

Introduction to Educational Research

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• Preface •

Preface . . . to the Preface

Each new edition of a textbook represents change, of some sort. Although it may not appear so to those who are unfamiliar with its “previous editions”—since this is a first-edition text—this text also represents substantial change from its earlier versions. For seven previous editions, I—along with my coauthor, Dr. Carol M. Charles—produced a textbook by the same name but with a different publisher. In early 2014, an opportunity arose for SAGE Publications to publish *Introduction to Educational Research*, as a first edition. Having worked on two previous textbook projects with SAGE over the past 10 years or so, I could not have been more excited and jumped at the opportunity to have the SAGE imprint on this textbook—especially since SAGE is the leading authority when it comes to publishing books on the topic of research methodologies.

This new version of *Introduction to Educational Research* represents a significant revision of previous editions. Chapters have been rewritten, and the organization of the book has been restructured. For those adopters who are familiar with the previous editions, I firmly believe that you will find this version of the text substantially more beneficial to both you and your students. Content coverage and integrated samples and examples have been thoroughly augmented, while the conversational writing style apparent in previous editions has been maintained throughout.

Purpose of the Text

This book has two main purposes that receive attention simultaneously. The first is to provide knowledge about educational research, sufficient for a clear understanding of the following:

- Exactly what educational research is and is not
- The nature of research and the scientific process it employs
- Identifying research problems and stating research questions and hypotheses
- The ethical responsibilities that must be adhered to by researchers
- The purposes and processes of conducting a review of related literature
- The various types of research methodologies and designs, along with their purposes, characteristics, strengths, and limitations
- Characteristics, sources, and techniques used in the collection of data
- Procedures for analyzing qualitative and quantitative data
- Procedures for writing research proposals and final research reports

The second purpose of this book—a purpose that has been given preeminence in this edition (in keeping with previous editions)—is to help graduate students conduct their own research. Toward that end, specific guidance is provided in the following areas:

- Identifying appropriate topics for research
- Properly framing research questions and hypotheses
- Identifying possible types of research necessitated by various topics
- Preparing a research proposal for an identified research topic
- Conducting a thorough search for related research literature
- Evaluating various types of research appropriate for investigating selected topics
- Identifying necessary data, sources of those data, and the procedures by which data are collected
- Analyzing data appropriately
- Answering research questions and testing hypotheses
- Stating findings and drawing conclusions
- Preparing research reports

Focused on the Needs of Educators and Graduate Students

Introduction to Educational Research, first edition, is designed specifically for educators who are new to research and seeking advanced degrees in graduate studies. Most users will be in-service teachers, administrators, special-education personnel, instructional coaches, and counselors, but the book is also appropriate for graduate students not yet actively teaching. No prior familiarity with the principles, procedures, or terminology of educational research is required to fully benefit from this text.

Text Organized Sequentially, Like an Educational Research Study

The text is composed of 14 chapters, an appendix, and a glossary. In keeping with the purposes of helping students organize and undertake research while simultaneously acquiring fundamental knowledge about research, the text is organized into four parts, as follows:

Part I: Initial Research Considerations

Chapter 1: What Is Educational Research?

Chapter 2: Overview of the Educational Research Process

Chapter 3: Identifying a Research Problem

Chapter 4: Ethics in Educational Research

Chapter 5: Reviewing Related Research Literature

Part I clarifies the nature of educational research, explains its characteristics, provides an overview of the entire process of conducting educational research, discusses mechanisms for identifying appropriate research topics or problems, and provides strategies for reviewing related research literature.

Part II: Designing a Research Study

Chapter 6: Qualitative Research Methods

Chapter 7: Quantitative Research Methods

Chapter 8: Mixed-Methods Research

Chapter 9: Action Research

Chapter 10: Writing a Research Proposal

Part II provides detailed descriptions of qualitative research methodologies and quantitative research designs, mixed-methods research designs, the process of conducting action research, and strategies for developing a written research proposal.

Part III: Collecting and Analyzing Data

Chapter 11: Qualitative Data Collection and Analysis

Chapter 12: Quantitative Data Collection

Chapter 13: Quantitative Data Analysis

Part III provides detailed descriptions and examples of data collection and analysis procedures for both qualitative and quantitative research studies.

