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*REVIEW OF EDUCATIONAL RESEARCH* 1991 61: 265  
DOI: 10.3102/00346543061003265

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## **Towards Rigor in Reviews of Multivocal Literatures: Applying the Exploratory Case Study Method**

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*This article aims to stimulate discussion about the issue of rigor in conducting reviews of multivocal literatures. Multivocal literatures, which abound in the field of education, are comprised of all accessible writings on a common, often contemporary topic. The exploratory case study method is proposed as a means to engender rigor in reviews of such literatures. It is argued that it is appropriate to apply the concept of rigor to reviews of multivocal literatures and to use the exploratory case study method as a tool for thinking about procedures that could enhance rigor in such reviews. The article draws upon the authors' experiences in conducting a review of the literature on school-based management to illustrate how the proposed procedures might be employed.*

This article proposes a method for engendering rigor in reviews of a particular type of literature. Unlike articles typically published in the *Review of Educational Research*, this article does not focus on the findings of a literature review. Rather, it outlines a method for carrying out a review of a particular type of literature. It relies heavily on the insights acquired from others' efforts to develop formal methods for carrying out rigorous reviews of strictly empirical literatures, on the work of case study researchers, and on the contributions of qualitative methodologists. It also draws on our own experience in attempting to produce a rigorous review of a more diverse literature. The contributions of others are used to develop general rationales for the method we propose. Our own experience is referenced only to illustrate how the method might be employed, not to recount in detail what the review disclosed.

The method we describe applies to reviews of what we term *multivocal* literatures. Multivocal literatures are comprised of all accessible writings on a common, often contemporary topic. The writings embody the views or voices of diverse sets of authors (academics, practitioners, journalists, policy centers, state offices of education, local school districts, independent research and development firms, and others). The writings appear in a variety of forms. They reflect different purposes, perspectives, and information bases. They address different aspects of the topic and incorporate different research or nonresearch logics. Systematic investigations (i.e., empirical studies that identify the conceptual perspectives or orienting questions that guide the research, specify the methods used to carry out the research, explicate the procedures employed to address validity and reliability, and offer the explanations for the findings of the research) represent only one of the varied forms of writings and constitute only a small portion of the literature base. Because multivocal literatures are characterized by a preponderance of diverse writings and a paucity of systematic investigations, reviews of these literatures require a deliberate analysis of the words of the people recorded in these diverse writings as well as a deliberate analysis of the findings reported in empirical investigations.

### Purpose and Perspective

Our purpose in proposing the method is to direct attention to and stimulate discussion of rigor in reviews of this type of literature. Whereas the introduction and application of concepts such as meta-analysis (Glass, 1976), best evidence synthesis (Slavin, 1986), and the case survey method (Yin & Heald, 1975; Yin & Yates, 1974) have precipitated lively discussions regarding the rigor with which reviews of strictly empirical literatures are conducted, these discussions have not directly addressed the notion of rigor in reviews of other types of literatures.

Such an omission is unfortunate for at least two reasons. First, the literatures for some of the most prominent topics in education (e.g., parental choice, teacher empowerment, site-based management, outcome based education, school-business partnerships) are multivocal. They are characterized by an abundance of diverse documents and a scarcity of systematic investigations. Despite the nature of the literatures, the salience of these topics generates interest in, and requests for, reviews of the available information (see, e.g., David, 1989; Elmore, 1990; Johnson, 1990; Malen, Ogawa, & Kranz, 1990; Raywid, 1988). Second, those who take on the task of reviewing the available information confront difficult issues. Beyond logistical and managerial matters that arise given the sheer volume and variety of documents, the practice of reviewing literatures that are so profuse, disparate, and unscientific begs several perplexing questions that clearly warrant, but rarely receive, explicit attention. Is it even appropriate to apply the notion of rigor to reviews of this type of literature? If so, how might the notion of rigor be addressed? What standards need to be considered? What methods might be applied to attain those standards?

In an effort to stimulate consideration of these issues, we offer two arguments. First, it is appropriate to apply the notion of rigor to reviews of multivocal literatures. Like reviews of strictly empirical literatures, reviews of multivocal literatures can be viewed as forms of original research. Thus, they can be held to the canons of research and strengthened by attention to methods of research. Second, the exploratory case study method constitutes a robust sensitizing device for enhancing rigor in reviews of these literatures. It provides a useful point of departure for addressing standards that need to be considered and developing procedures that might be used to approach, if not attain, those standards.

Whereas a number of philosophic and paradigmatic perspectives could be marshaled to construct or contest these arguments, the perspectives employed here are pragmatic in orientation and procedural in emphasis. We employ these perspectives because we are practitioners seeking sound and workable approaches to some of the intricate and important problems we encountered as we tried to organize, synthesize, and interpret a particular type of literature. We recognize that those who specialize in the philosophy of science and engage in paradigmatic debates have much to contribute to an understanding of the underlying assumptions and complex issues embodied in discussions of rigor and to efforts to articulate methods for conducting research in education (see, e.g., Bredo & Feinberg, 1982; Cronbach, 1975; Guba & Lincoln, 1981; Howe & Eisenhart, 1990; Smith & Heshusius, 1986). However, like others (e.g., Miles & Huberman, 1984a; Patton, 1990), we concentrate on the explication of processes and procedures that can be incorporated and consider that explication a partial, but essential, step in the development of methods that might enable us to carry out aspects of our work in a more rigorous manner.

### **Applying the Concept of Rigor: Reviews of Literature as Forms of Research**

In simplified terms, *rigor* involves adherence to principles and procedures, methods, and techniques that minimize bias and error in the collection, analysis, interpretation, and reporting of data. Traditionally used to assess original research, the *rigor* recently has been applied to assessments of reviews of research. In making this application, scholars have made a number of contributions that hold implications for addressing the rigor in reviews of multivocal literatures. Four contributions are especially relevant because they illustrate why the concern for rigor in reviews of multivocal literatures is appropriate and because they suggest how the concern might be attended. Those contributions are: (a) the recognition of literature bases as data sets, (b) the identification of major sources of bias and error that plague literature reviews, (c) the delineation of general standards that can be used to gauge rigor in literature reviews, and (d) the application of various research methods to engender rigor in literature reviews.

#### **Literature Bases as Data Sets**

In his original treatment of meta-analysis, Glass (1976) equates rigorous reviews of empirical research with original research and treats literature bases as data sets. Extending that analogy, Mintz (1983) characterizes meta-analysis as a form of survey research wherein the findings of each study included in a meta-analysis are treated as a response to a survey item, a data point. In their discussion of the case survey method, Yin and Yates (1974) also liken reviews of case studies to forms of survey research. They recognize that case studies of a particular topic are often heterogeneous in character and uneven in quality and that “investigators have used entirely different research or nonresearch logics to arrive at their conclusions” (Yin & Yates, 1974, p. 41). Despite the diverse nature of the cases, these scholars argue that the findings of each case can be treated as responses on a survey and that each response can be treated as a data point.

