

GLOBAL  
EDITION



# Writing Research Papers

*A Complete Guide*

FIFTEENTH EDITION



James D. Lester • James D. Lester, Jr.

ALWAYS LEARNING

PEARSON

# Index to Checklists

- Avoiding Unintentional Plagiarism 23
- Narrowing a General Subject into a Scholarly Topic 30
- Exploring Ideas with Others 37
- Addressing the Reader 46
- Explaining Your Purpose in the Research Proposal 49
- Evaluating Your Overall Plan 58
- Using Online Rather Than Print Versions 61
- Evaluating Online Sources 63
- Using Databases 90
- The Library Search 101
- Using Media Sources 108
- Interviews, Letters, Private Papers, Courthouse Documents 109
- Conducting a Survey 110
- Conducting an Experiment or Observation 111
- Documenting Your Sources 118
- Common Knowledge That Does Not Need to Be Documented 120
- Information That Must Be Documented 124
- Citing from Primary and Secondary Sources 135
- Responding to a Source 142
- Writing Effective Notes 155
- Writing the Final Thesis 180
- Using Links to Document Internet Sources 199
- Writing the Introduction 219
- Avoiding Certain Mistakes in the Introduction 225
- Writing the Body of the Paper 226
- Writing the Conclusion 231
- Avoiding Certain Mistakes in the Conclusion 234
- Global Revision 238
- Peer Review 239
- Editing the Manuscript 244
- Proofreading the Final Draft 245
- Index to Works Cited Models: MLA Style 270–274
- Index to Bibliographic Models: APA Style 316–317
- Index to CMS Footnote Models 338–339
- Index to Bibliographic Models: CSE Style 356
- Delivering Your Electronic Research Paper 380
- Publishing Alternative Documents 382

# Writing Research Papers

A Complete Guide

Fifteenth Edition

**Global Edition**

**James D. Lester**

**James D. Lester, Jr.**

*Austin Peay State University*

**PEARSON**

Boston Columbus Indianapolis New York San Francisco Upper Saddle River  
Amsterdam Cape Town Dubai London Madrid Milan Munich Paris Montréal Toronto  
Delhi Mexico City São Paulo Sydney Hong Kong Seoul Singapore Taipei Tokyo

Senior Vice President & Editorial Director:  
Joseph Opiela  
Head of Learning Asset Acquisition, Global  
Edition: Laura Dent  
Senior Sponsoring Editor: Katharine Glynn  
Executive Marketing Manager: Roxanne  
McCarley  
Senior Supplements Editor: Donna Campion  
Executive Digital Producer: Stefanie A. Snajder  
Digital Media Editor: Sara Gordus  
Content Specialist: Erin Jenkins  
Senior Acquisitions Editor, Global Edition:  
Sandhya Ghoshal

Associate Project Editor, Global Edition:  
Binita Roy  
Project Manager: Savoula Amanatidis  
Project Coordination and Text Design:  
Electronic Publishing Services Inc., NYC  
Cover Designer: Lumina Datamatics  
Cover Image: © photogl/Shutterstock  
Photo Researcher: Integra  
Senior Manufacturing Buyer: Dennis J. Para  
Senior Manufacturing Controller,  
Production, Global Edition: Trudy Kimber

For permission to use copyrighted material, grateful acknowledgment is made to the copyright holders on p. 401, which is hereby made part of this copyright page.

Pearson Education Limited  
Edinburgh Gate  
Harlow  
Essex CM20 2JE  
England

and Associated Companies throughout the world

Visit us on the World Wide Web at:  
[www.pearsonglobaleditions.com](http://www.pearsonglobaleditions.com)

© Pearson Education Limited 2015

The rights of James D. Lester and James D. Lester, Jr. to be identified as the authors of this work have been asserted by them in accordance with the Copyright, Designs and Patents Act 1988.

*Authorized adaptation from the United States edition, entitled Writing Research Papers: A Complete Guide, 15th edition, ISBN 978-0-321-95295-0, by James D. Lester and James D. Lester, Jr., published by Pearson Education © 2015.*

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without either the prior written permission of the publisher or a license permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd, Saffron House, 6–10 Kirby Street, London EC1N 8TS.

All trademarks used herein are the property of their respective owners. The use of any trademark in this text does not vest in the author or publisher any trademark ownership rights in such trademarks, nor does the use of such trademarks imply any affiliation with or endorsement of this book by such owners.

ISBN 10: 1-292-07689-5  
ISBN 13: 978-1-292-07689-8

British Library Cataloguing-in-Publication Data  
A catalogue record for this book is available from the British Library

14 13 12 11 10 9 8 7 6 5 4 3 2 1

Typeset in 10 pts ITC Garamond Std by Laser Words.

Printed and bound by Courier Kendallville in The United States of America.

# Contents

Preface to the Instructor 14

Acknowledgments 18

## Chapter 1 Introduction to Academic Writing 19

---

**1a** Why Do Research? 21

**1b** Learning the Conventions of Academic Writing 22

**1c** Understanding and Avoiding Plagiarism 23

**1d** Understanding a Research Assignment 24

Understanding the Terminology 24

**1e** Establishing a Research Schedule 27

## Chapter 2 Topic Selection 29

---

**2a** Relating Your Personal Ideas to a Scholarly Problem 31

Connecting Personal Experience to Scholarly Topics 31

Speculating about Your Subject to Discover Ideas and to Focus on the Issues 32

**2b** Talking with Others to Refine the Topic 36

Personal Interviews and Discussions 36

Online Discussion Groups 37

**2c** Using Online Searches to Refine Your Topic 37

Using an Online Subject Directory 38

Using an Internet Keyword Search 38

**2d** Using the Library's Electronic Databases to Find and Narrow a Topic 39

**2e** Using the Library's Electronic Book Catalog to Find a Topic 40

**2f** Developing a Thesis Statement, Enthymeme, or Hypothesis 42

**2g** Drafting a Research Proposal 45

The Short Proposal 45

The Long Proposal 46

**Your Research Project 50**

## Chapter 3 Organizing Ideas and Setting Goals 51

---

- 3a** Using a Basic Order to Chart the Course of Your Work 51
- 3b** Using Your Research Proposal to Direct Your Notetaking 52
- 3c** Listing Key Terms and Phrases to Set Directions for Notetaking 53
- 3d** Writing a Rough Outline 53
- 3e** Using Questions to Identify Issues 54
- 3f** Setting Goals by Using Organizational Patterns 55
- 3g** Using Approaches across the Curriculum to Chart Your Ideas 56
- 3h** Using Your Thesis to Chart the Direction of Your Research 57
- Your Research Project 59**

## Chapter 4 Finding Web-Based Resources 60

---

- 4a** Beginning an Online Search 61
- 4b** Reading an Online Address 65
- 4c** Using Keyword and Boolean Expressions 66
  - Subject Directory Search Engines 68
  - Robot-Driven Search Engines 68
  - Metasearch Engines 68
  - Specialized Search Engines 69
  - Educational Search Engines 69
  - Educational Search Engines Maintained by Libraries 71
- 4d** Using RSS and Social Bookmarking 72
  - RSS Feeds 72
  - Web 2.0 and Social Bookmarking 73
- 4e** Searching for Articles in Journals and Magazines 74
  - Online Journals 74
  - Online Magazines 75
- 4f** Searching for Articles in Newspapers and Media Sources 75
- 4g** Searching for Photographs and Other Visual Sources 77
- 4h** Accessing E-books 77
- 4i** Using Listserv, Usenet, Blogs, and Chat Groups 78
  - E-mail News Groups 78
  - Real-Time Chatting 78
- 4j** Examining Library Holdings via Online Access 79
- 4k** Finding an Internet Bibliography 79
  - Search Engine 79

- 4l** Conducting Archival Research on the Internet 80
  - Go to the Library 80
  - Go to an Edited Search Engine 80
  - Go to a Metasearch Engine 80
  - Go to a Listserv or Usenet Group 82
  - Utilize Newspaper Archives 82
- Your Research Project 82**

## Chapter 5 Using Library Resources 83

---

- 5a** Launching the Search 83
- 5b** Developing a Working Bibliography 84
- 5c** Finding Books on Your Topic 85
  - Using Your Library's Electronic Book Catalog 86
  - Using the Library's Bibliographies 86
- 5d** Finding Articles in Magazines and Journals 89
  - Searching the General Indexes to Periodicals 89
  - Finding Indexes by Topic in the Appendix 93
  - Readers' Guide to Periodical Literature* 94
  - Social Sciences Index 94
  - Humanities Index 94
  - Searching for an Index to Abstracts 94
  - Searching for Abstracts of Dissertations 96
- 5e** Searching for a Biography 96
  - Biography Index 97
  - Current Biography Yearbook 97
  - Contemporary Authors 97
  - Dictionary of Literary Biography 97
- 5f** Searching for Articles in Newspaper Indexes 97
- 5g** Searching Special Subject Directories 98
- 5h** Searching for Government Documents 99
- 5i** Searching for Essays within Books 100
- Your Research Project 100**

