sixty-five hour-long, topic-centered interviews were conducted with site-level administrators at elementary schools in a large urban school district to explore the relationships between evaluation information and other inputs into decision-making. The interviews focused on specific program-related decisions and sought to recreate the decision-making process as clearly as possible. These decisions sequences were analyzed to explore the relationship between the type of decision under discussion, the types of personnel who were involved, and the types of information that were utilized. The study found that personal opinion, rather than specific pieces of information dominated the decision process. In particular, evaluation data were mentioned only infrequently. However, when the decision process was subdivided into four stages—problem recognition, decision-making, ratification and dissemination, it was found that evaluation played a significant role in the problem recognition stage. It was also found that increased evaluation use was related to greater personal commitment on the part of key administrators.
The Relationship Between Evaluative Data and School Decision-Making

by

Brian Stecher

Educational Testing Service

Introduction

The purpose of this study was to examine the way information was used in decision-making at the local school level. Information derived from evaluation was of particular concern. However, the investigation was undertaken with a broader focus in order to ascertain the role of evaluative data vis-a-vis other information available to decision-makers.

The study focused on specific program-related decisions in urban elementary schools and sought to reconstruct the evolution of the decision as completely as possible. The individuals who participated, the sources of data that were brought to bear, the bases for opinions, etc., were all investigated. In this manner it was possible to determine the relative influence of different types of inputs and quantify some of these relationships. The purpose was to obtain a clearer understanding of the interrelationships between evaluation information and other elements of the decision process.

Background

Evaluation utilization is a relatively new area of research. In the late 1960's, Weiss (1966) found a paucity of empirical studies on the use of evaluation. There was plentiful speculation about the degree of evaluation use and the elements that affected it (Rossi, 1972; Aronson and Sherwood, 1967; Rodman and Kolodny, 1964) but there was little concrete evidence. In the decade of the 1970's, evaluation utilization became an active area of inquiry (Alkin et al., 1974; Patton et al, 1975; Hood and Blackwell, 1976; David, 1978; Alkin, Daillak and White, 1979).

*The research reported in this paper was performed at the UCLA Center for the Study of Evaluation pursuant to a grant from the National Institute of Education, U.S. Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education, and no official endorsement by the National Institute of Education should be inferred. This paper was presented at the annual meeting of the American Educational Research Association, April 13, 1983, Montreal, Canada.
This body of research helped to clarify the actual extent of evaluation utilization and the factors that seem to be determinates of evaluation use. In the past three or four years there has been a growing sensitivity to the subtle contextual and interpersonal variables that affect the role of evaluation. Recent research is characterized by greater reliance upon naturalistic techniques (Alkin, Daillak, and White, 1979; Daillak, 1980; Kennedy, Apling and Neumann, 1980).

Most of the research in this area can be characterized by very specific studies of evaluation activities. While this is a reasonable first step in examining the role of evaluation in decision-making, it does introduce a potential bias. Evaluation becomes a prominent feature in the research design, though it may not be such a prominent feature in the world of the school. Under such circumstances it is very difficult to obtain an accurate appraisal of the relative importance of evaluation in decision-making.

Kennedy, Apling, and Neumann (1980) adopted an interesting approach to combat this built-in bias. They asked respondents to focus on important "issues at hand" and examined these for the presence of evaluation. Thus they were able to assess the importance of evaluation in a particular context. However, while this approach identified situations that were personally important to the respondents, it did not necessarily identify events that were educationally important.

This study used a similar approach to determine the relative importance of evaluation in educational decision-making but focused specifically on significant occurrences in the life of the school's educational program. It grew out of earlier research conducted at the Center for the Study of Evaluation at UCLA, and utilized a data base gathered as part of the CSE User Interview Survey. Through an extensive quantitative analysis of this data base, informational components of the educational decision-making process in elementary schools were examined.

Procedures

Hour-long interviews were conducted with site-level administrators (principal, vice principals, program coordinators and resource teachers) at 20 randomly selected elementary schools in a large urban school district. The respondents each identified two significant program-related occurrences, and the interviewers probed to uncover specific decisions that were made. The interviews were structured to explore certain
specific issues, but within these areas the interviewers were free to pursue the discussion without constraints. Once decisions had been identified, an open-ended discussion was begun to recreate as clearly as possible the process through which the final outcome was reached.

Interviews were tape recorded, and these tape recordings were subject to quantitative analysis. Decision sequences were charted and information inputs were tallied. Frequency counts and cross-tabulations were used to explore the relationship between the type of decision under discussion, the type of personnel who were involved, and the types of information that were utilized in making the final choice.

