

Brief Contents

PART I An Introduction to Educational Research 1

CHAPTER 1 *The Process of Conducting Research* 2

CHAPTER 2 *Quantitative and Qualitative Approaches* 45

PART II The Steps in the Process of Research 67

CHAPTER 3 *Identifying a Research Problem* 68

CHAPTER 4 *Reviewing the Literature* 88

CHAPTER 5 *Specifying a Purpose and Research Questions or Hypotheses* 120

CHAPTER 6 *Collecting Quantitative Data* 150

CHAPTER 7 *Analyzing and Interpreting Quantitative Data* 182

CHAPTER 8 *Collecting Qualitative Data* 212

CHAPTER 9 *Analyzing and Interpreting Qualitative Data* 243

CHAPTER 10 *Reporting and Evaluating Research* 271

PART III Research Designs 297

CHAPTER 11 *Experimental Designs* 298

CHAPTER 12 *Correlational Designs* 355

CHAPTER 13 *Survey Designs* 387

CHAPTER 14 *Grounded Theory Designs* 431

CHAPTER 15 *Ethnographic Designs* 472

CHAPTER 16 *Narrative Research Designs* 511

CHAPTER 17 *Mixed Methods Designs* 551

CHAPTER 18 *Action Research Designs* 596

Contents

PART I An Introduction to Educational Research 1

1 Chapter The Process of Conducting Research 2

What Is Research? 3

Why Is Research Important? 3

Research Adds to Our Knowledge 4 • Research Improves Practice 4 • Research Informs Policy Debates 6

Several Problems with Research Today 7

What Are the Steps in Conducting Research? 7

Identifying a Research Problem 8 • Reviewing the Literature 9 • Specifying a Purpose for Research 9 • Collecting Data 10 • Analyzing and Interpreting the Data 10 • Reporting and Evaluating Research 10

What Ethical Practices Should You Observe? 11

Respecting the Rights of Participants 11 • Honoring Research Sites 12 • Reporting Research Fully and Honestly 12 • Ethical Context 13

What Are the Skills Needed for Research? 13

Solving Puzzles 13 • Lengthening Your Attention Span 13 • Using Libraries' Resources 14 • Writing, Editing, and More Writing 14

Applying the Research Process to Actual Studies 14

Key Ideas in the Chapter 15

Useful Information for Producers of Research 15

Useful Information for Consumers of Research 16

Understanding Concepts and Evaluating Research Studies 16

Conducting Your Research 16

Sample Quantitative Study 17

Sample Qualitative Study 33

2 Chapter Quantitative and Qualitative Approaches 45

What Does It Mean to Conduct Quantitative and Qualitative Research? 46

How Did Quantitative and Qualitative Research Develop? 46

A Brief History of Quantitative Research 46 • A Brief History of Qualitative Research 48

What Characteristics Distinguish and Are Common to Quantitative and Qualitative Research in Each of the Six Steps? 51

Identifying a Research Problem 51 • Reviewing the Literature 53 • Specifying a Purpose for Research 54 • Collecting Data 55 • Analyzing and Interpreting Data 56 • Reporting and Evaluating Research 58

What Are the Research Designs Associated with Quantitative and Qualitative Research? 59

Experimental Designs 60 • Correlational Designs 60 • Survey Designs 61 • Grounded Theory Designs 61 • Ethnographic Designs 61 • Narrative Research Designs 61 • Mixed Methods Designs 61 • Action Research Designs 61

How Do You Choose Whether to Use the Quantitative or Qualitative Approach? 62

Match Your Approach to Your Research Problem 62 • Fit the Approach to Your Audience 63 • Relate the Approach to Your Experiences 63