## Chapter 6 Conducting Field Research 102

---

- 6a** Investigating Local Sources 103
  - Interviewing Knowledgeable People 103
  - Writing Letters and Corresponding by E-mail 104

## 6 Contents

Reading Personal Papers 105

Attending Lectures and Public Addresses 105

**6b** Investigating Government Documents 106

**6c** Examining Audiovisual Materials, Television, and Radio 107

**6d** Conducting a Survey with a Questionnaire 108

**6e** Conducting Experiments, Tests, and Observation 110

**Your Research Project 111**

## Chapter 7 Plagiarism and How to Avoid It 113

---

**7a** Using Sources to Enhance Your Credibility 114

**7b** Placing Your Work in Its Proper Context 114

**7c** Understanding Copyright 115

**7d** Avoiding Plagiarism 116

Common Knowledge 118

Correctly Borrowing from a Source 120

**7e** Sharing Credit in Collaborative Projects 123

**7f** Honoring and Crediting Sources in Online Classrooms 123

**7g** Seeking Permission to Publish Material on Your Website 125

**Your Research Project 126**

## Chapter 8 Reading and Evaluating Sources 127

---

**8a** Finding Reliable Sources 127

**8b** Selecting a Mix of Primary and Secondary Sources 134

**8c** Evaluating Sources 134

Evaluating the Key Parts of an Article 134

Evaluating the Key Parts of a Book 136

Evaluating the Key Parts of an Internet Article 139

**8d** Outlining a Source 141

**8e** Summarizing a Source 141

**8f** Preparing an Annotated Bibliography 143

**8g** Preparing a Review of the Literature on a Topic 146

**Your Research Project 152**

## Chapter 9 Developing Outlines and Writing Effective Notes 153

---

Gathering Printouts, Photocopies, Scanned  
Images, and Downloaded Data 153

- 9a** Creating Effective Notes 154
    - Honoring the Conventions of Research Style 154
    - Using a Computer for Notetaking 154
  - 9b** Writing Personal Notes 154
  - 9c** Writing Direct Quotation Notes 156
    - Quoting Primary Sources 157
    - Quoting Secondary Sources 158
  - 9d** Writing Paraphrased Notes 159
  - 9e** Writing Summary Notes 161
  - 9f** Writing Précis Notes 163
    - Use the Précis to Review Briefly an Article or Book 164
    - Use the Précis to Write an Annotated Bibliography 164
    - Use the Précis in a Plot Summary Note 164
    - Use the Précis As the Form for an Abstract 165
  - 9g** Writing Notes from Field Research 166
  - 9h** Creating Outlines Using Academic Models 166
    - A General All-Purpose Model 166
    - Model for Advancing Your Ideas and Theories 167
    - Model for the Analysis of Creative Works 168
    - Model for Argument and Persuasion Papers 168
    - Model for Analysis of History 168
    - Model for a Comparative Study 169
  - 9i** Writing a Formal Outline 170
    - Using Standard Outline Symbols 170
    - Writing a Formal Topic Outline 171
    - Writing a Formal Sentence Outline 171
- Your Research Project 172**

## Chapter 10 Drafting the Paper in an Academic Style 174

---

- 10a** Focusing Your Argument 175
  - Maintaining a Focus on Objective Facts and Subjective Ideas 176
- 10b** Refining the Thesis Statement 176
  - Using Questions to Focus the Thesis 177
  - Adjust or Change Your Thesis During Research if Necessary 179
- 10c** Writing an Academic Title 180

## 8 Contents

- 10d** Drafting the Paper from Your Research Journal, Notes, and Computer Files 181
    - Writing from Your Notes 181
    - Writing with Unity and Coherence 183
    - Writing in the Proper Tense 183
    - Using the Language of the Discipline 184
    - Writing in the Third Person 184
    - Writing with the Passive Voice in an Appropriate Manner 186
  - 10e** Using Visuals Effectively in a Research Essay 186
    - File Formats 189
  - 10f** Avoiding Sexist and Biased Language 189
- Your Research Project 191**

## Chapter 11 MLA Style: In-Text References 192

---

- 11a** Blending Reference Citations into Your Text 192
  - Making a General Reference without a Page Number 193
  - Beginning with the Author and Ending with a Page Number 193
  - Putting the Page Number Immediately after the Name 193
  - Putting the Name and Page Number at the End of Borrowed Material 194
- 11b** Citing a Source When No Author Is Listed 194
  - Citing the Title of a Magazine Article 194
  - Citing the Title of a Report 195
  - Citing the Name of a Publisher or a Corporate Body 195
- 11c** Citing Nonprint Sources That Have No Page Number 195
- 11d** Citing Internet Sources 196
  - Identify the Source with Name or Title 196
  - Identify the Nature of the Information and Its Credibility 196
  - Omitting Page and Paragraph Numbers to Internet Citations 197
- 11e** Citing Indirect Sources 198
- 11f** Citing Frequent Page References to the Same Work 200
- 11g** Citing Material from Textbooks and Large Anthologies 201
- 11h** Adding Extra Information to In-Text Citations 202
  - One of Several Volumes 202
  - Two or More Works by the Same Writer 203
  - Several Authors in One Citation 203
  - Additional Information with the Page Number 204

- 11i** Punctuating Citations Properly and Consistently 204
  - Commas and Periods 204
  - Semicolons and Colons 206
  - Question Marks and Exclamation Marks 206
  - Single Quotation Marks 207
- 11j** Indenting Long Quotations 207
- 11k** Citing Poetry 209
  - Quoting Two Lines of Poetry or Less 209
  - Quoting Three Lines of Poetry or More 209
  - Indenting Turnovers for Long Lines of Poetry 210
  - Retaining Internal Quotations within a Block 210
  - Providing Translations 211
- 11l** Handling Quotations from a Play 211
- 11m** Altering Initial Capitals in Quoted Matter 212
- 11n** Omitting Quoted Matter with Ellipsis Points 212
- 11o** Altering Quotations with Parentheses and Brackets 215
  - Parentheses 216
  - Brackets 216
- Your Research Project 217**

## Chapter 12 Writing the Introduction, Body, and Conclusion 218

---

- 12a** Writing the Introduction of the Research Paper 218
  - Provide the Thesis Statement 218
  - Provide the Enthymeme 219
  - Provide a Hypothesis 220
  - Relate to the Well Known 220
  - Provide Background Information 221
  - Review the Literature 221
  - Review the History and Background of the Subject 222
  - Take Exception to Critical Views 222
  - Challenge an Assumption 223
  - Provide a Brief Summary 223
  - Define Key Terms 224
  - Supply Data, Statistics, and Special Evidence 224
- 12b** Writing the Body of the Research Paper 225
  - Organize by Chronology 225

Compare or Contrast Issues, Critical Views, and Literary Characters 227

Develop Cause and Effect 228

Define Your Key Terminology 228

Explain a Process 229

Ask Questions and Provide Answers 229

Cite Evidence from the Source Materials 230

Use a Variety of Other Methods 230

**12c** Writing the Conclusion of the Research Paper 231

Restate the Thesis and Reach beyond It 232

Close with an Effective Quotation 232

Return the Focus of a Literary Study to the Author 233

Compare the Past to the Present 233

Offer a Directive or Solution 234

Discuss Test Results 235

**Your Research Project 235**

## Chapter 13 Revising, Proofreading, and Formatting the Rough Draft 237

---

**13a** Conducting a Global Revision 237

Revising the Introduction 237

Revising the Body 238

Revising the Conclusion 238

Participating in Peer Review 239

**13b** Formatting the Paper to MLA Style 239

Title Page or Opening Page 240

Outline 241

Abstract 241

The Text of the Paper 242

Content Endnotes Page 242

Appendix 242

Works Cited 243

**13c** Editing before Typing or Printing the Final Manuscript 243

Using the Computer to Edit Your Text 243

**13d** Proofreading on the Screen and on the Printed Manuscript 244

**Your Research Project 245**

- 13e** Sample Papers in MLA Style 246
  - Short Literary Research Paper 246
  - Sample Research Paper 254

## Chapter 14 MLA Style: Citations 268

---

- 14a** Formatting the Works Cited Page 269
  - Index to Works Cited Models: MLA Style 270
- 14b** Works Cited Form—Online Sources 274
  - Citing Sources Found Online 274
- 14c** Works Cited Form—Citing Database and CD-ROM Sources 280
- 14d** Works Cited Form—Books 282
- 14e** Works Cited Form—Periodicals 294
- 14f** Works Cited Form—Newspapers 297
- 14g** Works Cited Form—Government Documents 299
- 14h** Works Cited Form—Other Sources 300

