Foreword

ducational decision makers are constantly confronted with challenges for improving educational outcomes. They are bombarded with stories in journals and newsletters that herald new educational breakthroughs in curriculum, instructional strategies, teacher qualifications, and technology that have been "shown" to raise student test scores. They are assailed with the recommendations of consultants and experts who begin their sentences with the authority of three words: "Research shows that...." But, they also know that these words are used very loosely in education, often to promote approaches to which the advocate is committed. Only rarely is the researcher required to provide documentation that substantiates the research findings. Even worse, what is often called research in education would not pass muster as rigorous evidence in any of the sciences or social sciences. Educational experimentation is difficult to undertake, and educational researchers often lack the specialized training that is required for systematic inquiry.

What is an educational decision maker to do under such circumstances? Can research claims be trusted? How can one understand the differences between solid research findings and mere claims that "Research shows that...." Recently, the stakes have risen. The No Child Left Behind Act of 2001 mandates that decisions using federal funding must be made on the basis of "scientifically based research." Presumably, state and local decision makers using federal funds must limit the choice of educational interventions for improving instruction to those that are scientifically validated. Yet, most policy makers and decision makers are not likely to be able to distinguish among interventions according to this criterion. Advocates of educational interventions have historically placed findings of questionable validity into scientific-appearing formats such as graphs and histograms, assertions of "significant" results, and journal citations. All of these are designed to confer the manifestations of "scientificism" on claims of educational effectiveness. Often these devices are used for marketing purposes. Unfortunately, the vast majority of research claims in education have been found to be suspect in terms of the validity of the evidence. Only a few are solidly supported by systematic research, but which few?

xii MAKING SENSE OF RESEARCH

Making Sense of Research by Elaine and Patrick McEwan is the most effective attempt that I have seen to assist decision makers in sifting through scientific claims about educational interventions. The book takes readers through a comprehensive set of principles regarding the evaluation of research claims and applies these to a set of case studies of prominent reforms. The collaboration of a noted educator and a highly regarded economist provides insights and understanding into both the strengths and weaknesses of education research. These insights are applied directly to prominent educational reforms and the analysis of the quality of research underlying them. Educators owe a debt of gratitude to the McEwans for their clarity in presentation and penetrating guidance. Without question, this book will serve as the standard work in assisting educators and decision makers to assess the validity of research claims in education as they determine how to improve student outcomes.

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