Examining the Parent Involvement and Gunman Incident Studies 63

Key Ideas in the Chapter 64

Useful Information for Producers of Research 65

Useful Information for Consumers of Research 65

Understanding Concepts and Evaluating Research Studies 66

PART II The Steps in the Process of Research 67

3 Chapter Identifying a Research Problem 68

What Is a Research Problem and Why Is It Important? 69

How Does the Research Problem Differ from Other Parts of Research? 69

Can and Should Problems Be Researched? 71

Can You Gain Access to People and Sites? 71 • Can You Find Time, Locate Resources, and Use

- Your Skills?* 71 • *Should the Problem Be Researched?* 72
- How Does the Research Problem Differ in Quantitative and Qualitative Research? 73
- How Do You Write a “Statement of the Problem” Section? 74
- The Topic* 74 • *The Research Problem* 75 • *Justification of the Importance of the Problem* 76 • *Deficiencies in What We Know* 79 • *The Audience* 79
- What Are Some Strategies for Writing the “Statement of the Problem” Section? 80
- A Template* 80 • *Other Writing Strategies* 80
- Examples of “Statement of the Problem” Sections 82
- Reexamining the Parent Involvement and Gunman Incident Studies 85
- Key Ideas in the Chapter 85**
- Useful Information for Producers of Research 86**
- Useful Information for Consumers of Research 86**
- Understanding Concepts and Evaluating Research Studies 86**
- Conducting Your Research 87**
- Chapter 4 Reviewing the Literature 88**
- What Is a Literature Review? 89
- What Are the Differences Between a Literature Review for a Quantitative Study and for a Qualitative Study? 89
- What Are the Five Steps in Conducting a Literature Review? 90
- Identifying Key Terms* 91 • *Locate Literature* 92 • *Critically Evaluate and Select the Literature* 103 • *Organize the Literature* 104 • *Write a Literature Review* 110
- Reexamining the Parent Involvement and Gunman Case Studies 115
- Literature Review Analysis in a Quantitative Study* 115 • *Literature Review Analysis in a Qualitative Study* 116
- Key Ideas in the Chapter 116**
- Useful Information for Producers of Research 117**
- Useful Information for Consumers of Research 118**
- Understanding Concepts and Evaluating Research Studies 118**
- Conducting Your Research 118**
- Chapter 5 Specifying a Purpose and Research Questions or Hypotheses 120**
- What Are Purpose Statements, Research Questions, Hypotheses, and Objectives? 121
- The Purpose Statement* 121 • *Research Questions* 122 • *Hypotheses* 122 • *Research Objectives* 122
- Why Are These Statements and Questions Important? 123
- How Do You Design Quantitative Purpose Statements, Research Questions, and Hypotheses? 123
- Specify Variables* 123 • *The Family of Variables* 125 • *Theories and Testing of Variables* 131 • *Writing Quantitative Purpose Statements* 133 • *Writing Quantitative Research Questions* 135 • *Writing Quantitative Hypotheses* 136
- How Do You Design Qualitative Purpose Statements and Research Questions? 138
- Differentiating Between Quantitative and Qualitative Purpose Statements and Research Questions* 139 • *The Central Phenomenon in Qualitative Research* 139 • *Emerging Processes in Qualitative Research* 140 • *Writing Qualitative Purpose Statements* 142 • *Writing Qualitative Research Questions* 143
- Reexamining the Parent Involvement and the Gunman Incident Studies 146
- Key Ideas in the Chapter 147**
- Useful Information for Producers of Research 148**
- Useful Information for Consumers of Research 148**
- Understanding Concepts and Evaluating Research Studies 149**
- Conducting Your Research 149**
- Chapter 6 Collecting Quantitative Data 150**
- Whom Will You Study? 151
- Identify Your Unit of Analysis* 151 • *Specify the Population and Sample* 151
- What Permissions Will You Need? 157
- Obtain Different Types of Permissions* 157 • *Obtain Informed Consent* 157
- What Information Will You Collect? 160
- Specify Variables from Research Questions and Hypotheses* 160 • *Operationally Define Each Variable* 160 • *Choose Types of Data and Measures* 161
- What Instrument Will You Use to Collect Data? 167
- Locate or Develop an Instrument* 167 • *Search for an Instrument* 168 • *Criteria for Choosing a Good Instrument* 168 • *Interval/Ratio Scales* 176
- How Will You Administer the Data Collection? 178
- Standardization* 178 • *Ethical Issues* 179
- Reexamining the Quantitative Parent Involvement Study 179
- Key Ideas in the Chapter 180**
- Useful Information for Producers of Research 180**
- Useful Information for Consumers of Research 181**
- Understanding Concepts and Evaluating Research Studies 181**
- Conducting Your Research 181**