Although these depictions of literature bases as data sets focus on bodies of systematic investigations, other types of writings can also be viewed as data sets. Historians, sociologists, anthropologists, and others who adopt an interpretative perspective have long recognized that the words of people, whether transmitted through verbal or written mediums, are important sources of data. They not only provide information about the context but reveal the meanings people attach to the phenomenon of study. For example, Glaser and Strauss point out that a wide range of printed materials can be seen as “voices begging to be heard” (1967, p. 163). They maintain that, though often underutilized, printed materials are, in many respects,

equivalent to the anthropologist’s informant or the sociologist’s interviewee. In those publications, people converse, announce positions, argue with a range of eloquence, and describe events or scenes in ways entirely comparable to what is seen and heard during field work. The researcher needs only to discover the voices in the library to release them for his [sic] analytic use. (Glaser & Strauss, 1967, p. 163)

Others also acknowledge that a wide range of writings can be valuable sources of information and insight. As Lindblom and Cohen (1979) argue, those involved in social problem solving often depend on and build on the perceptions, impressions, investigations, and interpretations that may be recorded in a vast assortment of printed materials. They note that much of what passes for social science is, in

actuality, *professional social inquiry* (PSI) which reflects the broad array of investigatory activities that share some, but rarely possess all, of the traits associated with social science (Lindblom & Cohen, 1979). Further, they conclude that social problem solvers often rely heavily on “ordinary knowledge . . . [which] . . . does not owe its origin, testing, degree of verification, truth status or currency to distinctive PSI professional techniques but rather to common sense, casual empiricism or thoughtful speculation” (Lindblom & Cohen, 1979, p. 12).

In sum, diverse documents are well-recognized sources of data. They contain important clues regarding how people describe, characterize, assess, and interpret the phenomenon of interest (Berkhofer, 1976; Glaser & Strauss, 1967; Murphy, 1980; Patton, 1980). Because diverse documents are repositories of data, multivocal literatures can be treated as data sets. Therefore, like reviews that focus only on systematic investigations, reviews of multivocal literatures can be viewed as a form of original research.

### Major Sources of Bias and Error

The extensive, and at times heated, exchanges concerning the rigor with which reviews of empirical literatures are conducted identify many sources of bias and error. Critics concur, however, that reviewer bias poses a particularly serious problem. For instance, reviewers can simply exclude studies on the basis of rather personal, subjective judgments of methodological adequacy and thereby eliminate large amounts of data (Glass, 1976; Glass, McGaw, & Smith, 1981; Joyce, 1987; Slavin, 1984). In addition, reviewers can selectively ignore information contained in the studies they examine and thereby create the illusion that the findings reported and interpretations offered are more firm, clear cut, and certain than the full body of research evidence actually indicates (Cook & Leviton, 1980). Moreover, reviewers can accidentally overlook or intentionally conceal bias and error because they rarely specify the procedures used to collect studies, the criteria used to accept or reject studies, or the procedures used to analyze, aggregate, and interpret studies (Yin & Yates, 1974).

Although focused on reviews of empirical literatures, the issues raised here pertain to reviews of multivocal literatures as well. The forms of reviewer bias that threaten reviews of empirical literatures also threaten reviews of multivocal literatures.

### *Exclusion of Data*

The exclusion of data poses a serious problem, perhaps an even greater problem in reviews of multivocal literatures than it does for reviews of strictly empirical literatures. In reviews of empirical research, exclusion is based on some assessment of methodological adequacy. There is disagreement over what constitutes methodological adequacy, but the exclusion of studies is guided by consideration of this basic, albeit disputed, tenet of educational research. In reviews of other types of literatures—notably, those comprised of diverse, largely nonempirical documents—exclusion of materials on the basis of methodological adequacy breaks down. Most writings are not reports of systematic investigations. As a result, they rarely contain detailed descriptions of data sources or methods. Although documents may allude to sentiment surveys, site visits, informal interviews, in-progress program evaluations, or research findings, information needed to assess the methodological adequacy of data collection and analysis procedures is not provided.

One obvious alternative would be simply to dismiss as unworthy of consideration, all documents that failed to provide the information needed to judge methodological adequacy. However, this approach exacerbates rather than alleviates the problem because it denies the existence and ensures the exclusion of large amounts of information. As noted above, diverse documents are repositories of data. Like other sources of data, these documents can be inaccurate, incomplete, and misleading (Glaser & Strauss, 1967; Murphy, 1980; Patton, 1980). Like other sources of data, these documents must be conscientiously scrutinized and cautiously interpreted. However, because they are repositories of data, at least in some instances, documents warrant careful examination, not blanket exclusion.

#### *Selective Use of Data*

Whereas the selective use of data to develop a seemingly uncompromised or uncontestable argument can occur in reviews of empirical literatures, reviews of multivocal literatures may be even more susceptible to this form of reviewer bias. Amidst the reams of fairly fragmented, at times impressionistic, qualitative data located in diverse documents, a reviewer's bias may go largely undetected. Given the dearth of hard evidence, a reviewer's bias may go largely unfettered.

#### *Ambiguity of Procedures*

Ambiguous data collection and analysis procedures can operate to camouflage reviewer bias in a synthesis of multivocal literatures in the same ways they can operate to conceal reviewer bias in a synthesis of empirical literatures. First, ambiguous treatment of these issues denies the reviewer opportunities to uncover, acknowledge, and account for sources of bias and error in the approach taken. Second, ambiguous treatment of these issues denies the reader opportunities for inspection, replication, verification, or refutation (Schulman, 1988). Whereas explicit procedures may or may not be sound procedures, explicit procedures do offer readers a clearer understanding of how results were obtained. They enable the reader, as Joyce puts it, "to enter the thought processes of the investigator" (1987, p. 12), detect what may be forms of bias, and make informed judgments regarding the validity, reliability, and credibility of the review. Whether the literature being analyzed is comprised of just empirical studies or includes more diverse documents, explicitly stated decision rules provide reviewers the opportunity to uncover their biases and readers the opportunity to assess their work.