## Chapter 15 Using the APA Style 307

---

- 15a** Writing Theory, Reporting Test Results, or Reviewing Literature 307
  - Theoretical Article 307
  - Report of an Empirical Study 308
  - Review Article 308
- 15b** Writing in the Proper Tense for an APA Paper 308
- 15c** Using In-Text Citations in APA Style 309
- 15d** Preparing the List of References 316
  - Index to Bibliographic Models: APA Style 316
  - Book 317
  - Periodical 318
  - Abstract 319
  - Review 320
  - Report 320
  - Nonprint Material 320
  - Sources Accessed Online 320
  - Article from a Library Database 324
  - CD-ROM 325

## 12 Contents

- 15e** Formatting an APA Paper 325
  - Theoretical Paper 325
  - Report of Empirical Research 326
  - Review Article 326
- 15f** Writing the Abstract 327
- 15g** Sample Paper in APA Style 327

## Chapter 16 CMS Style: The Footnote System 336

---

- 16a** Inserting a Superscript Numeral in Your Text 337
  - Writing Full or Abbreviated Notes 338
  - Index to CMS Footnote Models 338
- 16b** Formatting and Writing the Footnotes 339
- 16c** Writing Footnotes for Electronic Sources 341
- 16d** Writing Subsequent Footnote References 343
- 16e** Writing Endnotes Rather Than Footnotes 343
- 16f** Writing Content Footnotes or Content Endnotes 344
- 16g** Using the Footnote System for Papers in the Humanities 347
- 16h** Writing a Bibliography Page for a Paper That Uses Footnotes 347
- 16i** Sample Research Paper in the CMS Style 348

## Chapter 17 CSE Style: Citations for Technical Writing 355

---

- Index to Bibliographic Models: CSE style 356
- Guide by Discipline 356
- 17a** Writing In-Text Citations Using the CSE Citation-Sequence System 357
- 17b** Writing a References Page 358
- 17c** Writing In-Text Citations with Name and Year 359
- 17d** Using Name-Year with Bibliography Entries 361
  - Arranging the References List 363
- 17e** Sample Paper Using the CSE Citation-Sequence System 363

## Chapter 18 Creating Electronic and Multimedia Research Projects 375

---

- 18a** Beginning the Digital Project 375
- 18b** Building Digital Presentations 376

- 18c** Research Project Websites 377
  - Creating a Single Web Page 377
  - Importing, Entering, and Modifying Text 377
  - Citing Your Sources in a Web-Based Research Paper 378
- 18d** Using Graphics in Your Electronic Research Paper 378
  - Graphic File Formats 379
  - Creating Your Own Digital Graphics 379
- 18e** Using Sound and Video in Your Electronic Research Paper 379
- 18f** Preparing a Writing Portfolio 380
- 18g** Presenting Research in Alternative Formats 382
- Your Research Project 383**

**Glossary: Rules and Techniques for Preparing the Manuscript in MLA Style 384**

**Appendix: Finding Reference Works for Your General Topic 393**

- Historic Issues of Events, People, and Artifacts 393
- Scientific Issues in Physics, Astronomy, and Engineering 394
- Issues of Health, Fitness, and Athletics 395
- Social and Political Issues 395
- Issues in the Arts, Literature, Music, and Language 396
- Environmental Issues, Genetics, and the Earth Sciences 397
- Issues in Communication and Information Technology 398
- Issues in Religion, Philosophy, and Psychology 398
- Issues in Business and Economics 399
- Popular Culture, Current Events, and Modern Trends 400

Credits 401

Index 402

# Preface to the Instructor

For decades, this text has been the leader in offering current, detailed guidance about academic research, writing, and documentation. Over the last two decades, the world of academic research has changed dramatically. Most research is now done online, and this new universe of information has not only put an almost unimaginable wealth of new sources at our fingertips, but it has also brought challenges in evaluating the credibility and usefulness of those sources. Questions of academic integrity and unintentional plagiarism have arisen around the integration of electronic sources. This new fifteenth edition of *Writing Research Papers: A Complete Guide* confronts these new challenges and offers clear, detailed guidance to assist student researchers as they struggle to keep pace with online research, electronic publishing, and new documentation formats.

## What Is New in This Edition?

- **New “Clear Targets” at the beginning of each chapter** provide students with a list of learning objectives that serve as a ready guide for finding documentation information quickly and that provide students with the key goals of the chapter.
- **New explanations of research techniques** in Chapter 4 show students how to apply cutting-edge tools and strategies in their research, including keyword searches with expanded Boolean operators and social networking sites.
- **Three new student papers** plus a new annotated bibliography provide fresh models of student research work.
- **Updated coverage of APA documentation style** brings students up to speed with the latest revisions especially how to handle electronic source documentation.

## Key Features

The world of academic research is changing rapidly, especially with the ascendance of online research. Virtually every college student now writes on a computer and researches online. The fifteenth edition of *Writing Research Papers* continues to offer a wide array of resources to help students successfully plan and execute their research papers.

## Help with Digital Research

The digital revolution is so pervasive in research writing today that a single chapter cannot properly encompass the topic. Instead, every chapter of this text has been updated to reflect the current context for academic writing, including the impact of technology on searching for appropriate topics, finding and evaluating source material, gathering notes and drafting the paper, avoiding plagiarism and embracing academic integrity, and, of course, documenting sources. Students are directed step by step through the various formats for documenting online sources and are offered clear, detailed guidance on blending electronic citations into their writing. The most extensive updated content is included in Chapter 4, where explanations are provided about new research techniques using social networking sites and keyword searches with expanded Boolean operators.

## Current Documentation Guidelines

Since discipline-specific style guides offer very different methods for documenting sources—particularly electronic sources—depending on the academic field of research, a guide of this sort is vital to students who are responding to writing assignments in a variety of disciplines. To enable students to document sources correctly, this edition includes updated guidelines for the most important documentation formats.

- **Up-to-date coverage of MLA documentation style.** The Modern Language Association (MLA) significantly revised its documentation style for both print and electronic sources in the most recent edition of the *MLA Style Manual and Guide to Scholarly Publishing*, and the *MLA Handbook for Writers of Research Papers*. All sample citations and student papers in Chapters 1 to 14 reflect the current MLA style guides.
- **Revised APA documentation coverage.** The American Psychological Association (APA) also revised its documentation guidelines in the *APA Publication Manual*. All sample citations and student papers in Chapter 15 follow current APA documentation standards.
- **Current standards for CMS style.** The most recent edition of the University of Chicago Press' *Chicago Manual of Style* emphasizes the role of electronic research. All sample citations and student papers in Chapter 16 follow current CMS documentation standards.

## Research Tips for Avoiding the Pitfalls of Plagiarism

Chapters 1 to 10 provide at least one “Research Tip,” a feature that offers instruction and examples for citing sources appropriately and ethically, and avoiding plagiarism. Beginning with the section “Understanding and Avoiding Plagiarism,” in Chapter 1, *Writing Research Papers* clearly

explains what plagiarism is and presents strategies students can use to avoid unintentional plagiarism. Moreover, there is a special emphasis on how to blend quotations into academic writing and document Internet sources.

## Guidelines for Evaluating Online Sources

Understanding what constitutes an appropriate source for an academic paper is more and more challenging for students, as more and more sources become instantly available online. *Writing Research Papers* assists student researchers in deciding if and when to use familiar search engines such as Google or Yahoo!, and also offers detailed advice on how to find respected scholarly sources—and how to determine whether a source is in fact credible. A checklist, “Evaluating Online Sources,” helps students gauge the quality of online articles.

## Student Papers

Student writing examples provide models for student writers of how other students have researched and drafted papers on a wide range of topics. With seven annotated sample papers, more than any other text of this kind, *Writing Research Papers* demonstrates format, documentation, and the different academic styles. Student papers include:

Ashley Irwin, “Sylvia Plath and Her ‘Daddy’” (MLA Style)

Kaci Holz, “Gender Communication” (MLA style)

Caitlin Kelley, “More Academics for the Cost of Less Engaged Children” (APA style)

Clare Grady, “The Space Race: One Small Step—One Giant Leap” (CMS style)

Sarah Bemis, “Diabetes Management: A Delicate Balance” (CSE style)

Sarah Morrison, “Annotated Bibliography: Media Ethics” (MLA style)

Sarah Morrison, “Media Ethics: A Review of the Literature” (MLA style)

Sample abstracts in MLA and APA style are also displayed. Additional sample research papers are available in the *Instructor’s Manual* and *Model Research Papers from across the Curriculum*.

