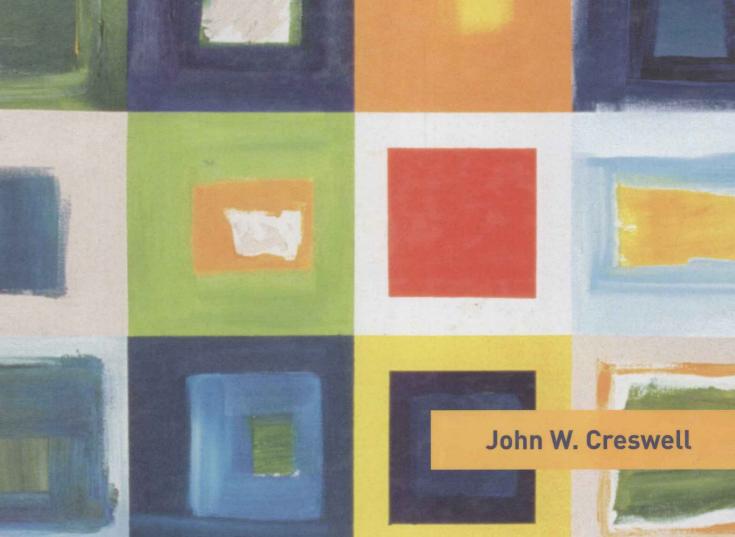
# Educational Research

Planning, Conducting, and Evaluating Quantitative and Qualitative Research



# Educational Research

# Planning, Conducting, and Evaluating Quantitative and Qualitative Research

**SECOND EDITION** 

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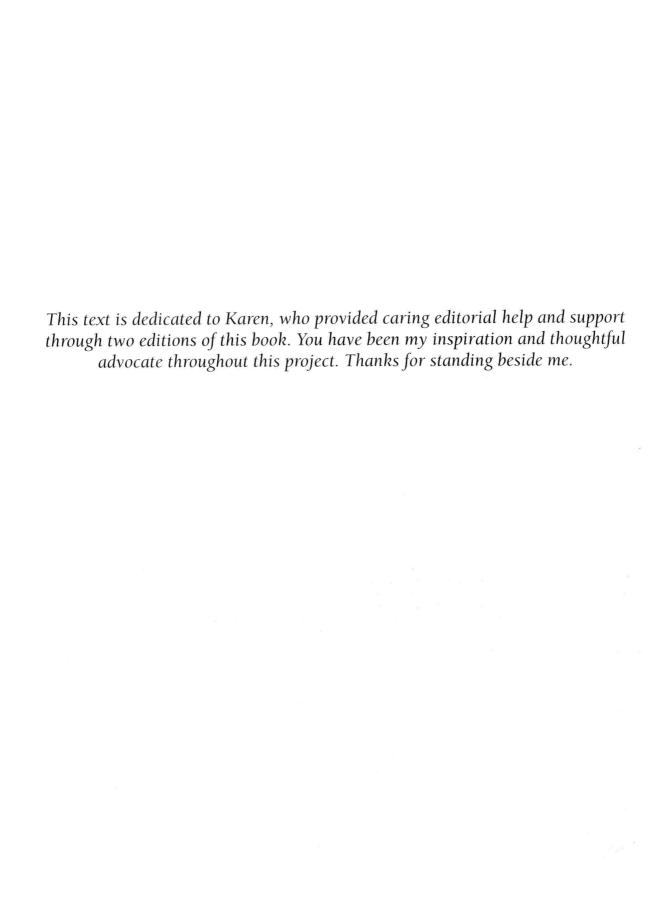
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# Preface

The philosophy that guided the development of this text is twofold. First, research involves a process of activities rather than the application of isolated, unrelated concepts and ideas. Educators practice research following a general sequence of procedures—from the initial identification of a research problem to the final report of research. This means that understanding the sequence or flow of activities is central to inquiry. Thus, the text begins with specific chapters devoted to each step in the process of research and the inclusion of concepts and ideas within this process.