#### **General Standards for Gauging Rigor**

The preceding discussion of sources of bias and error suggests general standards for gauging rigor in reviews of multivocal literatures. Because the sources of bias and error that pose threats to reviews of empirical literatures are present, perhaps to an even greater degree, in reviews of multivocal literatures, concern for rigor in these reviews must address the problem of reviewer bias in its varied forms. To meet general, minimal standards, methods for enhancing rigor in reviews of these literatures must confront issues associated with (a) the exclusion of data, (b) the selective use of information in documents, and (c) the ambiguity of data collection and analysis procedures.

#### **Applications of Research Metaphors**

As earlier noted, the continuous, and at times contentious, efforts to inject rigor into reviews of empirical literatures are treating reviews of literature as forms of

research. This idea of reviews of literature as forms of research both permits and encourages the development of formal methods that address aspects of rigor in reviews of empirical literatures. Two examples illustrate.

In meta-analysis, the findings of empirical investigations are analyzed using statistical procedures to test formal hypotheses and to determine the existence of effects across studies. To be sure, scholars continue to debate the criteria for including or excluding studies in a meta-analysis. Scholars contest the merits of meta-analysis, its derivative, best evidence synthesis, and other variants as a means of producing literature reviews that are free of other forms of bias and error. Yet, most scholars concur that the procedures for collecting, aggregating, and analyzing coded data are clear, explicit, and public (Joyce, 1987; Mintz, 1983; Slavin, 1987). Thus, at least one general, rudimentary requirement of rigor—presentation of methods that enables others to inspect, replicate, verify, or refute the findings—is satisfied. Equally important, other aspects of rigor are commanding and receiving thoughtful, spirited attention. The ongoing exchanges may foster the development of procedures that more effectively address these aspects of rigor as well.

In their discussion of the case survey method, Yin and Yates (1974) recommend the use of a closed-ended questionnaire to record the characteristics of case studies, the central findings of the studies, and the level of confidence associated with each reader-analyst's response to each item on the questionnaire. The responses become "the basic body of evidence" (Yin & Yates, 1974, p. 43) for conclusions regarding the literature on a particular topic and for inferences regarding the phenomenon of study. The responses permit the reviewer to gauge reliability by examining the amount of interanalyst agreement on a fixed set of closed-ended questions, to distinguish between weak and strong responses, to make explicit the criteria for accepting or rejecting studies, and to examine the effects of these decision rules (see, Yin & Yates, 1974, pp. 42–45). As with meta-analysis, scholars have debated the ability of the case survey method to accommodate all sources of bias and error and to address all aspects of rigor. Yet, even "in its formative stage of development" (Yin & Yates, 1974, p. 40), the approach can be viewed as "one significant step forward" (Yin & Yates, 1974, p. 40) not only because "aggregate reviews of individual case studies can now be undertaken with some scientific rigor" (Yin & Yates, 1974, p. 42) but also because the concept of *rigor* is being discussed directly and taken seriously. Here too, the ongoing dialogue may stimulate the development of methods that more effectively address important aspects of rigor.

The particular comparisons employed and specific methods developed to conduct reviews of empirical literatures do not transfer directly or literally to reviews of multivocal literatures, in part, because the information contained in documents does not lend itself to closed-ended summations, numerical reductions, or quantitative treatments. However, the general strategy of invoking a research metaphor is applicable. There is an approach to conducting original research that is analogous to reviewing multivocal literatures. More open-ended in design, more responsive to narrative depictions and qualitative analyses, and more aligned on other critical dimensions, the exploratory case study is a form of research that can be invoked to stimulate the development of formal methods for addressing rigor in reviews of multivocal literatures. Using this analogy, the review of literature on a topic is viewed as a case study of the topic or, more precisely, a case study of representations of the topic. Each document is treated as a data point—a source of information to be

scrutinized, summarized, and utilized in a relatively unencumbered but systematically executed search for emergent themes and patterns. The summations of diverse documents are then analyzed and aggregated in order to develop conclusions about the literature and inferences about the phenomenon of interest.

### **The Exploratory Case Study: A Robust Sensitizing Device**

There are several reasons why the exploratory case study is a robust sensitizing device for addressing rigor in reviews of multivocal literatures. First, its central aims and inductive emphasis coincide with the appropriate purposes and analytic processes embedded in these literature reviews. Second, the distinctive features of this method parallel the essential characteristics of the literature bases being examined. Third, given these similarities, recommended procedures to minimize bias and error in exploratory case studies can be transferred to, and incorporated in, reviews of multivocal literatures.

#### **Central Aims—Inductive Emphasis**

The primary purpose of an exploratory case study is to extend our understanding of complex social phenomena. The exploratory case study can contribute to this overarching objective in several important but limited ways.

##### *Preliminary Investigations That Generate Insights and Ground Research*

Often viewed as a preliminary step or a prudent prerequisite to more focused investigations, the exploratory case study is employed to inductively generate, rather than deductively confirm, insights regarding the phenomenon of interest. When the topic of interest has not been the subject of extensive empirical examination, an exploratory case study is a sound and sensible first step (Mayer & Greenwood, 1980; Yin, 1984). This strategy enables researchers to conduct a fairly comprehensive, open-ended search for relevant information, identify the major themes and patterns associated with the phenomenon of interest, develop or adopt constructs that embrace the patterns, articulate tentative hypotheses about the meanings of the constructs and their relations, and refine questions and/or suggest conceptual perspectives that might serve as fruitful guides for subsequent investigations.

The central aims of the exploratory case study coincide with the important but restricted purposes that reviews of multivocal literatures can serve. Like exploratory case studies, reviews of these literatures are a means to an end, one aspect of an ongoing effort to understand complex social phenomena, particularly when the phenomenon of interest has not been the subject of extensive empirical examination. Like exploratory case studies, reviews of these literatures can be viewed as a broad-based search for pertinent information and a disciplined attempt to identify the themes and patterns embodied in writings on the topic. Like exploratory case studies, reviews of multivocal literatures are suggestive and instructive, not definitive or conclusive. They do not warrant firm judgments, let alone precise predictions regarding the phenomenon of interest per se. However, these reviews can generate insights regarding the meanings people attach to the phenomenon of interest. They can reveal how people view the phenomenon and how they describe, assess, and interpret the topic of study. The themes and patterns apparent in these perceptual accounts can be used to formulate potentially productive lines of research. Our experience with a review of the literature on site-based management illustrates the manner in which an



exploratory case study of a multivocal literature might serve as a prelude to, and stimulus for, subsequent research.

