

For Whom This Book is Intended

Introduction to Educational Research, sixth 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, 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 in order to profit fully from this book.

Purposes of the Book

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

- The ethical and philosophical principles adhered to in research
- The nature of research and the scientific process it employs
- Research questions, hypotheses, and hypothesis testing
- The various types of research and their purposes, traits and designs
- Procedures for analyzing qualitative and quantitative data
- Published research, where it is found in the library, and how it is implemented

The second purpose of this book, a purpose that has been made preeminent in this edition (as well as in its immediate predecessor), is to help graduate students conduct their own research. Toward that end, specific guidance is provided in

- Identifying satisfactory topics for research
- Framing research questions and subquestions
- Stating research hypotheses and null hypotheses
- Identifying the type of research called for in various topics
- Preparing a research proposal for a selected topic
- Conducting a thorough library search of literature
- Analyzing types of research appropriate for investigating selected topics
- Identifying needed data, their sources, 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

Organization of the Book

In keeping with the purposes of helping students organize and undertake research while simultaneously acquiring fundamental knowledge about research, the book is organized into four parts, as follow:

Part One: Orientation to Educational Research

Clarifies the nature of research, explains its rules of operation, identifies standard types of educational research, and reviews the sources of data employed in those types of research.

Part Two: Preliminary Skills Needed for Conducting Research

Includes selecting, refining, and proposing a topic for research; locating published research in the library; and interpreting, summarizing, and annotating published research.

Part Three: Conducting Your Own Research Project

Shows users how to design their own research projects; clarifies the procedures and tools they need for gathering data in their investigations; explains how to analyze qualitative and quantitative research data, present findings, and draw conclusions; and takes students step by step through preparing an appropriate research report.

Part Four: Procedures and Exemplars in Nine Types of Research

Provides details about how the nine major types of research – ethnographic research, historical research, survey research, correlation research, causal-comparative research, experimental and quasi-experimental research, mixed-methods research, action research, and evaluation research – are planned and conducted. Published research reports that exemplify these types of research are reprinted in the chapters.

Chapters in the Book

The book is composed of 15 chapters, two appendixes, and a glossary. The first nine chapters are sequenced to provide direct guidance in planning, conducting, and reporting research. The last six chapters present types of research and exemplars for study and analysis. Chapter titles are:

Chapter 1: Educational Research: Its Nature and Rules of Operation

Chapter 2: Types of Educational Research and Corresponding Sources of Data

Chapter 3: Selecting, Refining, and Proposing a Topic of Research

Chapter 4: Locating Published Research

Chapter 5: Interpreting and Summarizing Published Research

Chapter 6: Designing a Research Project

Chapter 7: Procedures and Tools for Gathering Data

Chapter 8: Analyzing Research Data and Presenting Findings

Chapter 9: Preparing a Research Report

Chapter 10: Qualitative Research Methods

Chapter 11: Survey Research

Chapter 12: Nonexperimental Quantitative Research

Chapter 13: Experimental, Quasi-Experimental, and Single Subject Design

Chapter 14: Mixed-Methods Research Designs

Chapter 15: Action Research and Evaluation Research

Certain courses may well require a sequence different from that presented here. Modifications can and should be made to meet the needs of instructors and students.

Chapter Formats

Chapters are formatted to include the following sections:

Preview

Presented at the beginning of each chapter, the preview provides a brief but thorough overview of what is to come in the chapter. These previews help readers anticipating and focus on the major topics presentations in the chapter.

Targeted Learnings

After examining the preview, readers are directed to look especially for information related to specific chapter topics. These targeted learnings are repeated at the ends of chapter and are helpful for review and self-testing.

Chapter Information Organizer

A graphic organizer is presented that shows chapter organizations and content. These organizations are helpful as advance organizers for learning as vehicles for review.

The Body of the Chapter

Here, the information, examples, and other explanations that convey chapter contents are presented. Interspersed within the body of the chapter are application exercises that call on readers to interpret or make realistic applications of what they have learned.