Second, the educational researcher today needs a large toolbox of approaches to study the complex educational issues in our society. No longer can we, as educators, use only experiments or surveys to address our research problems. Educators in this new century—whether conducting research or reading research to self-inform—need to know about both quantitative and qualitative approaches to inquiry and to have an in-depth understanding of the multiple research designs and procedures used in our studies today. Throughout the steps in the process of research, this text will introduce you to both quantitative and qualitative approaches. You will examine each step and learn about their differences and similarities in application. The text will also introduce you to eight distinct quantitative and qualitative research designs or procedures that comprise the repertoire of the educational researcher today.

## **KEY FEATURES**

This text is the first introduction to educational research to offer a truly balanced, inclusive, and integrated overview of the field as it currently stands. As you will see from the table of contents, the book's coverage is unique in its balanced presentation of quantitative and qualitative research. Moreover, it consistently examines foundational issues of research—for example, determining how to approach a project and understanding what constitutes data and how to analyze them—from both quantitative and qualitative perspectives. This approach helps students understand fundamental differences between *and* similarities of these approaches. Three ideas are central to this text:

- It provides balanced coverage of quantitative and qualitative research.
- It helps students learn how to begin to do research.
- It helps students learn how to read and evaluate research studies.

Let's look at each of these in detail to see how they can help you achieve your course objectives.

# **Balances Coverage of Quantitative and Qualitative Research**

This text provides balanced coverage of all types of research designs. This provides readers with a complete picture of educational research as it is currently practiced. After an overview in Part I of the general nature of educational research and the specific quantitative and qualitative

approaches to it, the book examines in depth the steps in the research process in Part II, Chapters 3 through 10:

- 1. identifying a research problem
- 2. reviewing the literature
- 3. specifying a purpose and research questions or hypotheses
- 4. collecting either quantitative or qualitative data
- 5. analyzing and interpreting either quantitative or qualitative data
- 6. reporting and evaluating the research

Looking at the process simultaneously from both quantitative and qualitative perspectives helps students understand what choices a researcher has available and what meaning exists for a particular choice.

After this discussion, in Part III students will learn the procedures for conducting specific types of quantitative, qualitative, and mixed methods studies. Chapters 11 through 18 provide balanced coverage and examples of each of these types of educational research designs: experimental, correlational, survey, grounded theory, ethnographic, narrative, mixed methods, and action research.

# Helps Students Learn How to Begin to Do Research

Both the research process and design chapters offer the researcher step-by-step guidance in the basic aspects of planning, conducting, and evaluating research. A number of features guide readers through the steps and procedures of research. For example, a fictional beginning researcher, Maria, who is also a high school teacher and new graduate student, is followed throughout Part II and Part III to illustrate one researcher's efforts and to provide students with a realistic perspective of the process of research and the selection of specific research designs. Other features include, but are not limited to:

- tips on planning and conducting research in "Useful Information for Producers of Research"
- checklists that summarize key points, such as evaluation criteria to use to assess the quality of a quantitative or qualitative study
- in-text examples of actual and hypothetical studies that illustrate the correct and incorrect ways of reporting research
- follow-up activities in "Study Questions and Activities" to help students apply the concepts they've just learned
- a "Think Aloud" feature that describes practices the author has found useful.

# Helps Students Learn How to Read and Evaluate Research Studies

Direct guidance on reading research is offered throughout the text. To further help students become more skilled at interpreting and evaluating research, the text offers a number of features. Most important among these are the many articles included in the text and the "Useful Information for Consumers of Research" feature.

• The text provides annotated research articles in each of the design chapters in Part III. Two other articles—one qualitative, one quantitative—appear at the end of Chapter 1. All of these complete articles (there are numerous other, shorter article excerpts in the book) include highlighted marginal annotations that help students understand the structure of articles and the key issues with which a reader should be concerned when evaluating the quality and the applicable scope of each particular piece of research.

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▶ The "Useful Information for Consumers of Research" feature appears at the end of every chapter and offers concrete guidance in interpreting and in evaluating research.