## Reference Works by Topic

The list of references in the Appendix, “Finding Reference Works for Your General Topic,” provides a user-friendly list of sources for launching your research project. Arranged into ten general categories, as listed on pages 375–382, the Appendix allows a researcher to have quick access to relevant library books, library databases, and Internet sites.

## Accessible, Navigable Design

As in previous editions, *Writing Research Papers* is printed in full color, making information and features easier to find and more pleasing to read, and bringing strong, visual elements to the instruction. Icons identify special features, like the “Where to Look” boxes signaling cross-references.

## Additional Resources for Instructors and Students

**CourseSmart\***. Students can subscribe to *Writing Research Papers*, Fifteenth Edition, as a CourseSmart eText (at [www.coursesmart.co.uk](http://www.coursesmart.co.uk)). The site includes all of the book’s content in a format that enables students to search the text, bookmark passages, save their own notes, and print assignments that incorporate lecture notes.

## Instructor’s Manual

This extensive guide contains chapter-by-chapter classroom exercises, research assignments, quizzes, and duplication masters. Instructors can visit [www.pearsonglobaleditions.com/Lester](http://www.pearsonglobaleditions.com/Lester) to download a copy of this valuable resource.

\*This product may not be available in all markets. For more details, please visit [www.coursesmart.co.uk](http://www.coursesmart.co.uk) or contact your local Pearson representative.

# Acknowledgments

Many key people supported the development of *Writing Research Papers: A Complete Guide*, Fifteenth Edition. I am grateful to the following students for their help and for allowing me to use their work as models in this book: Kaci Holz, Caitlin Kelley, Ashley Irwin, Clare Grady, Sarah Morrison, and Sarah Bemis.

I am of course grateful to the reviewers who provided helpful suggestions for this revision, including Emory Reginald Abbott, Georgia Perimeter College; Stevens R. Amidon, Indiana University-Purdue University Fort Wayne; Crystal Bacon, Community College of Philadelphia; John Christopher Ervin, Western Kentucky University; Morgan Halstead, Malcolm X Community College; Candy A. Henry, Westmoreland County Community College; Joseph Kenyon, Community College of Philadelphia; Mark M. Kessler, Washington State Community College; Paulette Longmore, Essex County College; Anna Maheshwari, Schoolcraft College; Andrew J. Peggman, Cuyahoga Community College, Eastern Campus; Sylvia Y. S. Rippel, Lincoln University; Jeffrey Roessner, Mercyhurst University; and Carrie Tomberlin, Bellevue College.

For editorial assistance that kept us focused, special thanks are extended to the Pearson group, in particular Joe Opiela, Vice President and Publisher for English; Katharine Glynn, Senior Sponsoring Editor; Rebecca Gilpin, Assistant Editor; and Savoula Amanatidis, Project Manager; as well as Electronic Publishing Services Inc.

Heartfelt appreciation is also extended to the members of my family: Martha, Mark, Caleb, Jessica, Peyton, Sarah, and Logan. Their love and patience made this project possible.

JAMES D. LESTER, JR.

[james.lester@cmcss.net](mailto:james.lester@cmcss.net)

Pearson wishes to thank and acknowledge the following people for their work on the Global Edition:

## Contributor

Jyotsna Agrawal, Indian Institute of Technology Patna

## Reviewers

Shivani Nag, Ravenshaw University, Cuttack

Gatha Sharma, Shiv Nadar University, Uttar Pradesh

Bhavani Ravi, Human Resources and Organization Development Consultant

# 1

# Introduction to Academic Writing

## Chapter 1 Clear Targets

Communication begins when we make an initial choice to speak or to record our ideas in writing. Regardless of the writer's experience, writing is a demanding process that requires commitment. This chapter charts a direction for your research project:

- Understanding why research is an important method of discovery
- Learning the conventions of academic writing
- Overcoming the pitfalls of plagiarism with proper documentation
- Understanding the terminology of a research assignment
- Establishing a schedule for your research project

The written word—whether it is a history paper, a field report, or a research project—creates a public record of our knowledge, our opinions, and our skill with language; hence, we must strive to make our writing accurate, forceful, and honest.

Discovering a well-focused topic, and more importantly a reason for writing about it, begins the process. Choosing a format, exploring sources through critical reading, and then completing the writing task with grace and style are daunting tasks.

Despite this, writing is an outlet for the inquisitive and creative nature in each of us. Our writing is affected by the richness of our language, by our background and experiences, by our targeted audience, and by the form of expression that we choose. With perceptive enthusiasm for relating detailed concepts and honest insights, we discover the power of our own words. The satisfaction of writing well and relating our understanding to others provides intellectual stimulation and insight into our own beliefs and values.

As a college student, you will find that your writing assignments will extend past personal thoughts and ideas to explore more complex topics. Writing will make you confident in your ability to find information

and present it effectively in all kinds of ways and for all sorts of projects, such as:

- A theme in a first-year composition course on the dangers of social networking sites.
- A paper in history on Herbert Hoover's ineffectual policies for coping with the Great Depression of the early 1930s.
- A report for a physical fitness class on the benefits of ballroom dancing as exercise.
- A sociological field report on free and reduced-cost lunches for school-aged children.
- A brief biographical study of a famous person, such as American agrarian labor leader César Chávez.

All of these papers require some type of “researched writing.” Papers similar to these will be assigned during your first two years of college and increase in frequency in upper-division courses. This book eases the pressure—it shows you how to research “online discussion groups” or “the Great Depression,” and it demonstrates the correct methods for documenting the sources.

We conduct informal research all the time. We examine various models and their options before buying a car, and we check out another person informally before proposing or accepting a first date. We sometimes search online for job listings to find a summer job, or we roam the mall to find a new tennis racket, the right pair of sports shoes, or the latest DVD. Research, then, is not foreign to us. It has become commonplace to use a search engine to explore the Internet for information on any subject—from personal concerns, such as the likely side effects of a prescribed drug, to complex issues, like robotics or acupuncture.

In the classroom, we begin thinking about a serious and systematic activity, one that involves the library, the Internet, or field research. A research paper, like a personal essay, requires you to choose a topic you care about and are willing to invest many hours in thinking about. However, unlike a personal essay, a research paper requires you to develop your ideas by gathering an array of information, reading sources critically, and collecting notes. As you pull your project together, you will continue to express personal ideas, but now they are supported by and based on the collective evidence and opinions of experts on the topic.

Each classroom and each instructor will make different demands on your talents, yet all stipulate *researched writing*. Your research project will advance your theme and provide convincing proof for your inquiry.

- *Researched writing* grows from investigation.
- *Researched writing* establishes a clear purpose.
- *Researched writing* develops analysis for a variety of topics.

*Writing Research Papers* introduces research as an engaging, sometimes exciting pursuit on several fronts—your personal knowledge, ideas gleaned from printed and electronic sources, and research in the field.

## 1a Why Do Research?

Instructors ask you to write a research paper for several reasons:

**Research Teaches Methods of Discovery.** Explanation on a topic prompts you to discover what you know on a topic and what others can teach you. Beyond reading, it often expects you to venture into the field for interviews, observation, and experimentation. The process tests your curiosity as you probe a complex subject. You may not arrive at any final answers or solutions, but you will come to understand the different views on a subject. In your final paper, you will synthesize your ideas and discoveries with the knowledge and opinions of others.

**Research Teaches Investigative Skills.** A research project requires you to investigate a subject, gain a grasp of its essentials, and disclose your findings. Your success will depend on your negotiating the various sources of information, from reference books in the library to computer databases and from special archival collections to the most recent articles in printed periodicals. The Internet, with its vast quantity of information, will challenge you to find reliable sources. If you conduct research by observation, interviews, surveys, and laboratory experiments, you will discover additional methods of investigation.



Finding material on electronic sources and the Internet, Chapter 4, pages 60–82.

**Research Develops Inquiry-Based Techniques.** With the guidance of your instructor, you are making inquiry to advance your own knowledge as well as increase the data available for future research by others.

**Research Builds Career Skills.** Many career fields rely on investigation and inquiry for fact-finding purposes. Researchers work across a broad spectrum of disciplines, including the physical and life sciences of biology, chemistry, and physics. Engineering sciences in the aerospace, computer science, and automotive production fields must rely on past research while forging new manufacturing trends. Social scientists in the fields of economics, sociology, psychology, and political science foster advancements in society through investigative studies. Research professionals are on the cutting edge of scientific and technological developments, and their work leads to new medicines, consumer products, industrial processes, and numerous other developments.

**Research Teaches Critical Thinking.** As you wade through the evidence on your subject, you will learn to discriminate between useful information and unfounded or ill-conceived comments. Some sources, such as the Internet, will provide timely, reliable material but may also entice you with worthless and undocumented opinions.