Results

The discussions and quantified decision-sequences extracted from the interviews were analyzed in a number of ways. The first step involved simple frequency counts of the types of occurrences and elements of the decision process. Two of these analyses will be described here.

Types of Significant Occurrences

The respondents were asked to identify "significant occurrences" for discussion. Their responses provided an interesting glimpse of events that local school decision-makers deem to be important, the scope of program change that commonly occurs, and the types of decisions on which evaluation might conceivably be brought to bear.

Through a two-stage categorization process, the list of 73 significant occurrences was classified into 12 general categories. In order of frequency the occurrences related to: 1) instructional materials, 2) creation of new programs, 3) out-of-classroom professional staff, 4) small scale instructional programs, 5) bilingual program implementation, 6) general curriculum guidelines, 7) miscellaneous activities, 8) personnel actions, 9) evaluative events, 10) parent involvement, 11) staff development, and 12) patterns of student grouping for instruction. The size of these groups varied greatly and some were so small as to preclude reliable tests of differences in later analysis. However, faithfulness to distinctions between the actual events required that all 12 categories be retained. The frequency of each type of occurrence is displayed in Table I.
Table I
Type of Significant Occurrence

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Occurrences</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional materials</td>
<td>13</td>
<td>17.8</td>
</tr>
<tr>
<td>Creation of new programs</td>
<td>11</td>
<td>15.1</td>
</tr>
<tr>
<td>Out-of-classroom prof. staff</td>
<td>8</td>
<td>11.0</td>
</tr>
<tr>
<td>Small-scale inst. program</td>
<td>8</td>
<td>11.0</td>
</tr>
<tr>
<td>Bilingual program implementation</td>
<td>7</td>
<td>9.6</td>
</tr>
<tr>
<td>General curriculum guidelines</td>
<td>5</td>
<td>6.8</td>
</tr>
<tr>
<td>Miscellaneous occurrences</td>
<td>5</td>
<td>6.8</td>
</tr>
<tr>
<td>Personnel actions</td>
<td>4</td>
<td>5.5</td>
</tr>
<tr>
<td>Evaluation-related occurrences</td>
<td>3</td>
<td>4.1</td>
</tr>
<tr>
<td>Parent involvement</td>
<td>3</td>
<td>4.1</td>
</tr>
<tr>
<td>Staff development</td>
<td>3</td>
<td>4.1</td>
</tr>
<tr>
<td>Patterns of student grouping for instruction</td>
<td>3</td>
<td>4.1</td>
</tr>
</tbody>
</table>

From Table I it becomes obvious that the majority (64%) of the significant occurrences identified by the respondents concerned matters of curriculum and instruction. In this regard they share the common view of what is "important" in schooling. These are also areas in which evaluation conceivably can have positive impact.

Types of Information

During the interviews respondents were asked for data about two components -- the personnel who were involved and the information sources that were brought to bear on the interchange. Ideally, a respondent might describe a meeting in which certain informed individuals discussed data from different sources in order to illuminate a question and select the best course of action. In such a situation it
would be appropriate to define "information" very narrowly as facts derived from direct observation or a scientific analysis of a situation -- i.e., research and evaluation -- or from reports of similar situations by colleagues.

In reality, however, much of what transpired in such meetings was not merely an exchange of distinct facts, but rather an exchange that also included personal opinions, attitudes and beliefs. While these opinions were probably derived from direct experience, scientific analysis, contact with others in some manner, their exactogenesis was unknown. As a result, the definition of information was expanded to include beliefs and opinions as well as pieces of data. The phrase "type of information" referred to the smallest descriptive units that could be obtained relevant to the interaction.

Twenty-eight types of information were distinguished and grouped into 11 categories that contained inputs of a similar nature. In order of frequency the 11 categories were: 1) beliefs and opinions, 2) program requirements and budgets, 3) direct observation, 4) parent input, 5) district staff input, 6) needs assessment, 7) external consultants, 8) tests, 9) advice from colleagues, 10) other evaluation activities, and 11) other information types.

The frequency of information type by category is shown in Table 2.