Applying Technology

This section contains relatively brief presentations and/or discussions of topics related to the contents of the chapter and incorporates the use of technology. Specific topics for the Applying Technology section do not consist of a reiteration of the material in the chapter text; rather, this section contains material that could be considered secondary in nature but that can be used to exemplify or extend the content being discussed. Typically, these sections emphasized technology applications or related websites. Several chapters contain multiple Applying Technology sections.

Companion Website Highlight

This edition of the text is substantially enhanced by the inclusion of a Companion Website. Features of the Companion Website that are specifically highlighted in the chapters include supplemental materials that support the text material but that were not appropriate for inclusion in the text. These items appear in a format suitable for students to download and print out for their individual use. Examples of these highlighted items include:

- A sample guide for evaluating research
- A sample research proposal rating scale
- A research planning guide checklist
- Sample surveys
- Sample research proposals
- Statistical decision-making trees for both descriptive and inferential statistics
- A sample data file (which students can download and gain experience with data analysis)
- Several sample research studies

The Companion Website may be found at www.ablongman.com/mertler6e

Chapter Summary

A brief resume is presented at the end of each chapter that reiterate the major points covered in the body of the chapter. These summaries help readers tie the information together succinctly.

List of Important Terms

Following the chapter summary, a list of important terms discussed in the chapter is presented. Definitions of the terms are not provided here; hence, the list is useful for review, discussion, and student self-testing. Definitions appear in the glossary near the end of the book.

Your Current Status:

This section appears in select chapters follows the list of important terms. It provides a cumulative look at the progress the reader has made through the specific chapter. This knowledge reinforces learning and fosters a sense of accomplishment.

Activities for Thought and Discussion

Presented at the end of each chapter are several additional activities that call on students to interpret or apply information presented in the chapter. Students are encouraged to explore the activities individually or in groups. The topics and their interpretations can be used for lively and informative class discussions.

Answers to Chapter Exercises

Suitable answers are presented for the in-text exercises include in the chapter. Alternative answers not presented are often correct; disagreement concerning answers provides students with a valuable opportunity for discussion and exploring concepts in greater depth.

References and Recommended Readings

In-chapter references are cited in this section. Also included are works that have not been cited but that relate to the chapter contents and are recommended for additional supplemental reading.

Statistical Procedures

Fundamental statistical concepts and procedures appropriate for beginning students of educational research are presented as needed in various chapters. They are explained in relation to the analysis of specific research data and are clarified through many examples; thus, they are not intimidating to the reader. In-depth coverage of statistical topics is presented in Appendix A.

Appendix A

Following the final chapter of the text, an appendix is presented that presents an overview of statistical concepts and treatments in more depth than is offered elsewhere in the text. That information is assembled in Appendix A for reference or more advanced study.

Appendix B

An appendix containing an overview, explanations, and examples of the software program titled TakeNote! Continues in this edition. TakeNote! Is an efficient and easy-to-use program that assists users in organizing and writing research reports that can be ordered as a package option by contacting your local sales representative.

Glossary

Research terminology introduced in the text is listed and defined in the glossary.

Changes in the Sixth Edition

Users familiar with the previous edition of this book will see several changes, the most substantial of which are intended only to enhance the previous editions of the text. These changes include:

- The fifth edition's Chapter 10 (ethnographic research) and part of Chapter 12 (historical research) have been combined into a new chapter titled Qualitative Research.
- The remaining part of the fifth edition's Chapter 12 (descriptive research) has been revised into a new chapter titled Survey Research (Chapter 11).
- Correlational Research (formerly chapter 13) and causal-comparative research (formerly part of Chapter 14) have been combined into a new chapter titled Nonexperimental Quantitative Research (Chapter 12)
- A new chapter titled Mixed-Methods Research Designs has been added as Chapter 14.
- Action and evaluation research (formerly chapter 11) have been moved to the end of the text (chapter 15).
- All website URLs listed in the book have been verified and were deemed accurate at the time of the printing.