Part IV: The Research Report

Chapter 14: Writing a Final Research Report

Part IV discusses various aspects of writing a final research report, including the importance of identifying the audience, conventions of academic-style writing and format, and practical guidelines for writing.

Back Matter

The back matter of the text consists of an appendix and glossary. The appendix contains a written research report that has been published in an academic journal. This research report appears in its entirety. The glossary of important terms includes well over 350 terms related to various aspects of educational research.

Pedagogical Features and Benefits for Students

In keeping with the main purpose of helping users clearly understand and apply research concepts, several pedagogical features have been included in the book. Each chapter contains the following features:

- **Student Learning Objectives (or SLOs)**—The SLOs serve several pedagogical purposes. They provide a preview for each chapter, list the 4 to 8 major targeted learning objectives for that chapter, and may also be used as a review upon completing study of the chapter.
- **Developmental Activities**—Each chapter includes five developmental activities, located at the end of the chapter. These developmental activities are designed to provide opportunities, at a variety of levels of depth and breadth, for students to apply concepts and skills they have learned throughout the chapter. These may be used effectively as course assignments, in-class activities, or as a basis for class discussions on topics addressed in the chapter.
- **Chapter Summaries**—Thorough and detailed summaries of key concepts, listed in bullet-point format, are included at the end of each chapter and provide focused reviews of chapter contents.

Other pedagogical features include the following:

- **Reprinted Research Report**—The appendix contains a complete published research article. This can serve as an opportunity for students to engage in a critique of a published article as well as to see the format and writing style appropriate for academic journals.
- **Glossary**—A glossary of more than 350 terms important in educational research has been provided for easy student reference. The terms are highlighted in boldface on their first appearance in the text. This is one of the most comprehensive glossaries presented in any educational research textbook.

Supplements for Instructors

SAGE edge for Instructors, available at edge.sagepub.com/mertler, supports teaching by making it easy to integrate quality content and create a rich learning environment for students.

- **Test banks** provide a diverse range of pre-written options as well as the opportunity to edit any question and/or insert your own personalized questions to effectively assess students' progress and understanding.
- A **Respondus electronic test bank** is available and can be used on PCs. The test bank contains multiple choice, true/false, short answer, and essay questions for each chapter and provides you with a diverse range of pre-written options as well as the opportunity for editing any question and/or inserting your own personalized questions to effectively assess students' progress and understanding.

Respondus is also compatible with many popular learning management systems so you can easily get your test questions into your online course.

- **Sample course syllabi** for semester and quarter courses provide suggested models for structuring your courses.
- Editable, chapter-specific **PowerPoint® slides** offer complete flexibility for creating a multimedia presentation.
- **Lecture notes** summarize key concepts by chapter to help prepare for lectures and class discussions.
- Access to full-text **SAGE journal articles** that have been carefully selected to support and expand on the concepts presented in each chapter.
- **Multimedia content** includes original SAGE videos that appeal to students with different learning styles.

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• Acknowledgments •

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Dr. Craig A. Muller

• About the Author •



Dr. Craig A. Mertler began his career as a high school biology teacher. He has been an educator for 30 years—20 of those in higher education at Bowling Green State University, the University of West Georgia, and Lynn University, and 6 as an administrator (department chair, doctoral program director, and education dean). Over his career, he has taught courses focused on the application of action research to promote educator empowerment, school improvement, and job-embedded professional development, as well as classroom assessment, research methods, and statistical analyses. He has

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He is the author of 20 books, four invited book chapters, and 18 refereed journal articles. He has also presented more than 35 research papers at professional meetings around the country, as well as internationally. He conducts workshops for in-service educational professionals (at all levels) on classroom-based action research and on the topics of classroom assessment and assessment literacy, as well as data-driven educational decision making. His primary research and consulting interests include classroom-based action research, data-driven educational decision making, professional learning communities, and classroom teachers' assessment literacy. In his leisure time, he coaches high school volleyball and enjoys playing golf and traveling with his family.

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