Table 2
Information Sources

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Occurrences</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beliefs and opinions</td>
<td>234</td>
<td>50.0</td>
</tr>
<tr>
<td>Program Requirements &amp; budgets</td>
<td>54</td>
<td>11.5</td>
</tr>
<tr>
<td>Direct observation</td>
<td>39</td>
<td>8.3</td>
</tr>
<tr>
<td>Parent input</td>
<td>30</td>
<td>6.4</td>
</tr>
<tr>
<td>District staff</td>
<td>27</td>
<td>5.8</td>
</tr>
<tr>
<td>Needs assessment</td>
<td>26</td>
<td>5.6</td>
</tr>
<tr>
<td>External consultants</td>
<td>24</td>
<td>5.1</td>
</tr>
<tr>
<td>Tests</td>
<td>13</td>
<td>2.8</td>
</tr>
<tr>
<td>College advice</td>
<td>11</td>
<td>2.4</td>
</tr>
<tr>
<td>Other evaluation activities</td>
<td>9</td>
<td>1.9</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Table 2 illustrates a number of interesting relationships. By far the most frequent inputs into decisions were beliefs and opinions. This can be interpreted in a number of ways. It might simply reflect the respondents' lack of knowledge and insight about the bases for other's opinions. On the other hand it might be that core values and attitudes are based upon a multiplicity of experiences that occur over extended periods of time and consequently do not have identifiable short-term causes.

A third perspective is provided by Lortie (1975), who portrayed teaching as an isolated profession with an insulated, cellular quality. Teachers, according to Lortie's analysis, are expected to master professional skills on their own without relying on input from others. Thus, personal experience and personal opinion become elevated in importance. It could be argued that the natural extension of this pattern of professional socialization is a lowering of interest in and reliance upon exchanges of information between teachers and an increased emphasis on the importance of self-derived attitudes and opinions.

The results of this study probably reflect a combination of all these forces. Whatever the case, it was clear that beliefs and opinions were extremely important. This result is similar to the findings of an earlier questionnaire study (Chorness et al., 1968) and suggests a form of decision-making in which professional judgement is the dominant factor.

A number of administrators in the sample felt they operated in a universe of limited options. Frequent citation of program guidelines and regulations as key elements in the decision process added weight to the contention that a principal's hands were often tied.

The paucity of input from tests and other evaluation sources was discouraging, but not surprising. There were very few instances in which tests or other evaluations had impact upon the significant occurrences. This confirms David's (1978) finding that most Title I evaluation is conducted to comply with regulations and is not used to inform decisions.

On the other hand, needs assessment data were brought to bear on important school decision twice as frequently as tests. This added some credence to the belief that needs assessment can play a key role in school planning (even if its initial use is forced upon the school).
Other Analyses and Conclusions

A number of other analyses were conducted. For example, information types were cross-tabulated against decision types, and those decisions in which there were high and low reference to evaluation were examined. Similarly, the relationship between information type and the type of personnel was examined. In general, quantitative analyses were supplemented with qualitative examination of the events described by the respondents in order to illuminate the decision-making process. This combined analysis provided a number of interesting conclusions. Specific results from these and other comparisons are reported elsewhere (Stecher, Alkin and Flesher, 1981). The remainder of this discussion will highlight four of the more interesting results of the study and offer two global themes that emerged from the analysis.

One interesting finding was that the majority of the significant occurrences had their genesis outside the school, prompted by federal, state or district actions or by population changes. This finding is important because it indicates that school administrators spend a great deal of their time reacting to events rather than initiating actions based upon their own identification of need. As a consequence, there is less attention given to planning and prevention and more time devoted to correction and cure.

Another important conclusion was that global generalizations were not generally valid; instead the universe of generalization for most of the conclusions was limited to certain types of decisions, particular phases of the decision process, or certain types of evaluation. For example, personnel decisions operated differently than decisions involving the establishment of curricular guidelines. Similarly, different information use patterns were observed in different phases of the decision process. In particular, the use of evaluation differed between the recognition phase, the decision-making phase and the ratification phase. Finally, evaluation in the aggregate was too broad for most useful generalization; there were different uses for needs assessment, for example, than for the assistance provided by the district evaluation consultant.

Both needs assessment and testing had impact on problem recognition. Thus, the initial pessimistic assessment of the role of evaluation in school decision-making must be qualified somewhat. Though evaluation played a small role in the decision-making phase, it played a much larger role in identifying areas in need of attention. Needs assessment, in particular, played an important role helping the administrative staff monitor the success of their instructional efforts and identify problems.
Finally it appeared that utilization was linked to commitment on the part of key decision-makers. Reference to evaluation increased dramatically in those decisions in which a mixed teacher and administrator group was strongly identified with a significant occurrence. Evaluation use also increased in those instances in which an individual or group established a clear strategy for approaching a decision. When teachers or administrators took responsibility for guiding an issue to resolution there was more reference to evaluation than when such strategy was absent.

Putting many specific findings together, two general themes emerged. One theme which unites a number of findings was that problem recognition was a separate event, distinct from subsequent problem solution. In fact, the data collection and reporting systems that existed in the district understudy served the problem identification function extremely well. Data on students' achievement and language proficiency were reviewed on a periodic basis and were accepted as indicators of program effectiveness. In this way evaluation -- primarily in the form of test scores -- was extremely useful.