**Research Teaches Logic.** Like a judge in the courtroom, you must make perceptive judgments about the issues surrounding a specific topic. Your decisions, in effect, will be based on the wisdom gained from research

of the subject. Your paper and your readers will rely on your logical response to your reading, observation, interviews, and testing.

**Research Teaches the Basic Ingredients of Argument.** In most cases, a research paper requires you to make a claim and support it with reasons and evidence. For example, if you argue that “urban sprawl has invited wild animals into our backyards,” you will learn to anticipate challenges to your theory and to defend your assertion with evidence.



Making a claim and establishing a thesis, 2f, pages 42–45.

## 1b Learning the Conventions of Academic Writing

Researched writing in each discipline follows certain conventions—that is, special forms are required for citing sources and designing pages. These rules make uniform the numerous articles written internationally by millions of scholars. The society of language and literature scholars, the Modern Language Association, has a set of guidelines generally known as MLA style. Similarly, the American Psychological Association has its own APA style. Other groups of scholars prefer a footnote system, while still others use a numbering system. These variations are not meant to confuse; they have evolved within disciplines as the preferred style.

What is important for you, right now, is to determine which documentation style to use. Many composition instructors will ask you to use MLA style, as explained in Chapters 11–14, but they are just as likely to ask for APA style (Chapter 15) if your topic concerns one of the social sciences. In a like manner, your art history instructor might expect the footnote style but could just as easily request the



MLA Style, pages 268–276  
 APA Style, pages 307–335  
 Chicago (CMS) Style, pages 336–354  
 CSE Style, pages 355–374

APA style. Ask your instructor early which style to use and organize accordingly.

Regardless of the research style that you employ, your writing should advance substantive issues and inquiry. Keep in mind three key investigative conventions:

- Analysis** Classify the major issues of your study and provide detailed analysis of each in defense of your thesis.
- Evidence** Provide well-reasoned propositions and statements that are supported by facts, details, and evidence with proper documentation.
- Discussion** Relate the implications of your findings and the merits of the study, whether an author’s poetic techniques, a historical movement, or a social issue.

## 1c Understanding and Avoiding Plagiarism

The most important convention of academic writing is the principle of giving proper credit to the work of others. **Plagiarism is defined as the act of claiming the words or ideas of another person as your own.** Plagiarism is a serious violation of the ethical standards of academic writing, and most colleges and universities have strict penalties, including academic probation or expulsion, for students who are guilty of plagiarism. Most schools publish an official code of student conduct (sometimes called an academic integrity policy), and you should be familiar with this document as it applies to your research and writing.

Some students will knowingly copy whole passages from outside sources into their work without documentation. Others will buy research papers from online sources or friends. These intentional acts of academic dishonesty are the most blatant forms of plagiarism. *Unintentional plagiarism*, however, is still a violation of academic integrity. Unacknowledged use of another person's sentences, phrases, or terminology is plagiarism, so provide a citation and use quotation marks to show exactly where you are drawing on others' work. Similarly, unacknowledged use of another person's ideas, research, or approach is also plagiarism, so write careful paraphrases.



Understanding and Avoiding Plagiarism, Chapter 7, pages 113–126.

### CHECKLIST

#### *Avoiding Unintentional Plagiarism*

The following guidelines will help you avoid unintentional plagiarism.

- **Citation.** Let readers know when you borrow from a source by introducing a quotation or paraphrase with the name of its author.
- **Quotation marks.** Enclose within quotation marks all quoted words, phrases, and sentences.
- **Paraphrase.** Provide a citation to indicate the source of a paraphrase just as you do for quotations.
- **Parenthetical citations and notes.** Use one of the academic documentation styles (MLA, APA, CMS, or CSE) to provide specific in-text citations for each source according to the conventions of the discipline in which you are writing.
- **Works cited or references pages.** Provide a complete bibliography entry at the end of your paper for every source you use, conforming to the standards of the documentation style you are using.

## 1d Understanding a Research Assignment

Beyond selecting an effective subject, you will need a reason for writing the paper. Literature instructors might expect you to make judgments about the structure and poetic techniques of Walt Whitman. Education instructors might ask you to examine the merits of a balanced curriculum for secondary students. History instructors might want you to explore an event—perhaps the tactics and strategies of the abolitionist movement leading up to the American Civil War.

### Understanding the Terminology

Assignments in literature, history, and the fine arts will often require you to *evaluate*, *interpret*, and *perform causal analysis*. Assignments in education, psychology, political science, and other social science disciplines will usually require *analysis*, *definition*, *comparison*, or a search for *precedents* leading to a *proposal*. In the sciences, your experiments and testing will usually require a discussion of the *implications* of your findings. The next few pages explain these assignments.

### Evaluation

To evaluate, you first need to establish clear criteria of judgment and then explain how the subject meets these criteria. For example, student evaluations of faculty members are based on a set of expressed criteria—an interest in student progress, a thorough knowledge of the subject, and so forth. Similarly, you may be asked to judge the merits of a poem, an art exhibit, or the newest trends in touchscreen cameras. Your first step should be to create your criteria. What makes a good movie? How important is a poem’s form and structure? Is space a special factor in architecture? You cannot expect the sources to provide the final answers; you need to experience the work and make your final judgments on it.

Let’s see how evaluation develops with one student, Sarah Bemis, who was asked to examine diabetes. At first, Sarah worked to define the disease and its basic attack on the human system. However, as she read the literature she shifted her focus from a basic definition to evaluate and examine the methods for controlling diabetes. Her paper, “Diabetes Management: A Delicate Balance,” appears on pages 364–374.

In many ways, every research paper is an evaluation.

### Interpretation

To interpret, you must usually answer, “What does it mean?” You may be asked to explain the symbolism in a piece of literature, examine a point of law, or make sense of test results. Questions often point toward interpretation:

What does this passage mean?

What are the implications of these results?

What does this data tell us?

Can you explain your reading of the problem to others?

For example, your instructor might ask you to interpret the 1954 Supreme Court ruling in *Brown v. Board of Education*; interpret results on pond water testing at site A, in a secluded country setting, and site B, near a petrochemical plant; or interpret a scene from Henrik Ibsen's *An Enemy of the People*.

In a paper on Internet dating, one student found herself asking two interpretive questions: What are the social implications of computer dating? and What are the psychological implications?

### Definition

Sometimes you will need to provide an extended definition to show that your subject fits into a selected and well-defined category. Note these examples:

1. A low-fat diet reduces the risk of coronary disease.

You will need to define “low-fat” by describing foods that make up a low-fat diet and naming the benefits from this type of diet.

2. Title IX has brought positive changes to college athletic programs.

You will need to define the law in detail and specify the changes.

3. The root cause of breakups in relationships is selfishness.

This topic will require a definition of selfishness and examples of how it weakens relationships.

A good definition usually includes three elements: the subject (low-fat diet); the class to which the subject belongs (diets in general); and the differences between others in this class (low-carb or Atkins). Definition will almost always become a part of your work when some of the terminology is subjective. If you argue, for example, that medical experiments on animals are cruel and inhumane, you may need to define what you mean by *cruel* and explain why *humane* standards should be applied to animals that are not human. Thus, definition might serve as your major thesis.

Definition is also necessary with technical and scientific terminology, as shown by Sarah Bemis in her paper on diabetes. The paper needed a careful, detailed definition of the medical disorder in addition to the methods for managing it. By her inquiry, she reached her conclusion that medication in harmony with diet and exercise were necessary for victims of the disease. Her research paper appears on pages 364–374.

### Proposal

A proposal says to the reader, “We should do something.” It often has practical applications, as shown by these examples:

- To maintain academic integrity, college administrators must enact stringent policies and punishments for cheating and plagiarism.
- A chipping mill should not be allowed in our town because its insatiable demand for timber will strip our local forests and ruin the environment.

A proposal calls for action—a change in policy, a change in the law, and, sometimes, an alteration of accepted procedures. Again, the writer must advance the thesis and support it with reasons and evidence.

In addition, a proposal demands special considerations. First, writers should convince readers that a problem exists and is serious enough to merit action. In the previous example about chipping mills, the writer will need to establish that, indeed, chipping mills have been proposed and perhaps even approved for the area. Then the writer will need to argue that they endanger the environment: They grind vast amounts of timber of any size and shave it into chips that are reprocessed in various ways. As a result, lumberjacks cut even the immature trees, stripping forests into barren wastelands. The writer presumes that clear-cutting damages the land.

Second, the writer must explain the consequences to convince the reader that the proposal has validity. The paper must defend the principle that clear-cutting damages the land, and it should show, if possible, how chipping mills in other parts of the country have damaged the environment.