Below is a listing of how Part IV of the book has changed from the fifth to sixth editions, with respect to these chapters

Fifth Edition	Sixth Edition
Ch. 10-Ethnographic Research	Ch.10-Qualitative Research Methods
Ch. 11-Action and Evaluation Research	Ch. 11- Survey Research
Ch. 12-Descriptive and Historical Research	Ch. 12- Nonexperimental Quantitative Research
Ch. 13-Correlational Research	Ch. 13- Experimental, Quasi-Experimental, and Single Subject Designs
Ch.14-Experimental, Quasi-Experimental, and Causal-Comparative Research	Ch. 14-Mixed-Methods Research Designs
	Ch. 15-Action and Evaluation Research

- Nine new, more current exemplar studies (all published between 2002 and 2005) have been incorporated into Chapters 10 through 15.
- One brief research proposal, which accompanies the exemplar article on survey research in Chapter 11, has been included in Chapter 6.
- The additional research articles that appear in Chapter 10 through 15 have been updated and are available through Research Navigator.

In addition, the Companion Website (www.ablongman.com/mertler6e) has been updated to reflect changes made to the sixth edition of the text.

Special Features

This book has several special features that increase the appeal and value to readers and also facilitate the instructor's presentation of material.

Sequenced to Assist Doing Research

As with the previous edition, the book remains organized to help users plan and conduct their first educational research projects. By proceeding through chapter contents, and by completing the in-text exercises as well as the developmental activities, user will simultaneously prepare a research plan on a topic of importance and will learn how to obtain and analyze data, answer research questions and test hypotheses, and prepare a proper report of their projects.

Readability: Organization and Style

This sixth edition demonstrates continued refinement in clarity and readability, a trait that many users consider to be a major strength. Throughout, unfamiliar terms are highlighted, and clear definitions are provided. Many examples are provided to make concepts and applications more understandable. At the same time, the material is kept concise, resulting in a book that covers essential concepts without overwhelming the reader.

Pedagogical Features

In keeping with the main purpose of helping users clearly understand and apply research concepts, many pedagogical features have been included in the book. These features include:

- Chapter previews provide accurate anticipation of what is to be covered
- Chapter targeted learnings provide lists of key understandings that students are to acquire
- Chapter organizers offer graphic depictions of contents and organization of the chapters
- In-text application exercises give periodic breaks for students to respond to new information
- Chapter summaries help students comprehend chapter contents succinctly
- Current status sections help students see the progress they have made and what comes next
- End-of-chapter activities enable practice, reflection, and discussion
- Appendix of statistical concepts reviews and expands statistical concepts and procedures introduced in other chapters
- Expanded glossary offers easy reference to research terminology

Reprinted Research Reports

Nine reprinted journal articles are included that exemplify various types of research. These relatively nontechnical articles have been specially selected to serve as exemplars to orient and encourage students who wish to conduct similar types of

research. Guided activities and questions for discussion are provided to help students analyze the articles. In addition, each chapter in Part Four includes a list of additional published articles, easily accessible, in full text, via Research Navigator.

Instructor's Manual

An Instructor's Manual is available online to instructors who adopt the text. The instructor's manual contains:

- Organizational suggestions such as planning a course syllabus, selecting course assignments and activities, and establishing evaluation procedures.
- Instructional suggestions such as introducing the text to students, selecting and presenting content and activities in class sessions, guiding students in critiquing research reports, guiding students in using the computer as a research tool, and helping students develop tools for data collection
- Test items including short-answer and essay items

A Note for Instructors of Online Courses in Educational Research

There has been, of late, a substantial movement toward the instruction of courses in educational research via the Internet. This movement has been supported by us in the revision to this edition. In chapter 1 through 9, we offer some brief suggestions for online activities to instructors of online courses in sections titled Tips for Online Courses. In addition, we would like to refer instructors to an article, available in PDF full-text format through online courses. The citation for the article is

Tallent-Runnels, M.K., Cooper, S., Lan, W.Y., Thomas, J.A., & Busby, C. (2005) How to teach online: What the research says. *Distance Learning*, 2(1), 21-27. [An: 17270575]

In this article the authors list and discuss seven tips of online courses. These tips are as follows:

- Provide helpful resources on the course site.
- Let students have control over the pace at which they move throughout the course.
- Have lots of discussion
- Provide timely feedback to students about their performance
- Provide technical support for students (and faculty)
- Online study aids are step-by-step presentation may not make much difference in achievement
- Evaluation can be enhanced in online courses

Finally, the article provides a comprehensive list of additional references on the topic of online teaching.

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