Two implications should be drawn from this observation. First, it is legitimate for evaluation to serve a problem identification function, and even be structured with this role in mind. Second, the problem recognition function usually has been ignored in research on evaluation utilization, and this was a significant oversight that should be corrected in future research.

Another conclusion that subsumes a number of specific findings is that evaluation use is enhanced in instructional and curricular decisions when the decision process is interactive and the participants -- teachers, staff persons and building principals -- are concerned about the issues involved. Participation alone was not the critical variable for predicting evaluation use; it was not merely who was involved, but how they participated that made the difference in the level of evaluation utilization.

The data showed that evaluation use increased as administrative participation increased, particularly when the administrators were working in groups with teachers. Such mixed groups had greater impact on evaluation use than participation by either teachers or administrators alone. The key element seemed to be the interaction between teachers and administrators. When there was strong identification with the decision under consideration, the level of evaluative input increased. This suggests that key individuals who took an active role in the process (and
even established a strategy for decision-making had a strong impact on the level of evaluation. Thus, it seems fair to conclude that promoting interactive problem-solving among concerned teachers and administrators holds considerable potential for increasing evaluation use.

Practical Implications

In addition to these broad comments about change, two specific recommendations seem warranted. The first derives from consideration of the manner in which evaluation services were provided in the district under study and the way in which the role of the evaluation consultant was defined. School personnel in this district proffered negative reactions to external mandates and directives emanating from the administrative hierarchy. Unfortunately, the evaluation consultant often acted as the interpreter of regulations and the "enforcer" of administrative guidelines. A large portion of the interaction between the evaluation consultant and the school focused on such matters. Not only did this severely limit the amount of time that could be devoted to evaluation related exchanges, but some of the negative feelings toward the administrative hierarchy may have been transferred to the individual who unfortunately was cast in the role of intermediary.

Consider this in the light of the large body of research which suggests that evaluation will be utilized when it is motivated out of local concerns and serves local needs. The distinction between information to serve external mandates and information to serve local needs argues for a separation between the compliance and reporting functions of the district evaluators, on the one hand, and their role in promoting evaluation for local decision-making on the other. It might be wise to invest compliance functions in a different set of individuals, and free those who are acting in the name of evaluation from this responsibility.

While separation of the evaluation and compliance functions is a logical first step, it may not be enough by itself to significantly increase the use of evaluation at the local level. This study, along with previous research at the Center for the Study of Evaluation and elsewhere, suggests that evaluation utilization derives from an active, flexible evaluator and interested, local users joining together to plan and conduct evaluations. However, such an approach requires additional time and resources. It may be impossible for this district, or any other district, to afford an effective, ongoing evaluation effort that stresses planning and interaction between the evaluator and the school staff. Consequently, the capability for developing and conducting evaluation must be shifted.
to the local schools themselves. The district evaluation consultant could become an instrument for this change, undertaking training and technical assistance functions while transferring the evaluation capabilities to the school-site personnel.
Bibliography


Pepper noted, however, that Contextualists frequently sound as though they were broadening the scope of their considerations, although he remarked that if challenged they would disavow this. This tendency appears in Glaser and Strauss (1967). They offer a thorough explication of a way in which a particular event can be studied to yield concepts which serve to explain that event. They then, in discussing their notion of theoretical sampling, urge studying these concepts in markedly different contexts, thus ignoring potential differences between the events. This action also does not allow the researcher to be a part of the next contexts in the way in which she was part of the old, so that truth begins to take on a correspondence definition.

David M. Smith (1981) offered a succinct statement which fits with Contextualism. Ethnographers cannot view the primary goal of research as the production and delivery of goods [e.g. new knowledge], but rather as the facilitation of productive interactions between various kinds of persons comprising the educational establishment that will result in increased mutual understanding (p. 73).

ORGANICISM

While Organicism shares with contextualism the root metaphor of the historical event, historic events are considered in relation to each other as part of a grand whole rather than as separate and isolated happenings. The categories in Organicism are:

a) fragments
b) nexuses

c) contradictions
d) organic whole
e) implicitness
f) transcendence
g) preservations
Pepper related these categories as follows. Fragments of experience appear as part of nexuses or webs of connections which push for integration. There will be apparent contradictions and gaps in knowledge and oppositions to resolutions but eventually when enough is known all parts will fit into an organic whole which will then be seen to have been implicit in the fragments. This organic whole will transcend the previous contradictions by means of a coherent totality which economizes yet preserves all the elements seen previously as contradictory.