Chapter 7 Analyzing and Interpreting Quantitative Data 182

- How Do You Prepare the Data for Analysis? 183
Score the Data 183 • *Determine the Types of Scores to Analyze* 184 • *Select a Statistical Program* 186 • *Input Data* 187 • *Clean and Account for Missing Data* 189
- How Do You Analyze the Data? 190
Conduct Descriptive Analysis 191 • *Conduct Inferential Analysis* 195
- How Do You Report the Results? 204
Tables 204 • *Figures* 205 • *Present Results* 205
- How Do You Discuss the Results? 207
Summarize the Major Results 207 • *Explain Why the Results Occurred* 207 • *Advance Limitations* 207 • *Suggest Future Research* 207
- Reexamining Data Analysis and Interpretation in the Parent Involvement Study 208
- Key Ideas in the Chapter** 209
- Useful Information for Producers of Research** 210
- Useful Information for Consumers of Research** 210
- Understanding Concepts and Evaluating Research Studies** 210
- Conducting Your Research** 211

Chapter 8 Collecting Qualitative Data 212

- What Is the Process of Qualitative Data Collection? 213
- What Participants and Sites Will You Study? 213
Purposeful Sampling 214 • *Sample Size or Number of Research Sites* 217
- How Will You Gain Access to the People and Sites? 218
Seek Institutional Review Board Approval 218 • *Gatekeepers* 219
- What Information Will You Collect? 220
Observations 220 • *Interviews* 225 • *Documents* 230 • *Audiovisual Materials* 232
- How Do You Record Data? 233
Using Protocols 233
- How Do You Administer Data Collection? 236
Field Issues 236
- Ethical Issues in Data Collection 238
- Revisiting the Qualitative Gunman Incident Study 240
- Key Ideas in the Chapter** 240
- Useful Information for Producers of Research** 241
- Useful Information for Consumers of Research** 241
- Understanding Concepts and Evaluating Research Studies** 242
- Conducting Your Research** 242

Chapter 9 Analyzing and Interpreting Qualitative Data 243

- How Do You Analyze Qualitative Data? 244
- How Do You Prepare and Organize the Data for Analysis? 245
Organize Data 245 • *Transcribe Data* 246 • *Analyze by Hand or Computer* 246 • *Use Qualitative Computer Programs* 248
- How Do You Explore and Code the Data in Analysis? 250
Explore the General Sense of the Data 250 • *Code the Data* 251
- How Do You Use Codes to Build Description and Themes? 254
Description 254 • *Themes* 256 • *Layering and Interrelating Themes* 258
- How Do You Represent and Report Findings? 260
Representing Findings 261 • *Reporting Findings* 262
- How Do You Interpret Findings? 264
Summarize Findings 265 • *Convey Personal Reflections* 265 • *Make Comparisons to the Literature* 265 • *Offer Limitations and Suggestions for Future Research* 266
- How Do You Validate the Accuracy of Your Findings? 266
- Reexamining Qualitative Data Analysis in the Gunman Case Study 267
- Key Ideas in the Chapter** 268
- Useful Information for Producers of Research** 268
- Useful Information for Consumers of Research** 269
- Understanding Concepts and Evaluating Research Studies** 270
- Conducting Your Research** 270