## **NEW FEATURES IN THE SECOND EDITION**

You will find several new features included in this second edition:

- ▶ The quantitative data collection chapter is now followed by the quantitative data analysis and interpretation chapter; likewise, the qualitative data collection is followed by the qualitative data analysis and interpretation chapter. This sequence was changed from the first edition so that the quantitative methods could be presented together and the qualitative methods together.
- ▶ The introductions to each chapter are streamlined. Chapters now begin with a definition and purpose of the key concept of the chapter.
- New technology is now included in many chapters to bring you up to date with the latest useful technology for conducting educational research.
- ▶ The content is simplified to appeal to the novice researcher in education. Thus, Chapter 7 on quantitative data analysis and interpretation is more introductory than the original chapter in the first edition. Chapters 11 and 12 on experimental and correlational research also are simplified to emphasize only the key concepts useful to a beginning researcher. Throughout the research design chapters of Part III, a focus now exists on key characteristics that you need to know to understand the designs.
- ▶ The number of examples has been reduced in the second edition so that a greater emphasis is placed on the concepts.

# SUPPLEMENTARY MATERIALS

A number of ancillaries are available to complement the text. For students, a Study Guide and a Companion Website are available to reinforce and extend learning. Instructors may use the Instructor's Manual and Test Bank, a Computerized Test Bank, and customized PowerPoint slides and other materials on the Companion Website.

**Study Guide** The Study Guide contains worksheets to help students apply what they have learned in the text. Exercises pertaining to Chapters 1 through 10 require students to analyze articles in terms of their components, the process of research, and differences in conducting quantitative and qualitative studies. Exercises for the research design chapters (Chapters 11–18) ask students to evaluate reprinted quantitative and qualitative studies, thereby deepening their understanding of design distinctions. Also included are multiple-choice practice test items to assess understanding and prepare students for class exams.

Companion Website You can find the Companion Website at http://www.prenhall.com/creswell. This free online learning site helps students master course content with interactive self-quizzes, challenging application problems, and Internet links to explore related topics. The site enables instructors to manage their courses online with Syllabus Manager™ and provides access and print options for PowerPoint® slides to enhance class lectures.

**Instructor's Manual/Test Bank** An Instructor's Manual with Test Bank is available to accompany this text. For each chapter in the book, this manual provides strategies for teaching chapter

content, lecture notes that summarize important concepts requiring review and reinforcement, and transparency masters for overhead use or as handouts to students. (Duplicates of these transparencies are provided electronically on the Companion Website in PowerPoint for instructors' use.) This manual also provides suggestions for when and how to use the supplements with the text.

The Test Bank portion of the manual contains various types of items—multiple-choice, matching, short essay, and fill-in-the-blank—for each chapter. Questions ask students to identify and describe research processes and design characteristics they have learned about and to classify and evaluate quantitative and qualitative studies and research situations.

**Computerized Test Bank** A Computerized Test Bank, which is a replication of the printed test bank, is available on disk for Windows and Macintosh.

### **ACKNOWLEDGMENTS**

This book is a culmination of 30 years of experience in conducting both quantitative and qualitative research in education and the social sciences. It could not have been written without the capable assistance of numerous individuals, such as graduate students, research assistants, and colleagues at the University of Nebraska–Lincoln. Dr. Dana Miller assisted in a timely and thorough review of many chapters. Vicki Plano Clark provided editorial assistance and a key conceptual eye for missing details. Dr. Ron Shope developed the initial PowerPoint presentation and has revised it extensively for this second edition. Dong Dong Zhang provided inspiration for many applied ideas and support at critical phases of the project. Other graduate students offered useful ideas, including Michael Toland, Kathy Shapely, and many other students in my classes on the foundations of educational research. Dr. Bill Mickelson served as a statistics consultant and quantitative analysis reviewer.

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NOTE: Every effort has been made to provide accurate and current Internet information in this book. However, the Internet and information posted on it are constantly changing, so it is inevitable that some of the Internet addresses listed in this textbook will change.