Pepper referred to the first three categories as progressive ones which culminate in the fourth, the organic whole. However, the organic whole and the following three categories are ideals and, while continually sought, will never be reached by humans. Pepper used as the illustration of organicism the classical history of astronomy, wherein more and more separate facts have been related and understood in terms of increasingly larger wholes.

In Organicism, truth is evidenced by coherence. The truer the theory, the greater its scope, inclusiveness and determinateness. Time is unimportant for the specious present is but in instant in the working out of truth and when this arrives, when there is an absolute organic whole, the specious present disappears. There is a contradiction though, for when there is an absolute organic whole, those elements of the specious present "suspense, distrust, longing, all forms of desire, frustration, all pain, and perhaps all pleasure..." will also disappear. Thus, the absolute fails to preserve all the fragments of experience known to us.

Research Implications of Contextualism

It appears that researchers seeking to use multisite case studies are guided, at least in part, by Organicist notions. Many of these efforts (e.g. Stake and Easley, 1978) seek to collect extensive information about several different particular sites and then combine and integrate this information to yield a coherent whole. Since the aim of Organicism is an integration of seemingly disparate and even contradictory parts, the researcher is required to collect as much information as possible, with the belief that it can be integrated into a whole. Since Organicism, like Contextualism, is a synthetic world hypothesis, care must be given to preserve the wholeness, the Quality, of the individual sites studied. A possible problem is that researchers too early limit their inquiries, too early focus on parts of the event rather than trying to capture the whole.
CONCLUSION

As I understand these different world hypotheses, it seems the bulk of educational research is guided or shaped by assumptions consonant with Formism and Mechanism. These, as Pepper drew them, are analytic approaches which seek to identify the essential controlling elements or variables. Formism would identify the types and the distinguishing characteristics by which these might be identified and the laws associated therewith. While various laws control the development of the characteristics of each instantiation of a type, the different instantiations are more similar than not. The focus then, is on similarities. Differences can then be dismissed as due to random error; outliers, to use the statistical language which fits in this world hypothesis so well, can be ignored.

Mechanism, as it influences educational research, gives rise to the hope of discovering primary qualities which underlie the qualities observed, and the laws which control their interactions. These laws will be predictive and useful in all situations. That such laws have not yet been developed in education is ascribed to the infancy of the endeavor. "Fruitful results are expected to occur as more precise instruments are developed, more sophisticated designs created, and more powerful statistical analyses used." (Popkewitz, et al., 1979).

Practitioners, however, as distinguished from researchers, operate in a setting where outliers are expected or seen to be more prevalent. Practitioners deal with samples for which population statistics seem too often inappropriate. Thus laws or types developed from Mechanistic or Formistic approaches might not be useful.

Perhaps even more basic it that practitioners may hold world hypotheses more dominated by Contextualism. The many factors present in any particular setting act together and interact to form the Quality of the event.
For example, if teachers are given some test data about a problem student and asked to choose from among four strategies to deal with the student, many reply that they have insufficient data upon which to make a decision. When asked about the data they would like to have, they respond that they would have to know the student, to know how he related to peers, how he had performed in other classes, how he had related to the teacher in this class, and many other information which concerned, not information about individual variables, but information about the whole child in a complete context. Teachers too respond that information about individual variables, for example reading ability, is close to meaningless without sufficient description of the context and the history of the child.

Practitioners also often employ some Contextualist definitions of truth. They are centrally concerned with what works for them in their setting. Truth is closely tied to their particular setting.

Practitioners then may fail to heed research finding because much research is driven by world hypotheses different from that held by practitioners. Practitioner knowings are rooted in particulars, in contexts which offer a reality composed, not of separate variables, but of the interaction and fusion of many separate elements, each with its own history and identity. Any change effort - introduction of new basal readers, use of different laboratory experiments, guidelines for streamlined program management - must take into account the complex of interacting factors which make up the Quality of the particular and must work to understand that before it can be changed.
REFERENCES


Research and Consciousness of World Views

Abstract

This paper addresses two issues of concern in education: How should educational research be carried out and Why do practitioners so often fail to heed the findings from educational research. The author uses the conceptualization of Stephen Pepper which distinguished four different hypotheses about the nature of the world to suggest that different approaches to educational research are undergirded by different and conflicting hypotheses about the nature of the world. Thus, while some argue that different approaches to research which may be characterized as quantitative and qualitative can be effectively merged, this paper argues that such fusion may in many cases not be possible in any meaningful way.

It is suggested that much educational research is impelled by a world hypothesis in conflict with that which seems to be held by practitioners, thus contributing to the lack of dialogue between researchers and practitioners.