Chapter 10 Reporting and Evaluating Research 271

- What Is a Research Report? 272
What Audience Will Receive the Report? 272 • *What Are the Types of Research Reports?* 273
- How Should You Structure Your Report? 278
Look at the Physical Structure of Research Reports 278 • *Design an Appropriate Quantitative Structure* 279 • *Design an Appropriate Qualitative Structure* 280
- How Do You Write in a Sensitive and Scholarly Way? 283
Use Nondiscriminatory Language 283 • *Encode Scholarly Terms into Your Research* 284 • *Use an Appropriate Point of View* 284 • *Balance Your Research and Content* 285 • *Interconnect Sections for Consistency* 286 • *Use Computer Aids* 286 • *Write a Concise Title and Abstract* 286

- How Do You Evaluate the Quality of Your Research? 287
Employ Appropriate Standards 288 • *Quantitative Standards* 288 • *Qualitative Standards* 288 • *Evaluate with a Process Approach* 289
- Reexamining the Parent Involvement and Gunman Incident Studies 293
- Key Ideas in the Chapter** 293
- Useful Information for Producers of Research** 294
- Useful Information for Consumers of Research** 295
- Understanding Concepts and Evaluating Research Studies** 295
- Conducting Your Research** 296

PART III Research Designs 297

Chapter 11 Experimental Designs 298

- What Is an Experiment? 299
When Do You Use an Experiment? 299 • *When Did Experiments Develop?* 299
- What Are Key Characteristics of Experiments? 300
Random Assignment 300 • *Control Over Extraneous Variables* 301 • *Manipulating Treatment Conditions* 304
- Outcomes Measures 306
Group Comparisons 306 • *Threats to Validity* 307
- What Are the Types of Experimental Designs? 310
Between-Group Designs 313 • *Within-Group or Individual Designs* 317
- What Are the Steps in Conducting Experimental Research? 325
Step 1. Decide if an Experiment Addresses Your Research Problem 325 • *Step 2. Form Hypotheses to Test Cause-and-Effect Relationships* 325 • *Step 3. Select an Experimental Unit and Identify Study Participants* 326 • *Step 4. Select an Experimental Treatment and Introduce It* 326 • *Step 5. Choose a Type of Experimental Design* 327 • *Step 6. Conduct the Experiment* 327 • *Step 7. Organize and Analyze the Data* 327 • *Step 8. Develop an Experimental Research Report* 328
- How Do You Evaluate Experimental Research? 328
- Applying What You Have Learned: An Experimental Study 328
The Research Problem and Use of Quantitative Research 329 • *Use of the Literature* 329 • *The Purpose Statement and Research Questions* 329 • *Data-Collection Procedures in an Experiment* 330 • *Data Analysis and Interpretation Procedures in an Experiment* 330 • *The Overall Reporting Structure* 331
- Key Ideas in the Chapter** 331

- Useful Information for Producers of Research** 332
- Useful Information for Consumers of Research** 332
- Additional Resources You Might Examine** 333
- Sample Experimental Design** 334

Chapter 12 Correlational Designs 355

- What Is Correlational Research? 356
When Do You Use Correlational Research? 356 • *How Did Correlational Research Develop?* 356
- What Are the Types of Correlational Designs? 357
The Explanatory Design 358 • *The Prediction Design* 359
- What Are the Key Characteristics of Correlational Designs? 360
Displays of Scores 360 • *Associations Between Scores* 363 • *Multiple Variable Analysis* 366
- How Do You Conduct a Correlational Study? 370
Step 1. Determine if a Correlational Study Best Addresses the Research Problem 370 • *Step 2. Identify Individuals to Study* 370 • *Step 3. Identify Two or More Measures for Each Individual in the Study* 370 • *Step 4. Collect Data and Monitor Potential Threats* 371 • *Step 5. Analyze the Data and Represent the Results* 372 • *Step 6. Interpret the Results* 372
- How Do You Evaluate a Correlational Study? 373
- Applying What You Have Learned: A Correlational Study 373
The Research Problem and Use of Quantitative Research 374 • *Use of the Literature* 374 • *The Purpose Statement and Research Questions* 374 • *Types and Procedures of Correlational Data Collection* 375 • *Types and Procedures of Correlational Data Analysis and Interpretation* 375 • *The Overall Reporting Structure* 375
- Key Ideas in the Chapter** 375
- Useful Information for Producers of Research** 376
- Useful Information for Consumers of Research** 376
- Additional Resources You Might Examine** 377
- Sample Experimental Design** 378