*Provisional Nature, Generative Potential of Multivocal Literature Reviews*

The decision to approach a review of the literature on site-based management as an exploratory case study meant that we would attempt to acquire and analyze all pertinent documents and use those documents to generate insights regarding the manner in which site-based management is defined, described, and assessed. Because the topic had not been the subject of extensive systematic investigation, a very general, orienting framework guided the inquiry. We wanted to characterize site-based management, discover its distinctive properties, and describe its various forms. We wanted to uncover the implicit assumptions and the causal connections nested in this reform, examine those linkages, and develop a clearer understanding of how this reform operates and why it may operate that way (Malen, Ogawa, & Kranz, 1990, p. 290). Our findings suggested that two distinct but complementary strains of research might be pursued.

*The substantive prospects of site-based management.* We discovered that site-based management plans take a variety of forms but rest on several sets of assumptions regarding the manner in which site-based management begets school improvement. When we examined the implicit assumptions or *theories of action* (Argyris & Schon, 1982) in light of existing data, we found little support for the major premises of site-based management proposals. In the documents we analyzed, there was little evidence that site-based management proposals altered influence relationships, renewed organizations, or engendered the characteristics of academically effective schools. Rather, the available information indicated that a wide range of factors may restrict the ability of site-based management to achieve these objectives.

Whereas the literature review neither confirms nor dismisses the substantive potential of site-based management, it highlights factors that warrant attention and suggests lines of research that might more fully articulate and ultimately test the theories of action, the implicit hypothesis in site-based management proposals. For instance, studies might begin by specifying how site-based management plans alter existing structures and compare them along several dimensions—notably, the authority that is delegated in the domains of budget, personnel, and program; the manner in which that authority is distributed among combinations of *stakeholders* (principals, teachers, parents, others) at the site level; and the degree of discretion afforded by the rules and resources of the context. Studies might describe how these various forms of site-based management actually operate and how the multiple sets of factors identified in the literature review interact to shape responses to site-based management. These descriptive data could be used to both elaborate and examine the linkages between site-based management plans and their intermediate objectives (altered influence relationships, organizational renewal, effective schools characteristics) as well as the linkages between these intermediate objectives and the ultimate aim—improved school performance.

*The political-institutional properties of site-based management.* In addition to the select findings noted above, we made other discoveries that suggested a different line of research. We found that site-based management is a recurrent, widespread reform that resurfaces in periods of intense stress; that site-based management plans are often ambiguous and elusive; and that the literature base is dominated by project

descriptions, status reports, and position papers, deficient in systematic assessments and devoted to treatments of exemplar models and successful schools. As we attempted to integrate and interpret the full body of findings, we noted that site-based management may operate primarily as a political response to environmental turbulence and as an institutional response to a crisis of confidence.

In abbreviated terms, political-institutional perspectives hold that, when systems are confronted by multiple, complex, and competing demands, they naturally and necessarily seek responses that can quell conflict and restore confidence (DiMaggio & Powell, 1983; Easton, 1965; Zucker, 1987). Under these conditions, responses are kept ambiguous so they can embrace competing interests and absorb diverse concerns. An available response is often selected not so much because there is evidence that it can solve any of the problems to which it has been attached but because there is reason to believe it will enable the system to survive (Meyer & Rowan, 1978). Because systematic assessments risk revealing that the response may be more symbolic than substantive, information tends to emphasize the exemplar efforts and reiterate the rationales used to justify the adoption of a structural reform (Kaufman, 1977).

Given the ability of the political-institutional perspectives to account for the emergent themes of this exploratory case study, we suggested that site-based management might be examined using these conceptual perspectives. For instance, research could focus on efforts to determine whether the most poignant effect of site-based management is symbolic rather than substantive or whether its most pronounced impact is restoration of stability and legitimacy, not improvements in process or performance. If systematic investigations find that site-based management operates primarily as a symbolic response, subsequent studies might focus on the processes through which this strategy functions to quiet conflict and restore confidence (at least for some periods of time) as well as on the reasons systems resurrect this strategy at different points in time. Researchers might also address questions of effect. For example, does the restoration of stability and legitimacy reduce the incentive or limit the capacity to impact organizational process and improve performance? Or does the restoration of stability and legitimacy enable schools to concentrate on and acquire the resources they need to alter process and affect performance? If so, under what conditions? Attention to these and other questions would enable us to test the political-institutional interpretation of school-based management and develop a clearer understanding of this reform (Malen, Ogawa, & Kranz, 1990, p. 326).

In sum, our decision to frame a review of the literature on site-based management as an exploratory case study enabled us to seek pertinent information from a wide range of sources, to identify major themes and patterns associated with the phenomenon of interest, to uncover and examine the implicit hypothesis embedded in site-based management proposals, and to outline two quite distinct but potentially fruitful strains of research. The review did not produce definitive answers. It did generate questions that might be pursued in an ongoing effort to understand how this reform operates and why it may operate that way.

### **Distinctive Features**

The exploratory case study has distinctive features and, as a consequence, preferred uses. Generally speaking, the exploratory case study (a) grapples with complex

phenomena in real-life contexts; (b) recognizes that the complex nature and, at times, the contemporary character of the phenomena diminishes the degree of control that can be exerted by the investigator; (c) incorporates multiple sources of data as a means to acquire and corroborate observations regarding the phenomenon of interest; (d) tends to rely heavily, albeit not exclusively, on qualitative data; and (e) aims to provide a cogent, detailed portrait of the phenomenon—the attributes it assumes, the variations it displays, the ways it appears to operate, and the combinations of factors that seem to shape the patterns observed in natural settings (Lofland, 1971; Patton, 1980; Yin, 1984, pp. 22–24).

Given these features, the exploratory case study is well suited to the examination of complex contemporary phenomena that are not amenable to the laboratory level of control implied by the quantitative techniques used in, or the numerical profiles produced by, other forms of research. Because the distinctive features of the exploratory case study parallel the major characteristics of multivocal literatures, this research method appears to be closely aligned with, and hence applicable to, reviews of these literatures.

### *Complex Phenomena*

Multivocal literatures address complex phenomena, often of current interest. Topics such as site-based management, teacher empowerment, and school–business partnerships are nebulous notions—vague terms that subsume a host of diverse, intricate, and complicated approaches to education reform. The literatures on these and other topics are themselves complex. The sheer volume and variety of documents confound analysis. The literature on site-based management, for example, is comprised of virtually hundreds of documents prepared by a diverse set of authors (academics, practitioners, journalists, policy centers, state offices of education, local school districts, independent research and development firms, and others), prepared for a wide range of purposes, aimed at a variety of audiences, and focused on different aspects of the topic (Malen, Ogawa, & Kranz, 1990). On the complexity dimension, the features of these literatures parallel the features of the phenomena for which the exploratory case study is particularly well suited.