Third, the writer will need to address any opposing positions, competing proposals, and alternative solutions. For example, chipping mills produce chip board for decking the floors of houses, thus saving trees that might be required for making expensive plywood boards. Without chipping mills, we might run short on paper and homebuilding products. The writer will need to note opposing views and consider them in the paper.

### Causal Argument

Unlike proposals, which predict consequences, causal arguments show that a condition exists because of specific circumstances—that is, something has caused or created this situation, and we need to know why. For example, a student's investigation uncovered reasons why schools in one state benefit greatly from a lottery but do not in another.

Let's look at another student who asked the question, "Why do numerous students, like me, who otherwise score well on the ACT test, score poorly in the math section of the test and, consequently, enroll in developmental courses that offer no college credit?" This question merited his investigation, so he gathered evidence from his personal experience as well as data drawn from interviews, surveys, critical reading, and accumulated test results. Ultimately, he explored and wrote on a combination of related issues—students' poor study skills, bias in the testing program, and inadequate instruction in grade school and high school. He discovered something about himself and many details about the testing program.

### Comparison, Including Analogy

An argument often compares and likens a subject to something else. You might be asked to compare a pair of poems or to compare stock markets—NASDAQ with the New York Stock Exchange. Comparison is seldom the focus of an entire paper, but it can be useful in a paragraph

about the banking policy of Andrew Jackson and that of his congressional opponents.

An analogy is a figurative comparison that allows the writer to draw several parallels of similarity. For example, the human circulatory system is like a transportation system with a hub, a highway system, and a fleet of trucks to carry the cargo.

### Precedence

*Precedence* refers to conventions or customs, usually well established. In judicial decisions, it is a standard set by previous cases, a *legal precedent*. Therefore, a thesis statement built on precedence requires a past event that establishes a rule of law or a point of procedure. As an example, let's return to the argument against the chipping mill. If the researcher can prove that another mill in another part of the country ruined the environment, then the researcher has a precedent for how damaging such an operation can be.

### Implications

If you conduct any kind of test or observation, you will probably make field notes in a research journal and tabulate your results at regular intervals. At some point, however, you will be expected to explain your findings, arrive at conclusions, and discuss the implications of your scientific inquiry—what did you discover, and what does it mean?

For example, one student explored the world of drug testing before companies place the products on the market. His discussions had chilling implications for consumers. Another student examined the role of mice as carriers of Lyme disease. This work required reading as well as field research and testing to arrive at final judgments. In literature, a student examined the recurring images of birds in the poetry of Thomas Hardy to discuss the implications of the birds in terms of his basic themes.

## 1e Establishing a Research Schedule

Setting a schedule at the beginning of a research project helps you stay on track and reminds you to follow the basic steps in the process. This book is organized to help you follow along with each step in the process. Write dates in the spaces on pages 27–28 next to each step and keep yourself on schedule.

- **Finding and narrowing a topic.** Your topic must have a built-in question or argument so you can interpret an issue and cite the opinions found in your course materials.
- **Drafting a thesis and research proposal.** Even if you are not required to create a formal research proposal, you need to draft some kind of plan to help direct and organize your research before you start reading in depth. See sections 2f and 2g and Chapter 3.

- **Reading and creating a working bibliography.** Preliminary reading establishes the basis for your research, helping you discover the quantity and quality of available sources. If you can't find much, your topic is too narrow. If you find too many sources, your topic is too broad and needs narrowing. Chapters 4 and 5 explain the processes for finding reliable sources online and in the library.
- **Creating notes.** Begin entering notes in a digital or printed research journal. Some notes will be summaries, others will be carefully selected quotations from the sources, and some will be paraphrases written in your own voice. Chapter 9 details the techniques for effective notetaking.
- **Organizing and outlining.** You may be required to create a formal outline; formal outlines and additional ideas for organizing your ideas are presented in sections 9h and 9i.
- **Drafting the paper.** During your writing, let your instructor scan the draft to give you feedback and guidance. He or she might see further complications for your exploration and also steer you clear of any simplistic conclusions. Drafting is also a stage for peer review, in which a classmate or two looks at your work. Section 13a, pages 237–239, gives more details on peer review. Chapters 10–12 explain matters of drafting the paper.
- **Formatting the paper.** Proper document design places your paper within the required format for your discipline, such as the number system for a scientific project or the APA style for an education paper. Chapters 14–17 provide the guidelines for the various disciplines.
- **Writing a list of your references.** You will need to list in the proper format the various sources used in your study. Chapters 14–17 provide documentation guidelines.
- **Revising and proofreading.** At the end of the project, you should be conscientious about examining the manuscript and making all necessary corrections. With the aid of computers, you can check spelling and some aspects of style. Chapter 13 gives tips on revision and editing. The Glossary is a list of terms that explains aspects of form and style.
- **Submitting the manuscript.** Like all writers, you will need at some point to “publish” the paper and release it to the audience, which might be your instructor, your classmates, or perhaps a larger group. Plan well in advance to meet this final deadline. You may present the paper in a variety of ways—on paper, through e-mail to your instructor, on a USB flash drive, in a drop box, or on your own website.

## 2 Topic Selection

### Chapter 2 Clear Targets

**M**ost instructors allow students to find their own topics for major writing assignments. Therefore, your task is to choose a topic that will hold your interest throughout the entire research process. At the same time, your chosen topic will need a scholarly perspective. This chapter charts a direction for your research project:

- Relating personal ideas to a scholarly problem
- Talking with others to refine the topic
- Refining your topic through online sources
- Utilizing databases and electronic resources to perfect your topic
- Developing a thesis statement, enthymeme, or hypothesis
- Drafting a research proposal

As you make the connection between your interests and the inherent issues of the subject, keep in mind that a scholarly topic requires inquiry as well as problem solving. To clarify what we mean, let's take a look at how two students launched their projects.

- Valerie Nesbitt-Hall saw a cartoon about a young woman saying to a man, "Sorry—I only have relationships over the Internet. I'm cyber-sexual." Although laughing, Valerie knew she had discovered her topic—online romance. Upon investigation, she found her scholarly angle: Matching services and chat rooms are like the arranged marriages from years gone by.
- Norman Berkowitz, while watching a news update on the continuing struggles of service members in the Iraq War, noticed dry and barren land, yet history had taught him that this land between the Tigris and the Euphrates rivers was formerly a land of fruit and honey, perhaps even the Garden of Eden. What happened to it? His interest focused, thereafter, on the world's water supply, and his scholarly focus shifted to the ethics of distribution of water.

As these examples show, an informed choice of subject is crucial for fulfilling the research assignment. You might be tempted to write from

a personal interest, such as “Fishing at Lake Cumberland”; however, the content and the context of the research task should drive you toward a serious, scholarly perspective: “The Effects of Toxic Chemicals on the Fish of Lake Cumberland.” This topic would probably send you into the field for hands-on investigation (see Chapter 6 for more on field research).

In another example, you might be intrigued by the topic “Computer Games,” but the research assignment requires an evaluation of issues, not a description. It also requires detailed definition. A better topic might be “Learned Dexterity with Video and Computer Games,” which requires the definition of learned dexterity and how some video games promote increased hand and eye coordination. Even in a first-year composition class, your instructor may expect discipline-specific topics, such as:

<b>Education</b>	Differentiated Instruction: Options for Classroom Participation
<b>Political Science</b>	Conservative Republicans and the Religious Right
<b>Literature</b>	Kate Chopin’s <i>The Awakening</i> and the Women’s Movement
<b>Health</b>	The Effects of Smoking during Pregnancy
<b>Sociology</b>	Parents Who Lie to Their Children

A scholarly topic requires inquiry, like those above, and it sometimes requires problem solving. For example, Sarah Bemis has a problem—she has diabetes—and she went in search of ways to manage it. Her solution—a balance of medication, monitoring, diet, and exercise—gave her the heart and soul of a good research paper. (See pages 364–374 for “Diabetes Management: A Delicate Balance.”)

## CHECKLIST

### *Narrowing a General Subject into a Scholarly Topic*

Unlike a general subject, a scholarly topic should:

- Examine one narrowed issue, not a broad subject.
- Address knowledgeable readers and carry them to another plateau of knowledge.
- Have a serious purpose—one that demands analysis of the issues, argues from a position, and explains complex details.
- Meet the expectations of the instructor and conform to the course requirements.

Thus, your inquiry into the issues or your effort to solve a problem will empower the research and the paper you produce. When your topic addresses such issues, you have a reason to:

- Examine with intellectual curiosity the evidence found.
- Share your investigation of the issues with readers, bringing them special perspectives and enlightening details.
- Present a meaningful discussion of the implications of your study rather than merely presenting a summary of ideas.