Chapter 13 Survey Designs 387

- What Is Survey Research? 388
When Do You Use a Survey? 388 • *How Did Survey Research Develop?* 388
- What Are the Types of Survey Designs? 389
Cross-Sectional Survey Designs 389 • *Longitudinal Survey Designs* 391

- What Are the Key Characteristics of Survey Research? 393
Sampling from a Population 393 • *Questionnaires and Interviews* 394 • *Instrument Design* 397 • *Response Rate* 402
- How Do You Construct and Analyze a Mailed Questionnaire? 404
The Cover Letter 404 • *Overall Questionnaire Construction* 410 • *Data Analysis of a Research Questionnaire* 410
- How Do You Design and Conduct an Interview Survey? 410
Stance of the Interviewer 411 • *Training of Interviewers* 411 • *Steps in Interviewing* 412 • *A Telephone Interview Guide* 412
- What Are the Steps in Conducting Survey Research? 414
Step 1. Decide if a Survey Is the Best Design to Use 414 • *Step 2. Identify the Research Questions or Hypotheses* 414 • *Step 3. Identify the Population, the Sampling Frame, and the Sample* 414 • *Step 4. Determine the Survey Design and Data-Collection Procedures* 415 • *Step 5. Develop or Locate an Instrument* 415 • *Step 6. Administer the Instrument* 415 • *Step 7. Analyze the Data to Address the Research Questions or Hypotheses* 415 • *Step 8. Write the Report* 415
- How Do You Evaluate Survey Research? 416
- Applying What You Have Learned: A Survey Study 416
The Research Problem and Use of Quantitative Research 417 • *Use of the Literature* 417 • *The Purpose Statement and Research Questions* 417 • *Survey Procedures in Data Collection* 417 • *Survey Procedures of Data Analysis and Interpretation* 418 • *The Overall Writing Structure* 418
- Key Ideas in the Chapter** 418
Useful Information for Producers of Research 419
Useful Information for Consumers of Research 419
Additional Resources You Might Examine 420
Sample Survey Research 421
- Chapter 14 Grounded Theory Designs** 431
- What Is Grounded Theory Research? 432
When Do You Use Grounded Theory? 432 • *How Did Grounded Theory Develop?* 432
- Types of Grounded Theory Designs 433
The Systematic Design 434 • *The Emerging Design* 438 • *The Constructivist Design* 439 • *Choosing Among the Designs* 439 • *What Are the Key Characteristics of Grounded Theory Research?* 440 • *A Process Approach* 440 • *Theoretical Sampling* 442 • *Constant Comparative Data Analysis* 443 • *A Core Category* 444 • *Theory Generation* 445 • *Memos* 447
- What Are the Steps in Conducting Grounded Theory Research? 448
Step 1. Decide if a Grounded Theory Design Best Addresses the Research Problem 448 • *Step 2. Identify a Process to Study* 449 • *Step 3. Seek Approval and Access* 449 • *Step 4. Conduct Theoretical Sampling* 449 • *Step 5. Code the Data* 449 • *Step 6. Use Selective Coding and Develop the Theory* 450 • *Step 7. Validate Your Theory* 450 • *Step 8. Write a Grounded Theory Research Report* 450
- How Do You Evaluate Grounded Theory Research? 451
Applying What You Have Learned: A Grounded Theory Study 451 • *The Research Problem and Use of Qualitative Research* 452 • *Use of the Literature* 452 • *The Purpose Statement and Research Questions* 452 • *Types of Procedures of Grounded Theory Data Collection* 453 • *Types of Procedures of Grounded Theory Data Analysis and Interpretation* 453 • *The Overall Writing Structure* 453
- Key Ideas in the Chapter** 454
Useful Information for Producers of Research 454
Useful Information for Consumers of Research 454
Additional Resources You Might Examine 455
Sample Experimental Design 456
- Chapter 15 Ethnographic Designs** 472
- What Is Ethnographic Research? 473
When Do You Conduct an Ethnography? 473 • *How Did Ethnographic Research Develop?* 473
- What Are the Types of Ethnographic Designs? 475
Realist Ethnographies 475 • *Case Studies* 476 • *Critical Ethnographies* 478
- What Are the Key Characteristics of an Ethnographic Design? 479
Cultural Themes 480 • *A Culture-Sharing Group* 480 • *Shared Patterns of Behavior, Belief, and Language* 481 • *Fieldwork* 482 • *Description, Themes, and Interpretation* 483 • *Context or Setting* 485 • *Researcher Reflexivity* 485
- What Are the Steps in Conducting an Ethnography? 486
Step 1. Identify Intent and the Type of Design, and Relate Intent to Your Research Problem 486 • *Step 2. Discuss Approval and Access Considerations* 487 • *Step 3. Use Appropriate Data-Collection Procedures* 488 • *Step 4. Analyze and Interpret Data Within a Design* 489 • *Step 5. Write the Report Consistent with Your Design* 490
- How Do You Evaluate an Ethnography? 490