### *Degree of Control Exerted by Investigator*

Like researchers who conduct case studies, reviewers of multivocal literatures confront conditions that diminish the degree of control that can be exerted by the investigator. In the strictest sense of the term, *control* is exerted when the researcher can manipulate an independent variable in order to determine its effect on a dependent variable and when a researcher can manage extraneous variables in order to isolate the relationship between independent and dependent variables. Clearly, neither reviewers of empirical literatures nor reviewers of other literatures exert these kinds of controls. But degree of control is even more problematic for reviewers of multivocal literatures. Clearly, the complex, contemporary character of a phenomenon such as site-based management eludes this level of control. It is extraordinarily difficult, if not impossible, to manipulate and isolate variables with such precision when the phenomenon exists in, and is inextricably linked to, a real-world context. Moreover, the documents that address site-based management frequently do not designate and define variables, let alone delineate controls. On the degree of control dimension, the challenges that await the reviewer of multivocal literatures resemble the challenges that face the case study researcher.

*Multiple Sources of Data*

Typically, case studies acquire data from multiple sources, including direct observation, informal or in-depth interviews, surveys, and documents (Murphy, 1980; Patton, 1980; Yin, 1984). Whereas reviewers of multivocal literatures do not have all of these sources of data at their disposal, the broad category of documentary data includes multiple sources of data. As previously noted, documents that deal with the topic of school-based management are produced by a diverse set of authors and, at times, make direct reference to perceptions acquired from a rich mix of informants representing different positions in the system and different perspectives of the phenomenon (e.g., the perspectives of individuals and organizations, practitioners and academics, advocates and critics, participants and observers). Moreover, documents can be categorized and characterized in ways that enable the reviewer to corroborate information and develop convergent lines of evidence. Such classifications enable reviewers to gauge the extent to which data contained in these various types of documents converge to support (question, or contest) the emergent themes and patterns. Although reviewers of multivocal literatures do not have direct access to the full range of data sources incorporated in case study research, the documents that comprise the literature base, at least in some respects, can be viewed and treated as multiple sources of data.

For example, documents that address the topic of site-based management were classified as project descriptions or status reports, position statements, systematic investigations, and related literature sources. Briefly, project description/status reports address relatively recent as well as more longstanding attempts to institute or reinstitute some version of school-based management. They are often authored by or based on data acquired from an individual who was instrumental in initiating or holds primary responsibility for overseeing a district's school-based management experiment. At times, project descriptions make general reference to surveys, visits, program evaluations, and field studies, but these descriptions offer little information regarding data sources and data collection/analysis procedures. More often, they rely on summary judgments or list examples of activities spawned, adjustments made, or achievements made in a few of the most successful pilot schools. Position statements issue a call for, or build a case for, greater autonomy at the school level; identify conditions under which various decentralization ventures might accomplish their stated objectives; and offer that advice districts might follow as they implement site-based management plans. With rare exception, position statements are based on general references to select findings from effective schools studies, unspecified theories of modern management, the research on participatory decision making, the failure of top-down mandated reforms, and/or testimonials from district administrators associated with model school-based management experiments. Systematic investigations provide empirical data regarding the manner in which different versions of site-based management actually operate. They identify the conceptual perspectives, or orienting questions, that guide the research; specify the methods used to carry out the research; explicate procedures employed to address validity and reliability; and offer explanations for the findings of the research. Related literature sources report, or review, systematic investigations of topics associated with site-based management, such as previous attempts to decentralize and democratize schools through the creation of community school boards, program-specific advisory

councils, or other participatory decision-making arrangements (Malen, Ogawa, & Kranz, 1990, pp. 292–296).

To be sure, these classifications do not encompass the full range of data sources available to case study researchers. They do, however, enable reviewers to map the manner in which information acquired from these various types of documents tends to come together to affirm, refute, or cast doubt on findings, conclusions, and interpretations.

#### *Reliance on Qualitative Data*

Case studies are not restricted to qualitative data, but they often rely heavily on narrative accounts. Because the documents that comprise multivocal literatures are essentially qualitative in nature, this feature of the case study method corresponds to a dominant characteristic of multivocal literatures. The various documents acquired on site based management, for example, contain essentially qualitative data. A few project descriptions refer to numerical summations of survey results. Two systematic investigations include quantitative data as one line of evidence on select aspects of site-based management programs. By and large, however, the documents are comprised of qualitative data.

#### *Development of Cogent, Detailed Portraits of Phenomena*

Exploratory case studies attempt to provide a cogent, detailed portrait—a coherent, narrative depiction—of complex phenomena. They seek to capture and communicate the intricate and indeterminate nature of the phenomenon through descriptions that reveal the telling aspects (Mosher, 1972). Yet they also seek to preserve the subtle nuances and to accommodate the entangled web of forces that interact to produce the patterns apparent in real-life contexts. Because multivocal literatures address complex phenomena and because multivocal literatures are themselves intricate and indeterminate, reviewers who seek to capture and communicate the qualities of the literature have few options. One of the most promising is to paint as thick and thorough a picture as possible. Like case study researchers, reviewers can present a cogent, detailed portrait that might serve as an antecedent to, and impetus for, more sophisticated, refined examinations of the topic.

#### **Transferable Procedures**

The case study method embodies a number of procedures that might be employed to address major sources of bias and error in literature reviews. The following section seeks to illustrate, not exhaust, the possibilities by highlighting procedures that were particularly helpful to us as we tried to synthesize and interpret a diverse, disparate literature and by noting other procedures that, in retrospect, we could have but did not incorporate.

#### *Exclusion of Data From Reviews*

The exploratory case study method offers two ways of handling problems related to the exclusion of data. First, it requires that reviewers attend to construct validity. In so doing, the method prompts reviewers to conduct a broad-based, but conceptually driven, search for information regarding the phenomenon of study. It also requires reviewers to regard conformity to the conceptual definition—the primary criterion

for seeking and selecting information—not methodological adequacy. Second, it offers guidelines for analyzing and interpreting information acquired from diverse sources and, thus, encourages reviewers to carefully consider, not automatically dismiss, large amounts of documentary data.

*Attention to construct validity.* Attention to *construct validity* (the establishment of clear definitions, accurate measures, and sound indicators of the phenomenon under study) is an obvious but indispensable check on bias and error in reviews of multivocal literatures. A clear definition of the topic sets the parameters of the literature base, specifies the criteria used to determine which documents are or are not germane, and thereby systematizes the collection and selection of documents enveloped by the review. Even though case studies are often criticized because the investigator “fails to develop a sufficiently operational set of measures” (Yin, 1984, p. 37) and, as a consequence, relies on “subjective judgments” (Yin, 1984, p. 37) to guide data collection and selection procedures, the method itself requires investigators to attend to construct validity and recommends procedures for doing so—namely, (a) consult multiple sources, (b) maintain chains of evidence (records of sources consulted and inferences drawn), and (c) incorporate informant reviews (Yin, 1984, pp. 37–38).