## 2a Relating Your Personal Ideas to a Scholarly Problem

Try to make a connection between your interests and the inherent issues of the subject. For instance, a student whose mother became seriously addicted to the Internet developed a paper from the personal experiences of her dysfunctional family. She worked within the discipline of sociology and consulted journals of that field. Another student, who worked at a volume discount store, developed a research project on bargain shopping and its effect on small-town shop owners. She worked within the discipline of marketing and business management, reading appropriate literature in those areas. Begin with two activities:

1. Relate your experiences to scholarly problems and academic disciplines.
2. Speculate about the subject by listing issues, asking questions, engaging in free writing, and using other idea-generating techniques.

### Connecting Personal Experience to Scholarly Topics

You can't write a personal essay and call it a research paper, yet you can choose topics close to your life. Use one of the techniques described in the following list:

#### 1. Combine personal interests with an aspect of academic studies:

Personal interest:	Skiing
Academic subject:	Sports medicine
Possible topics:	“Protecting the Knees” “Therapy for Strained Muscles” “Skin Treatments”

#### 2. Consider social issues that affect you and your family:

Personal interest:	The education of my child
Social issue:	The behavior of my child in school
Possible topics:	“Children Who Are Hyperactive” “Should Schoolchildren Take Medicine to Calm Their Hyperactivity?”

### 3. Consider scientific subjects, if appropriate:

Personal interest:	The ponds and well water on the family farm
Scientific subject:	Chemical toxins in the water
Possible topic:	“The Poisoning of Underground Water Tables”

### 4. Let your cultural background prompt you toward detailed research into your heritage, your culture, or the mythology of your ethnic background:

Ethnic background:	Native American
Personal interest:	History of the Apache tribes
Possible topic:	“The Indian Wars from the Native American’s Point of View”
Ethnic background:	Hispanic
Personal interest:	Struggles of the Mexican child in an American classroom
Possible topic:	“Bicultural Experiences of Hispanic Students: The Failures and Triumphs”

**HINT:** Learn the special language of the academic discipline and use it. Every field of study, whether sociology, geology, or literature, has words to describe its analytical approach to topics, such as the *demographics* of a target audience (marketing), the *function* of loops and arrays (computer science), the *symbolism* of Maya Angelou’s poetry (literature), and *observation* of human subjects (psychology). Part of your task is learning the terminology and using it appropriately.

## Speculating about Your Subject to Discover Ideas and to Focus on the Issues

At some point you may need to sit back, relax, and use your imagination to contemplate the issues and problems worthy of investigation. Ideas can be generated in the following ways:

### Free Writing

To free write, merely focus on a topic and write whatever comes to mind. Do not worry about grammar, style, or penmanship, but keep writing nonstop for a page or so to develop valuable phrases, comparisons, personal anecdotes, and specific thoughts that help focus issues of concern. Below, Jamie Johnston comments on violence and, perhaps, finds his topic.

The savagery of the recent hazing incident at Glenbrook North High School demonstrates that humans, both men and women, love a good fight. People want power over others, even in infancy. Just look at how siblings fight. And we fight vicariously, too, watching boxing and wrestling, cheering at fights during a hockey game, and on and on. So personally, I think human beings have always been blood thirsty and power hungry. The French philosopher Rousseau might claim a “noble savage” once existed, but personally I think we’ve always hated others.

This free writing set the path for this writer’s investigation into the role of war in human history.

### Listing Keywords

Keep a list of words, the fundamental terms that you see in the literature. These can help focus the direction of your research. Jamie Johnston built this list of terms as he began to explore research about war:

prehistoric wars	early weapons	noble savages
remains of early victims	early massacres	slaves
sacrificial victims	human nature	power
limited resources	religious sacrifices	honor

These keywords can help in writing the rough outline, as explained in the following section.

### Arranging Keywords into a Rough Outline

Writing a preliminary outline early in the project might help you see if the topic has substance so you can sustain it for the length required. At this point, the researcher needs to recognize the hierarchy of major and minor issues.

- Prehistoric wars
  - Evidence of early brutality
    - Mutilated skeletons
- Evidence of early weapons
  - Clubs, bows, slings, maces, etc.
  - Walled fortresses for defense

Speculations on reasons for war

- Resources
- Slaves
- Revenge
- Religion

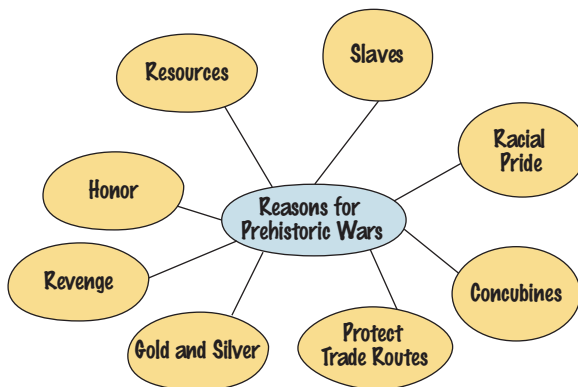
Human nature and war

- Quest for power
- Biological urge to conquer

This initial ranking of ideas would grow in length and mature in depth during the research process.

### Clustering

Another method for discovering the hierarchy of your primary topics and subtopics is to cluster ideas around a central subject. The cluster of related topics can generate a multitude of interconnected ideas. Here's an example by Jamie Johnston:



### Narrowing by Comparison

Comparison limits a discussion to specific differences. Any two works, any two persons, any two groups may serve as the basis for a comparative study. Historians compare Civil War commanders Robert E. Lee and Ulysses S. Grant. Political scientists compare conservatives and liberals. Literary scholars compare the merits of free verse and those of formal verse. Jamie Johnston discovered a comparative study in his work, as expressed in this way:

Ultimately, the key questions about the cause of war, whether ancient or current, center on one's choice between biology and

culture. On the one side, society as a whole wants to preserve its culture, in peace if possible. Yet the biological history of men and women suggests that we love a good fight.

That comparative choice became the capstone of Johnston's conclusion.

### Asking Questions

Research is a process of seeking answers to questions. Hence, the most effective researchers are those who learn to ask questions and seek answers. Raising questions about the subject can provide clear boundaries for the paper. Stretch your imagination with questions to develop a clear theme.

- 1. General questions examine terminology, issues, causes, and so on. For example, having read Henry Thoreau's essay "Civil Disobedience," one writer asked:**

What is civil disobedience?

Is dissent legal? Is it moral? Is it patriotic?

Is dissent a liberal activity? Conservative?

Should the government encourage or stifle dissent?

Is passive resistance effective?

Answering the questions can lead the writer to a central issue or argument, such as "Civil Disobedience: Shaping Our Nation by Confronting Unjust Laws."

- 2. Rhetorical questions use the modes of writing as a basis. One student framed these questions:**

Comparison: How does a state lottery compare with horse racing?

Definition: What is a lottery in legal terms? in religious terms?

Cause/Effect: What are the consequences of a state lottery on funding for education, highways, prisons, and social programs?

Process: How are winnings distributed?

Classification: What types of lotteries exist, and which are available in this state?

Evaluation: What is the value of a lottery to the average citizen? What are the disadvantages?

- 3. Academic disciplines across the curriculum provide questions, as framed by one student on the topic of sports gambling.**

Economics: Does sports gambling benefit a college's athletic budget? Does it benefit the national economy?

Psychology: What is the effect of gambling on the mental attitude of the college athlete who knows huge sums hang in the balance on his or her performance?

History:	Does gambling on sporting events have an identifiable tradition?
Sociology:	What compulsion in human nature prompts people to gamble on the prowess of an athlete or team?

**4. Journalism questions explore the basic elements of a subject: Who? What? Where? When? Why? and How? For example:**

Who?	Athletes
What?	Illegal drugs
When?	During off-season training and also on game day
Where?	Training rooms and elsewhere
Why?	To enhance performance
How?	By pills and injections

The journalist's questions direct you toward the issues, such as "win at all costs" or "damaging the body for immediate gratification."

**5. Kenneth Burke's *pentad* questions five aspects of a topic: act, agent, scene, agency, purpose.**

What happened (the act)?	Crucifixion scene in <i>The Old Man and the Sea</i> .
Who did it (agent)?	Santiago, the old fisherman.
Where and when (scene)?	At the novel's end.
How did it occur (the agency)?	Santiago carries the mast of his boat up the hill.
What is a possible motive for this event (purpose)?	Hemingway wanted to make a martyr of the old man.

This researcher can now search the novel with a purpose—to find other Christian images, rank and classify them, and determine if, indeed, the subject has merit.

## 2b Talking with Others to Refine the Topic

### Personal Interviews and Discussions

Like some researchers, you may need to consult formally with an expert on the topic or explore a subject informally while having coffee or a soda with a colleague, relative, or work associate. Ask people in your community for ideas and for their reactions to your general subject.

