Contents

Preface: The Aims of This Edition xiii

Introduction: Your Research and Your Audience 1

- 1.1 What Is Research? 3
- 1.2 Connecting with Your Audience 4
- 1.3 Understanding Your Role 5
- 1.4 Imagining the Role of Your Audience 7
- 1.5 How to Use This Book 11
 - ▶ QUICK TIP: A CHECKLIST FOR UNDERSTANDING YOUR AUDIENCE 13

I ASKING QUESTIONS, SEEKING ANSWERS

Prologue: Planning Your Project — An Overview 17

- ► QUICK TIP: SUSTAINING A RESEARCH PROJECT ALONE AND IN GROUPS 19
- 1 From Topics to Questions 21
 - 1.1 From an Interest to a Topic 22
 - 1.2 From Focused Topic to Research Question 25
 - 1.3 The Most Significant Question: So What? 29
 - ► QUICK TIP: FINDING TOPICS 33
- 2 From Questions to a Problem 35
 - 2.1 Understanding Research Problems 36
 - 2.2 Distinguishing Between "Pure" and "Applied" Research 42
 - 2.3 Connecting Research to Practical Consequences 43
 - 2.4 Finding a Good Research Problem 45
 - 2.5 Learning to Work with Problems 47
 - ► QUICK TIP: MAKING AN OPPORTUNITY OF INEXPERIENCE 48

II SOURCES AND RESOURCES

Prologue: Sources and Authentic Research 51

3 Finding and Evaluating Sources 53

- 3.1 Understanding Three Types of Sources 53
- 3.2 Making the Most of the Library 57
- 3.3 Locating Sources Online 63
- 3.4 Evaluating Sources for Relevance and Reliability 65
- 3.5 Looking Beyond Predictable Sources 69
- 3.6 Using People to Further Your Research 69
 - ► QUICK TIP: USING GENERATIVE ARTIFICIAL INTELLIGENCE 72

4 Engaging Sources 74

- 4.1 Recording Complete Bibliographic Information 75
- 4.2 Engaging Sources Actively 76
- 4.3 Reading for a Problem 78
- 4.4 Reading for Arguments 81
- 4.5 Reading for Data and Support 83
- 4.6 Taking Notes Systematically 84
- 4.7 Annotating Your Sources 91
 - ► QUICK TIP: MANAGING MOMENTS OF UNCERTAINTY 94

III MAKING YOUR ARGUMENT

Prologue: Assembling a Research Argument 97

5 Making Good Arguments: An Overview 101

- 5.1 Argument as Conversation 101
- 5.2 Assembling the Core of Your Argument 102
- 5.3 Explaining Your Reasoning with Warrants 105
- 5.4 Acknowledging and Responding to Anticipated Questions and Objections 106
- 5.5 Planning Your Research Argument 107
- 5.6 Creating Your Ethos 110
 - ► QUICK TIP: A COMMON MISTAKE FALLING BACK

 ON WHAT YOU KNOW 113

6 Making Claims 114

- 6.1 Determining the Kind of Claim You Should Make 114
- 6.2 Evaluating Your Claim 116
- 6.3 Qualifying Claims to Enhance Your Credibility 120
 - ► QUICK TIP: MAKE YOUR CLAIM CONTESTABLE 123

7 Assembling Reasons and Evidence 124

- 7.1 Using Reasons to Plan Your Argument 124
- 7.2 Distinguishing Evidence from Reasons 125
- 7.3 Determining the Kind of Evidence You Need 126
- 7.4 Distinguishing Evidence from Reports of It 127
- 7.5 Evaluating Your Evidence 129
 - ► QUICK TIP: ASSESS YOUR EVIDENCE AS YOU GATHER IT 136

8 Warrants 137

- 8.1 Warrants in Everyday Reasoning 138
- 8.2 Warrants in Research Arguments 139
- 8.3 Testing Warrants 142
- 8.4 Knowing When to State a Warrant 146
- 8.5 Using Warrants to Test Your Argument 147
- 8.6 Challenging Others' Warrants 149
 - ► QUICK TIP: REASONS, EVIDENCE, AND WARRANTS 152