When we took on the task of reviewing the literature on site-based management, we were confronted with a topic that seemed to defy definition. Some documents contained references to the term, but they did not contain definitions of the term. Other documents provided definitions, but the definitions tended to be brief, vague, and varied. The exploratory case study method reminded us that we had to deal with the definitional issues and offered strategies for handling those issues.

The method prompted us to engage in a comprehensive search for documents that contained the terms *school-based management* and *site-based management*, coded the definitions offered or the descriptions used, and created or adopted constructs that embraced the themes found within, and across, these documents. Through this process, we developed a definition of school-based management. We conceptualized school-based management as a formal alteration of governance structures—a form of decentralization that identifies the school as the primary unit of improvement and the redistribution of decision-making authority as the primary means through which improvements may be stimulated and sustained (Malen, Ogawa, & Kranz, 1990, p. 289). We specified dimensions that captured the common elements of various site-based management definitions: the domains in which decision-making authority is delegated; the distribution of authority among site participants; and the discretion afforded site participants, given the rules and resources of the context. We used this conceptual definition both to guide the search for additional documents and to gauge the relevance of acquired documents. We did not formally solicit reactions to this definition from *informants* (authors of documents), but reviewers could easily incorporate this step. Reviewers could simply ask authors whether the phenomena described in the documents conformed to the definition derived by the reviewers.

*Guidelines for analyzing and interpreting data.* The exploratory case study method does not provide precise prescriptions for analyzing and interpreting documentary data. Rather, the method embraces general guidelines for assessing and assembling data in ways that enable researchers to develop more valid, verifiable inferences. Applying the guidelines is, in many respects, a “crude and fragile task” (Miles & Huberman, 1984a, p. 225) that depends as much on the analyst’s intellect and

integrity as the method's precepts and procedures. Although the task is certainly "delicate" (Joyce, 1987, p. 12), adherence to several guidelines can make it more disciplined.

First, the case study method expects researchers to examine and assess each document in terms of its purpose, coverage, and quality. Because documents are often written for purposes and audiences other than those of the study being carried out (Yin, 1984, p. 81) and because documents often address different aspects of a phenomenon with different degrees of thoroughness, it is essential that researchers record the purpose, specify the coverage, and assess the quality of each document.

This expectation can be transferred to reviews of multivocal literatures. For example, we tried to gauge the purpose (e.g., to articulate the aims of site-based management proposals or to describe the activities associated with a particular project) of each document on site-based management and to designate the aspects (e.g., the perceived impact of a site-based management program on the morale of teachers or on the implementation of instructional innovations) of the topic addressed by each document. We also tried to assess the individual and relative strength of data, using criteria broadly endorsed by qualitative methodologists: (a) the position and certainty of the source; (b) the clarity, detail, consistency, and plausibility of the content; and (c) the ability to corroborate the information contained in each document with information acquired from other sources both within and across settings (Bogdan & Taylor, 1975; Gottschalk, 1969; Murphy, 1980; Patton, 1980). To illustrate, several project descriptions, authored by individual administrators responsible for implementing site-based management in a particular district, maintained that site-based management precipitated changes in the instructional component of schools. Project descriptions that offered only conclusory claims were judged to be weaker than those that attended or reflected the above-mentioned criteria (e.g., the instructional changes were specified and elaborated, were corroborated by statements from teachers in the schools cited, and were not contested by other documents that addressed the impact of site-based management on the instructional program in that district). Whereas this process is imprecise, it is important. It not only required us to carefully examine and assess each document it also helped us to acknowledge and inspect the basis for judgments regarding the individual and the relative strength of the information contained in the diverse documents.

Second, the case study method requires researchers to construct categories that organize and characterize the data set. Just as the process of scrutinizing and coding each and every document allows researchers to identify "bins" (Miles & Huberman, 1984b, p. 225), it permits reviewers to identify "partitions" (Joyce, 1987, p. 13) that make seemingly disparate and unwieldy literatures more manageable and more discernible. For example, having examined over 200 documents on school-based management along the lines described above, we discovered that even though the purpose, coverage, and quality of the documents varied, four categories (i.e., project descriptions, or status reports; position statements; systematic investigations; and related literature source classifications, defined in the section on multiple sources of data) captured the essential qualities of the diverse writings. These categories helped us organize the documents, convey the criteria used to classify the documents, and characterize the data set (Malen, Ogawa, & Kranz, 1990, pp. 292–296).

Third, the case study method insists that researchers chart the relationship between the questions of the study and the components of the data set (Yin, 1984). Like

case study researchers, reviewers can map the manner in which components of the data set inform the questions of the study. For example, we wanted to uncover the implicit assumptions of school-based management. Given that question, three components of the data set (project descriptions/status reports, position statements, and systematic investigations) were particularly appropriate, because they all attempted to articulate the aims of school-based management and the reasons it is being advanced as a viable reform option. We also wanted to gauge the extent to which the implicit assumptions or causal connections were supported by evidence in the documents we reviewed. Given that question, all four components of the data set were clearly pertinent but not equally weighted. Select systematic investigations (those that focused on the particular linkage being examined) were viewed as primary sources because they addressed the question directly and empirically. Other systematic investigations of site-based management, or related topics, were viewed as secondary sources that might inform the question indirectly through their descriptions of how site-based management programs actually operate or through their reports of efforts to test a major premise of site-based management plans (e.g., the impact of teacher involvement on the quality of school planning). Project descriptions/status reports and position statements were treated as supplemental sources that might address the question informally through their narrative depictions, testimonial statements, and anecdotal accounts.

Fourth, the case study method obligates researchers to (a) invoke the orienting questions of the study to elicit themes and patterns in the data, (b) adopt constructs that capture those themes and patterns, (c) develop coding schemes to array the data and to assess the inferences and (d) incorporate strategies designed to test emergent interpretations (Glaser & Strauss, 1967; Miles & Huberman, 1984b; Schatzman & Strauss, 1973; Strauss & Corbin, 1990).