Applying What You Have Learned: An Ethnographic Study 491

The Research Problem and Use of Qualitative Research 491 • *Use of the Literature* 492 • *The Purpose Statement and Research Questions* 492 • *Types of Procedures of Ethnographic Data Collection* 492 • *Types of Procedures of Ethnographic Data Analysis and Interpretation* 492 • *The Overall Writing Structure* 493

Key Ideas in the Chapter 493

Useful Information for Producers of Research 494

Useful Information for Consumers of Research 494

Additional Resources You Might Examine 495

Sample Experimental Design 496

Chapter 16 Narrative Research Designs 511

What Is Narrative Research? 512

When Do You Use Narrative Research? 512 • *How Did Narrative Research Develop?* 512

What Are the Types of Narrative Designs? 513

Who Writes or Records the Story? 514 • *How Much of a Life Is Recorded and Presented?* 514 • *Who Provides the Story?* 514 • *Is a Theoretical Lens Being Used?* 515 • *Can Narrative Forms Be Combined?* 515

What Are the Key Characteristics of Narrative Designs? 515

Individual Experiences 517 • *Chronology of the Experiences* 518 • *Collecting Individual Stories* 518 • *Restorying* 519 • *Coding for Themes* 521 • *Context or Setting* 522 • *Collaborating with Participants* 522

What Are Some Potential Issues in Gathering Stories? 522

What Are the Steps in Conducting Narrative Research? 523

Step 1. Identify a Phenomenon to Explore That Addresses an Educational Problem 523 • *Step 2. Purposefully Select an Individual from Whom You Can Learn About the Phenomenon* 523 • *Step 3. Collect the Story from That Individual* 524 • *Step 4. Restory or Retell the Individual's Story* 525 • *Step 5. Collaborate with the Participant-Storyteller* 525 • *Step 6. Write a Story About the Participant's Experiences* 525 • *Step 7. Validate the Accuracy of the Report* 525

How Do You Evaluate Narrative Research? 526

Applying What You Have Learned: A Narrative Research Study 526

The Research Problem and Use of Qualitative Research 527 • *The Use of the Literature* 527 • *The Purpose Statement and Research Questions* 527 • *Types of Procedures of Narrative Data Collection* 528 • *Types and Procedures of Narrative Data Analysis and*