9 Acknowledgments and Responses 154

- 9.1 Questions About Your Research Problem 155
- 9.2 Questions About the Soundness of Your Argument 156
- 9.3 Imagining Alternatives to Your Argument 158
- 9.4 Deciding What to Acknowledge 159
- 9.5 Framing Your Responses as Sub-Arguments 161
- 9.6 The Vocabulary of Acknowledgment and Response 161
 - ► QUICK TIP: THREE PREDICTABLE DISAGREEMENTS 166

IV DELIVERING YOUR ARGUMENT

Prologue: Planning, Writing, and Thinking 171

10 Planning and Drafting 175

- 10.1 Why a Formal Paper? 175
- 10.2 Planning Your Paper 177
- 10.3 Avoiding Three Common but Flawed Patterns 184
- 10.4 Turning Your Plan into a Draft 185
 - ► QUICK TIP: MANAGING ANXIETY AS A WRITER 188

11 Revising and Organizing 191

- 11.1 Thinking Like a Reader 192
- 11.2 Revising Your Frame 192
- 11.3 Revising Your Argument 193

		► QUICK TIP: ABSTRACTS 198
10	T	anating Commons and
12	,	porating Sources 201
		Summarizing, Paraphrasing, and Quoting 201
		Creating a Fair Summary 202
		Creating a Fair Paraphrase 203
		Using Direct Quotations 204
		Mixing Summary, Paraphrase, and Quotation 205
		Showing Readers How Evidence Is Relevant 206
		The Social Importance of Citing Sources 206
		Four Common Citation Styles 207
	12.9	Guarding Against Inadvertent Plagiarism 209
		► QUICK TIP: INDICATING CITATIONS IN YOUR PAPER 214
13	Comn	nunicating Evidence Visually 217
	13.1	Choosing Visual or Verbal Representations 217
	13.2	Choosing the Most Effective Graphic 218
	13.3	Designing Tables, Charts, and Graphs 220
	13.4	Specific Guidelines for Tables, Bar Charts, and Line Graphs 223
	13.5	Representing Data Ethically 228
		► QUICK TIP: LOOK FOR OPPORTUNITIES TO
		INCLUDE VISUAL EVIDENCE 234
14	Introductions and Conclusions 235	
	14.1	The Common Structure of Introductions 235
	14.2	Step 1: Stating a Context 238
	14.3	Step 2: Stating Your Problem 240
	14.4	Step 3: Stating Your Response 244
	14.5	Setting the Right Pace 246
	14.6	Finding Your First Few Words 247
	14.7	Writing Your Conclusion 248
		► QUICK TIP: USE KEY TERMS IN TITLES 251
15	Revising Style: Telling Your Story Clearly 252	
		Judging Style 252
		The First Two Principles of Clear Writing 254

11.4 Revising Your Organization 195

11.6 Letting Your Draft Cool, Then Revisiting It 197

11.5 Checking Your Paragraphs 196

- 15.3 A Third Principle: Old Before New 262
- 15.4 Choosing Between the Active and Passive Voice 264
- 15.5 A Final Principle: Complexity Last 266
- 15.6 Editorial Polish 268
 - ▶ QUICK TIP: THE QUICKEST REVISION STRATEGY 270

16 Research Presentations 272

- 16.1 Presenting to Auditors 272
- 16.2 Giving a Preliminary Presentation 275
- 16.3 Giving a Final Presentation 277
 - ► QUICK TIP: TREAT YOUR PRESENTATION AS A PERFORMANCE 281

V SOME LAST CONSIDERATIONS

- 17 The Ethics of Research 285
 - 17.1 Your Ethical Obligation to Yourself 285
 - 17.2 Your Ethical Obligations to Your Audience and Fellow Researchers 286
 - 17.3 Research and Social Responsibility 289
 - 17.4 A Final Thought 291

18 Advice for Teachers 292

- 18.1 The Risks of Imposing Formal Rules 293
- 18.2 On Assignment Scenarios: Creating a Ground for Curiosity 294
- 18.3 Accepting the Inevitable Messiness of Learning 296

Our Debts 299

Appendix: A Brief Guide to Bibliographic and Other Resources 301 Index 307