Reviewers can draw on these procedures to facilitate the analysis of multivocal literatures. For example, because one of our objectives in reviewing the literature on site-based management was to uncover the implicit assumptions embedded in site-based management proposals, we began by asking a simple question: What are the rationales for site-based management proposals? We recorded all the rationales we found in project descriptions or status reports, position statements, and systematic investigations. We inspected the list, adopted constructs that appeared to absorb all the rationales on the list (e.g., theories of action that defined and diagrammed the causal connections embedded in the rationales), and recoded the data to be sure that all the rationales fit within the constructs we posited. Then we developed matrices that enabled us to systematically track and actually see what every document in every category of the data set said about every causal connection in every theory of action. The matrices provided both a substantive account and a visual display of the extent to which the theories of action we uncovered were present in, and constituted, an accurate reduction of the data. Moreover, the matrices enabled us to incorporate strategies designed to test emergent interpretations. We could continuously interrogate the data (Schatzman & Strauss, 1973). That is, we could deliberately seek, directly locate, and systematically examine evidence that supported, negated, or confounded our interpretations.

Finally, within the logic of the method and the limitations of the data, researchers can formulate conclusions and offer interpretations that contribute to our understanding of complex phenomena. Although the findings and interpretations of ex-



ploratory case studies are necessarily tentative, they are often instructive, particularly if researchers (a) discuss the results of exploratory investigations in light of broader, perhaps competing, conceptual perspectives and (b) articulate lines of research that flow from the provisional explanations (LeCompte & Goetz, 1982; Yin, 1984).

Like researchers who employ the exploratory case study approach, reviewers of multivocal literatures are bound by the logic of the method and the liabilities of the data. Within the confines of these constraints, reviewers may contribute to our understanding of complex phenomena. Clearly, our review of the literature on school-based management does not warrant firm conclusions. Rather, it outlines two partial but plausible interpretations of this reform and sketches lines of research that flow from these two interpretations (i.e., the substantive prospects of a site-based management theme, rooted in rational views of organizations, and the symbolic properties of a site-based management theme, rooted in political-institutional views of the organizations summarized earlier). Thus the review illustrates, in a suggestive sense, the generative potential of multivocal literature reviews.

In sum, the exploratory case study method addresses problems associated with the exclusion of documents in two ways. It directs attention to construct validity. In so doing, it prompts reviewers to define the topic of study and to regard conformity to the conceptual definition as the primary criterion for seeking and selecting data, not methodological adequacy. Although additional criteria are applied to determine how information will be weighted, these are not used to determine whether information will be included. Because the method encourages reviewers to systematically locate and incorporate all pertinent information, it reduces the likelihood that relevant information will be automatically or arbitrarily excluded. The exploratory case study method also embodies general guidelines for analyzing and interpreting data acquired from diverse sources. In these ways, the method enables reviewers to carefully consider, not summarily discount, large amounts of documentary data.

#### *Selective Use of Data Included in Reviews*

In addition to the general guidelines for analyzing and interpreting documentary data outlined in the preceding section, the exploratory case study method includes several related procedures that address problems associated with the selective use of data more directly. Like the general guidelines, these supporting procedures are imprecise and unrefined. They operate as guards, not guarantees. They may alleviate and avert bias and error, but they do not eliminate them. Although these procedures do not constitute a set of exact or fixed rules, they do encompass a set of reasonable and recognized checks that enable the researcher to develop more accurate, dependable inferences and to produce more replicable, hence more reliable, analyses.

*Formal, retrievable database.* A fundamental requirement of case study research is the creation of a “formal, retrievable data base” (Yin, 1984, p. 92), a “formal assembly of evidence distinct from the final case study report” (Yin, 1984, p. 78). The requirement recognizes that researchers cannot simply read, remember, and reclaim the data in the case study report. From the reams of raw materials collected, researchers must develop summations that can be (a) read and reread to be sure they are accurate reductions of the raw materials and (b) examined and reexamined to be sure that all pertinent information is taken into account throughout data analysis and reflected in the final report. This seemingly obvious, but often overlooked, pro-

cedure in case study research (Yin, 1984, p. 93) could serve as one check on the neglect and, hence, the selective use of information in reviews of multivocal literatures. For example, the narrative summations of all documents, the open-ended code sheets, the more focused matrices previously described, and the other materials we produced (e.g., bibliographic notations, analytic memos, additional coding schemes) constituted a formal, retrievable database that we could readily reference, repeatedly scrutinize, and regularly reclaim to check for omissions and distortions in the analysis of information and the preparation of the report.

*Clear definition of emergent constructs—Explicit lines of evidence.* The case study method requires the investigator to do more than define the topic of study, chart the relationship between the orienting questions of the study and the major components of the data set, identify themes, and adopt constructs that capture them. These steps are important, especially in the early phases of the study, but they are not sufficient. Throughout all the stages of data analysis, the investigator must define emergent constructs, delineate the manner in which evidence is being used to examine the constructs (or their relations), and demonstrate the degree to which data from diverse sources corroborate or confound the analysis.

These conventions can be applied to reviews of multivocal literatures. For example, when *quality planning* surfaced as an analytic category, these conventions prompted us to address a number of issues: What is quality planning? What constitutes evidence of a relationship between site-based management and quality planning? What do the various components of the data set say about the linkage between site-based management and quality planning? What evidence supports, questions, confounds, or contradicts the linkage? To what extent do components of the data set corroborate our depiction of that linkage? Similarly, when *altered influence relationships* surfaced as an analytic category, these conventions prompted us to ask a number of questions: What influence relationships are to be altered? How does one determine whether influence relationships have been altered? What are appropriate indicators, or indexes, of changes in influence relationships? What constitutes evidence of a relationship between site-based management and altered influence relationships? What do the various components of the data set say about this relationship? To what extent do components of the data set corroborate or contest our depiction of that relationship? Whereas such continuous, deliberate attempts to define emergent constructs and delineate chains of evidence do not solve all the problems associated with the selective use of evidence, these procedures can be activated to prevent, expose, and minimize some of those problems.

*Systematic search for contrary findings and rival interpretations.* The case study method does not just require researchers to be open to contrary findings and alternative interpretations. It obligates researchers to systematically seek them, meticulously marshal the evidence that supports them, publicly acknowledge them, and critically appraise them (LeCompte & Goetz, 1982; Patton, 1980; Yin, 1984).

Reviewers can employ this rather general but fundamental approach. They can conscientiously seek contrary data (e.g., negative cases, subtle deviations, possible exceptions) and posit alternative interpretations; they can recode and recombine data so that the evidence which supports the conflicting patterns and varied interpretations is conspicuous; and they can publicly convey the conflicting evidence and critically assess the rival explanations. In so doing, reviewers, like other qualitative researchers, may be able to curb the selective use of information. For instance, this

approach helped us discover that our initial assessment of the ability of site-based management to improve morale was ignoring signs of exceptions, missing distinctions between initial and sustained and short-term and long-term effects, and overlooking rival explanations for patterns in the data. We needed to modify the claim that site-based management did not improve morale and motivation. We needed to acknowledge that site-based management appeared to have an initial energizing impact on some principals and teachers. We ended, ultimately, by qualifying our assessment. Instead of concluding that site-based management had no effect, we suggested there is some evidence that site-based management may have initial, positive effects on the morale and motivation of some participants but that there is little evidence that site-based management produces sustained improvements in the morale or motivation of a substantial number of participants. Moreover, we acknowledged that the absence of convincing evidence may be due to the limited amount of research regarding these linkages as well as the complex character of these relationships.