For example, Valerie Nesbitt-Hall knew about a couple who married after having met initially in a chat room on the Internet. She requested an interview and got it.

Casual conversations that contribute to your understanding of the subject need not be documented. However, the conscientious writer will credit a formal interview if the person approves. The interviewed subjects on pages 103–104 preferred anonymity.



Nesbitt-Hall's interview can be found on pages 103–106.

## Online Discussion Groups

What are other people saying about your subject? You might share ideas and messages with other scholars interested in your subject. Somebody may answer a question or point to an interesting aspect that has not occurred to you. With discussion groups, you have a choice:

- Classroom e-mail groups that participate in online discussions of various issues.
- Online courses that feature a discussion room.
- Discussion groups on the Internet.
- Real-time chatting with participants online—even with audio and video, in some cases.



More on discussion groups on the Internet, 4i, page 78.

Many instructors may set up informal classroom discussion lists and expect you to participate online with fellow students. In other cases, the instructor might suggest that you investigate a specific site, such as Voice of the Shuttle, a website for humanities research. You can find many discussion groups, but the manner in which you use them is vital to your academic success. Rather than chatting, solicit ideas and get responses to your questions about your research topic.

### CHECKLIST

#### *Exploring Ideas with Others*

- Consult with your instructor.
- Discuss your topic with three or four classmates.
- Listen to the concerns of others.
- Conduct a discussion or an interview (see pages 103–106).
- Join a computer discussion group.
- Take careful notes.
- Adjust your research accordingly.

## 2c

## Using Online Searches to Refine Your Topic

The Internet provides a quick and easy way to find a topic and refine it to academic standards. Chapter 4 discusses these matters in greater detail. For now, use the subject directories and keyword searches.



Internet searches, 4c, pages 66–71.

## Using an Online Subject Directory

Many search engines have a subject directory that organizes sources by topic. For example, **Yahoo! Directory** organizes online sources in broad categories like arts and humanities, education, social sciences, and so forth. If you started with a topic such as “alternative medicine,” you would quickly realize that your topic was too broad: **Yahoo! Directory** lists more than forty subtopics for “alternative medicine.” The directory might help to identify a narrower topic, such as aromatherapy or meditation, that you might be able to research more effectively.

Because you want to present an academic study about your topic, you might also conduct an online search using **Google Scholar**. This Web program can direct your search across many disciplines through articles, theses, books, and abstracts that are presented by academic publishers, professional societies, online repositories, universities, and other websites. Google Scholar helps you find relevant work across the world of scholarly research.

However, the Internet has made it difficult to apply traditional evaluations to an electronic article: Is it accurate, authoritative, objective, current, timely, and thorough in coverage? Some Internet sites are advocates to special interests, some sites market products or sprinkle the site with banners to commercial sites and sales items, some sites are personal home pages, and then many sites offer objective news and scholarly information. The answers:

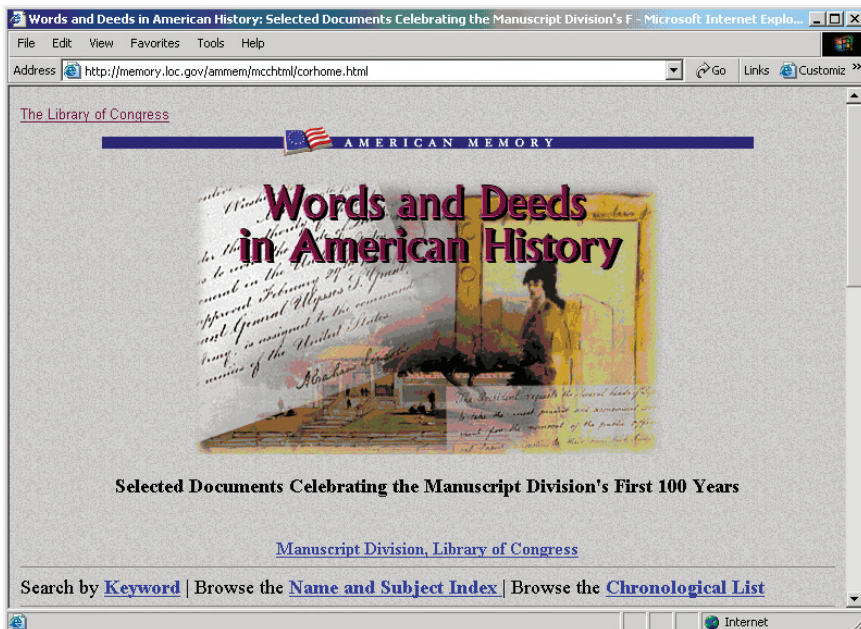
1. Go to the reliable databases available through your library, such as InfoTrac, ERIC, ProQuest, and EBSCOhost. These are monitored sites that give information filtered by editorial boards and peer review. You can reach them from remote locations at home or the dorm by connecting electronically to your library.
2. Look for articles on the Internet that first appeared in a printed version. These will have been, in most cases, examined by an editorial board.
3. Look for a reputable sponsor, especially a university, museum, or professional organization.
4. Consult Chapter 4, which discusses the pros and cons of Internet searching.

## Using an Internet Keyword Search

Using Google or a similar search engine allows you to search for keywords related to your topic. A keyword search for “American history manuscripts,” for example, leads to the Library of Congress page shown in Figure 2.1. This page allows users to search the Library’s manuscript collection by keyword, name and subject, date, or topic. Topic headings include military history, diplomacy and foreign policy, and women’s history, all of which would help find sources leading to a more focused topic.



Help with keyword searches, 4c, pages 66–71.



**FIGURE 2.1** A Library of Congress site “Words and Deeds in American History,” found by using a keyword search for American history manuscripts.

**Boolean expressions** let you focus your keyword search by stipulating which words and phrases *can* appear in the results, which words *must* appear, or which topics *must not* appear in the search results. Most online databases and Web search sites include the use of Boolean search terms, specifically *AND*, *OR*, and *NOT*, as well as the plus (+) or minus (–) signs. Placed between keywords, Boolean expressions instruct the search engine to display only those websites in which your research terms appear in certain combinations, and to ignore others.

Utilizing Boolean expressions in a keyword search will help to narrow your general subject. For example, one student entered “Internet + addiction,” and the computer brought up thousands of sources. By tightening the request to the phrase “Internet addiction” enclosed within quotation marks, she cut the list considerably and discovered other keywords: cyber-wellness, weboholics, and netaddiction. She realized she had a workable topic. For more assistance with keyword searches using Boolean expressions, see pages 66–71.

## 2d Using the Library's Electronic Databases to Find and Narrow a Topic

College libraries have academic databases not found on general search engines, such as InfoTrac, ERIC, and ProQuest. These database files are reliable because they refer you to thousands of articles that



Evaluating Online Sources,  
pages 63–64

have been peer reviewed by experts or filtered through editorial processes. For now, examine various titles as you search for your own topic. If you see one of interest, click on it for more information. Follow these steps:

1. **Select a database.** Some databases, such as InfoTrac and ProQuest, are general; use them to find a subject. Other databases focus on one discipline; for example, ERIC indexes search only specific educational sources. These databases will move you quickly to a list of articles on your topic.
2. **List keywords or a phrase to describe your topic, enclosed within quotation marks.** Avoid using just one general word. For example, the word *forestry* on the Electronic Library database produced over 5,000 possible sites. The two-word phrase “forest conservation” produced a more manageable number of sites. Here is one of the entries: “A New Year for Forest Policy.” Jami Westerhold. *American Forests*. 118.4 (Winter 2013) p32.
3. **Examine the various entries for possible topics.** Look for relevant articles, browse the descriptions, read the abstracts, and—when you find something valuable—print the full text, if it is available.

## 2e

### Using the Library’s Electronic Book Catalog to Find a Topic

Instructors expect you to cite information from a few books, and the library’s book index will suggest topics and confirm that your subject has been treated with in-depth studies in book form, not just on the Internet or in magazines. Called by different names at each library (e.g., Acorn, Felix, Access), the electronic index lists all books housed in the library, as well as other helpful items. It does not index articles in magazines and journals, but it will tell you which periodicals are housed in the library and whether they are in printed form or on microforms. Like the electronic databases described in 2d, the index will help you find a workable topic by guiding you quickly from general subjects to subtopics and, finally, to specific books.

Section 5c, pages 85–86, describes the process in great detail with examples. For now, enter your subject, such as *food*, *nutrition*, *allergies*, to see what titles are available in the library. The titles, such as *Children and Food Allergies*, *Environmental Poisons in Our Food*, or *Living with Something in the Air*, will suggest a possible topic, perhaps “Special Diets to Control Allergic Reactions to Food.” If you go into the stacks to find a book, take the time to examine nearby books on the same shelf, for they will likely treat the same subject.