Interpretation 528 • *The Overall Writing Structure* 528

Key Ideas in the Chapter 529

Useful Information for Producers of Research 529

Useful Information for Consumers of Research 529

Additional Resources You Might Examine 530

Sample Narrative Design 532

Chapter 17 Mixed Methods Designs 551

What Is Mixed Methods Research? 552

When Do You Conduct a Mixed Methods Study? 552 • *How Did Mixed Methods Research Develop?* 553

What Are the Types of Mixed Methods Designs? 556

The Triangulation Design 557 • *The Embedded Design* 558 • *The Explanatory Design* 560 • *The Exploratory Design* 561

What Are the Key Characteristics of Mixed Methods Designs? 562

Rationale for the Design 562 • *Collecting Quantitative and Qualitative Data* 562 • *Priority* 563 • *Sequence* 564 • *Data Analysis Matched to a Design* 564 • *Diagram of the Procedures* 567

What Are the Steps in Conducting a Mixed Methods Study? 567

Step 1. Determine if a Mixed Methods Study Is Feasible 567 • *Step 2. Identify a Rationale for Mixing Methods* 567 • *Step 3. Identify a Data Collection Strategy* 568 • *Step 4. Develop Quantitative, Qualitative, and Mixed Methods Questions* 568 • *Step 5. Collect Quantitative and Qualitative Data* 569 • *Step 6. Analyze Data Separately or Concurrently* 569 • *Step 7. Write the Report as a One- or Two-Phase Study* 569

How Do You Evaluate a Mixed Methods Study? 570

Applying What You Have Learned: A Mixed Methods Study 570

The Research Problem 571 • *The Literature Review Paragraphs* 571 • *The Purpose Statement and Rationale for Mixed Methods Research* 571 • *Collection of Mixed Methods Quantitative and Qualitative Data* 571 • *Analyzing and Interpreting Quantitative and Qualitative Data* 572 • *The Overall Writing Structure* 572

Key Ideas in the Chapter 573

Useful Information for Producers of Research 573

Useful Information for Consumers of Research 574

Additional Resources You Might Examine 574

Sample Experimental Design 576

Chapter 18 Action Research Designs 596

- What Is Action Research? 597
When Do You Use Action Research? 597 • *How Did Action Research Develop?* 597
- What Are the Types of Action Research Designs? 599
Practical Action Research 599 • *Participatory Action Research* 602
- What Are the Key Characteristics of Action Research? 605
A Practical Focus 605 • *The Teacher-Researcher's Own Practices* 608 • *Collaboration* 608 • *A Dynamic Process* 609 • *A Plan of Action* 609 • *Sharing Research* 609
- What Are the Steps in Conducting an Action Research Study? 609
Step 1. Determine if Action Research Is the Best Design to Use 609 • *Step 2. Identify a Problem to Study* 610 • *Step 3. Locate Resources to Help Address the Problem* 610 • *Step 4. Identify Information You Will Need* 610 • *Step 5. Implement the Data Collection* 611 • *Step 6. Analyze the Data* 612 • *Step 7. Develop a Plan for Action* 612 • *Step 8. Implement the Plan and Reflect* 612
- How Do You Evaluate an Action Research Study? 612
- Applying What You Have Learned: An Action Research Study 613
The Research Problem and Qualitative Approach to Research 613 • *Use of the Literature* 614 • *The Purpose Statement and Research Questions* 614 • *Types of Procedures of Action Research Data Collection* 614 • *Types of Procedures of Action Research Data*

Analysis and Interpretation 614 • *The Overall Writing Structure* 615

- Key Ideas in the Chapter** 615
- Useful Information for Producers of Research** 616
- Useful Information for Consumers of Research** 616
- Additional Resources You Might Examine** 616
- Sample Experimental Design** 618

A **Appendix** *Answers to the Chapter Study Questions* 626

D **Appendix** *Determine Size Using Sample Size Tables* 630

C **Appendix** *Nonnormal Distribution* 633

D **Appendix** *Strategies for Defending a Research Proposal* 634

Glossary 636

References 650

Author Index 659

Subject Index 663

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.