

RESEARCH IN EDUCATION  
*A Conceptual Introduction*

James H. McMillan  
*Virginia Commonwealth University*  
Sally Schumacher  
*Virginia Commonwealth University*

Second Edition

Scott, Foresman and Company  
Glenview, Illinois London, England

## CHAPTER 4

### LITERATURE REVIEW

#### ■ KEY TERMS ■

literature review  
related literature  
secondary sources  
primary sources  
report literature

preliminary literature search  
exhaustive search  
database  
thesaurus  
meta-analysis

Literature reviews, if conducted carefully and presented well, add much to an understanding of the selected problem and help place the results of a study in a historical perspective. Without reviews of the literature, it would be difficult to build a body of accepted knowledge on an educational topic.

This chapter explains the purposes and steps to locate, search, and criticize the literature. It also describes sources for secondary literature and reference services for primary literature. A quantitative literature review follows specific guidelines in the presentation and criticism of the literature to provide an understanding of the existing knowledge of the problem and a rationale for the research questions. Qualitative researchers present literature discussions and integrate criticism of the literature in the text of a study. Later in the chapter you will find a discussion of meta-analysis, a statistical methodology used to synthesize the results of prior research; this review process is described and assessed. Finally, we suggest some standards for evaluating traditional narrative literature reviews.

#### ■ FUNCTIONS OF A REVIEW OF RELATED LITERATURE ■

An interpretative review of the literature is exactly that—a summary and synthesis of relevant literature on a research problem. A **literature review** is usually a critique of the status of knowledge on a carefully defined educational topic. The

literature review enables a reader to gain further insights from the purpose and the results of a study.

Literature for a review includes many types of sources: professional journals, reports, scholarly books and monographs, government documents, and dissertations. It may include empirical research, theoretical discussions, reviews of the status of knowledge, philosophical papers, and methodological treatises.<sup>1</sup>

**Related literature** is that which is obviously relevant to the problem, such as previous research investigating the same variables or a similar question; references to the theory and the empirical testing of the theory; and studies of similar practices. Thoroughly researched topics in education usually have sufficient studies pertinent to the research topic. Excerpt 4.1 is an example of a literature review of directly related studies, which are studies that investigated a similar problem.

New or little-researched topics usually require a review of any literature related in some essential way to the problem to provide the conceptual framework and a rationale for the study. Related literature may be found outside the field of education such as in sociological research on small-group interaction, political studies of voter behavior, or psychological research on cognitive processes. Related literature may also be in an educational context that is different from that of the research problem. Excerpt 4.2 contains an example of a literature review that relates three broad topics to the research problem.

A review of the literature serves several purposes in research. Knowledge from the literature is used in stating the significance of the problem, developing the research design, relating the results of the study to previous knowledge, and suggesting further research. A review of the literature enables a researcher to:

1. *Define and limit the problem.* Most studies that add to educational knowledge investigate only one aspect of the larger topic. The researcher initially becomes familiar with the major works in that topic and the possible breadth of the topic. The research problem is eventually limited to a subtopic within a larger body of previous theory, knowledge, or practice and stated in the appropriate terms.
2. *Place the study in a historical and associational perspective.* To add to the knowledge in any subfield, researchers analyze the way their studies will relate to existing knowledge. A researcher may thus state that the research of A, B, and C has added a certain amount to knowledge; the work of D and E has further added to our knowledge; and this study extends our knowledge by investigating the stated question.
3. *Avoid unintentional and unnecessary replication.* A thorough search of the literature enables the researcher to avoid unintentional replication and to select a different research problem. The researcher, however, may deliberately replicate a study for verification. A research topic that has been investigated with similar methods that failed to produce significant results

<sup>1</sup>We gratefully acknowledge the assistance of K. A. Cutler, Social Science Reference Librarian, and the Reference Services of the James Branch Cabell Library of Virginia Commonwealth University in the preparation of this chapter.

### EXCERPT 4.1

#### Relevant Literature: Directly Related

Interaction between adults and children has been examined in both family and preschool settings but few studies have reported comparisons of mothers and preschool teachers either in terms of their attitudes or their behavior. Although Elardo and Caldwell (1973) reported a high level of agreement between parents and preschool teachers on a set of objectives, the technique used in their study may not have been sensitive to differences because the respondents were allowed to rate every objective as "very important." Cabler (1974) reported that principals and teachers of kindergarten children assigned higher priority to the development of such "personal" characteristics as self-concept and emotional maturity, while parents placed higher priority on "intellectual" development. More recently, Winetsky (1978) found that preschool teachers preferred that children be involved in self-directed activities, while mothers of preschool children showed a greater preference for teacher-directed activities. The mother-teacher differences revealed by Winetsky's questionnaire study are consistent with observed behavioral differences between mothers and day care workers interacting with 18-month-old infants: Mothers were more restrictive and verbally directive than were child care workers (Rubenstein & Howes, 1978). The study reported here presents additional evidence for differences between mothers and preschool teachers in the ways in which they interact with young children.<sup>1</sup>

Source: From "Some Contrasts Between Mothers and Preschool Teachers in Interaction with 4-year-old Children" by Robert D. Hess, et al., *American Educational Research Journal*, Summer 1979, Vol. 16, No. 3, pp. 307-316. Copyright © 1979, American Educational Research Association, Washington, DC. Reprinted by permission.

- indicates a need to revise the problem or the research design. Evaluation studies may seem to duplicate prior research, but this duplication is necessary if the study is designed for site decision-making.
4. *Select promising methods and measures.* As researchers sort out the knowledge on a subject, they assess the research methods that have established that knowledge. Previous investigations provide a rationale and insight for the research design. Analysis of measures, sampling, and methods of prior research may lead to a more sophisticated design, the selection of a valid instrument, a more appropriate data analysis procedure, or a different methodology for studying the problem.
  5. *Relate the findings to previous knowledge and suggest further research.* The results of a study are contrasted with those of previous research in order to state how the study added additional knowledge. If the study yielded nonsignificant results, the researcher's insights may relate to the research problem or to the design. Most researchers suggest directions for further research based on insights gained from conducting the study and the literature review.