

# HOW TO **DESIGN AND EVALUATE** **RESEARCH IN EDUCATION**



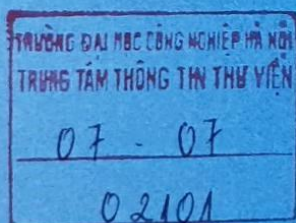
EIGHTH EDITION

JACK R. **FRAENKEL**  
NORMAN E. **WALLEN**  
HELEN H. **HYUN**



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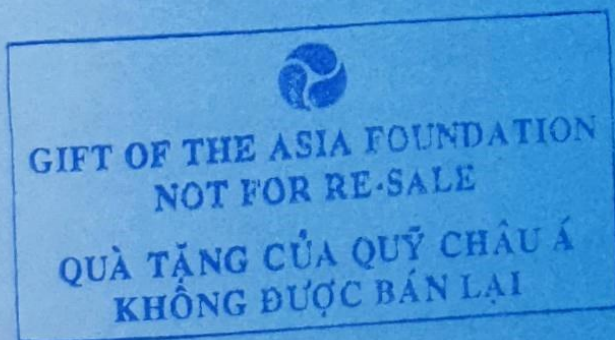
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*How to Design and Evaluate Research in Education* is directed to students taking their first course in educational research. Because this field continues to grow so rapidly with regard to both the knowledge it contains and the methodologies it employs, the authors of any introductory text are forced to carefully define their goals as a first step in deciding what to include in their book. In our case, we continually kept three main goals in mind. We wanted to produce a text that would:

1. Provide students with the basic information needed to understand the research process, from idea formulation through data analysis and interpretation.
2. Enable students to use this knowledge to design their own research investigation on a topic of personal interest.
3. Permit students to read and understand the literature of educational research.

The first two goals are intended to satisfy the needs of those students who must plan and carry out a research project as part of their course requirements. The third goal is aimed at students whose course requirements include learning how to read and understand the research of others. Many instructors, ourselves included, build all three goals into their courses, since each one seems to reinforce the others. It is hard to read and fully comprehend the research of others if you have not yourself gone through the process of designing and evaluating a research project. Similarly, the more you read and evaluate the research of others, the better equipped you will be to design your own meaningful and creative research. In order to achieve the above goals, we have developed a book with the following characteristics.

## CONTENT COVERAGE

Goal one, to provide students with the basic information needed to understand the research process, has resulted in a nine-part book plan. Part 1 (Chapter 1) introduces students to the nature of educational research, briefly overviews each of the seven methodologies discussed later in the text, and presents an overview of the research process as well as criticisms of it.

Part 2 (Chapters 2 through 9) discusses the basic concepts and procedures that must be understood before one can engage in research intelligently or critique it meaningfully. These chapters explain variables, definitions, ethics, sampling, instrumentation, validity, reliability, and internal validity. These and other concepts are covered thoroughly, clearly, and relatively simply. Our emphasis throughout is to show students, by means of clear and appropriate examples, how to set up a research study in an educational setting on a question of interest and importance.

Part 3 (Chapters 10 through 12) describes in some detail the processes involved in collecting and analyzing data.

Part 4 (Chapters 13 through 17) describes and illustrates the methodologies most commonly used in quantitative educational research. Many key concepts presented in Part 2 are considered again in these chapters in order to illustrate their application to each methodology. Finally, each methodology chapter concludes with a carefully chosen study from the published research literature. Each study is analyzed by the authors with regard to both its strengths and weaknesses. Students are shown how to read and critically analyze a study they might find in the literature.

Parts 5 (Chapters 18 through 20) and 6 (Chapters 21 through 22) discuss qualitative research. Part 5 begins the coverage by describing qualitative research, its