*Multiple researchers.* When more than one researcher is involved in a study, an individual's bias and error may be detected and checked by other members of the research team. For example, individuals can independently code the data and systematically compare the results. Individuals can develop analytic memos, air interpretations, and engage in a process of deliberate, adversarial critique (Campbell, 1975) wherein they delineate and debate rival interpretations. In these and other ways, members of the research team can operate to protect the study from bias and error.

These same practices can be incorporated in reviews of multivocal literatures. Reviews can be conducted by multiple researchers who are willing to carve out the activities and to build in the interactions that enable members of the team to detect the bias and error of individuals on the team. For example, the use of multiple researchers created opportunities and incentives to check bias and error in our review of the literature on school-based management. We regularly and aggressively examined and challenged each other's codes, inferences, arguments, and interpretations. These interactions did more than add zest to the task. They prompted us to be more thorough, consistent, and precise in our analysis of the data. They also prompted us to be more detailed, systematic, and explicit in our efforts to produce a report that demonstrated the relationship between the evidence examined and the conclusions offered.

*Collegial-informant reviews.* Collegial and/or informant reviews are an integral part of the exploratory case study. With other researchers, Murphy notes that "the fresh eye of a neutral colleague" (1980, p. 71) may spot weaknesses in inferences, "holes in arguments, leaps to logic and alternative interpretations" (1980, p. 72) that researchers involved in a study may not see. Similarly, informant reviews can correct or corroborate the findings and interpretations of a case study (Yin, 1984).

These steps can be readily transferred to reviews of multivocal literatures. For example, we asked several colleagues to critique drafts of the review of literature on site-based management. We did not formally or systematically solicit *informant reviews* (i.e., responses from authors of documents). However, in a sense, these occurred informally and serendipitously. Members of the review team presented the findings of the review at meetings in Ohio, California, Wisconsin, Colorado, and Utah. After these presentations, individuals involved in school-based management programs (some of which had been described in documents included in the literature

review) shared their reactions. Several commented that their experiences mirrored our findings and interpretations. One remarked that we had painted a pessimistic portrait that understated the potential of school-based management plans. Whereas these comments were helpful to us, reviewers need not rely on casual or fortuitous responses. Those who review multivocal literatures could invite a cross-section of authors of documents to audit and to assess their work.

In sum, the exploratory case study method addresses the problems associated with the selective use of data. The method embraces a number of procedures that, taken together, operate to help reviewers develop more accurate, dependable inferences and to produce more replicable and, consequently, more reliable analyses.

#### *Ambiguity of Procedures*

The exploratory case study method addresses problems associated with ambiguous data collection and analysis procedures in a straightforward manner. It requires that researchers “present their methods so clearly that other researchers can use the original report as an operating manual by which to replicate the study” (LeCompte & Goetz, 1982, p. 38). It also requires that researchers present their findings so fully that other individuals can determine what decision rules were used and whether they were followed.

To meet these requirements, researchers can maintain an *audit trail* (Guba & Lincoln, 1981, p. 122)—a complete account of the study that includes (a) a detailed description of how the study was conducted (e.g., steps taken to collect data, the criteria used to select and evaluate data, the coding schemes used to analyze data, the decision rules employed to interpret the data) and (b) a retrievable database (e.g., all the raw materials consulted, all the summations developed, all the code sheets used, all the analytic memos prepared). In addition, researchers can communicate the contents of the audit trail in the public, printed report.

Reviewers can honor these tenets of case study research. For example, in developing the review of literature on school-based management, we kept a record of the study and tried to communicate that record in ways that would permit others to replicate the work. The report includes a synopsis of the data collection and data analysis procedures (e.g., the computer search conducted, the annotated bibliographies consulted, the publications surveyed to identify names of individuals, organizations and agencies that might have information on school-based management, the efforts made to locate documents, the list of all materials obtained, the dimensions along which documents were coded at each stage of data analysis). The report characterizes the database (e.g., the range and quality of documents consulted). It also attempts to articulate the basis for judgments rendered and to acknowledge the limitations of conclusions offered.

Whether this review discloses the methods and describes the findings in a manner sufficient to permit others to follow the trail and reproduce the work is an open question. Whether reviews can meet these standards is not. Like case study researchers (e.g., Kingdon, 1984), reviewers can describe the methods employed and the decision rules used explicitly. In so doing, reviewers help themselves by creating opportunities to uncover, acknowledge, and account for bias and error in the approach taken. They also assist the reader by providing opportunities for inspection, replication, verification, or refutation.

### Summary: A Point of Departure

This article attempts to extend the discussion of rigor in reviews of empirical literatures to rigor in reviews of multivocal literatures. The article contends that reviews of multivocal literatures can be viewed as forms of original research, subject to the canons of research and strengthened by attention to methods of research. The article relies on the work of others to demonstrate that multivocal literatures can be treated as data sets. It builds on the contributions of meta-analysis and the case survey method to identify major sources of bias and error, to define general standards for gauging rigor, and to secure a basic strategy—the application of a research metaphor—to stimulate the development of formal methods that foster rigor in literature reviews. Our article argues that a particular research metaphor—the exploratory case study method—constitutes a robust sensitizing device for addressing aspects of rigor in reviews of multivocal literatures. In so far as the choice of research methods rests on the extent to which a particular research strategy fits the primary purposes of the research venture and the special characteristics of the phenomenon being examined, the exploratory case study method appears to be a viable option. The central aims of this method coincide with the discovery-oriented purposes and the inductive emphasis embedded in reviews of multivocal literatures. The special characteristics of multivocal literature bases parallel the special characteristics of the phenomena for which the case study is an appropriate research strategy. These similarities suggest that recommended procedures to minimize bias and error can be transferred to, and incorporated in, reviews of multivocal literatures.

The exploratory case study approach is offered as a useful point of departure. The method does not attend all aspects of rigor. It does not offer precise prescriptions or fixed formulas. However, it does encompass procedures that can help reviewers of multivocal literatures cope with the challenges inherent in efforts to organize, synthesize, and interpret diverse, disparate writings. And, it may serve an even more important purpose. It may precipitate discussions that move researchers towards rigor in reviews of these literatures.

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