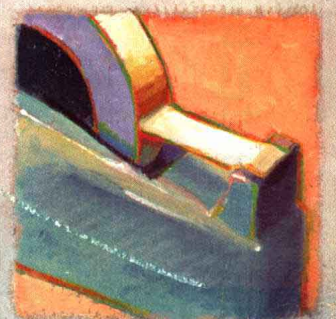
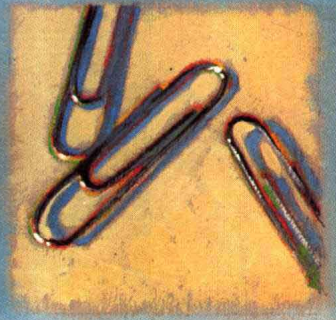


FIFTH EDITION

The Research Paper Process, Form, and Content

Audrey J. Roth



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AUDREY J. ROTH

Miami-Dade Community College

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To the Teacher

Revision is an integral part of the writing process. However, once a class paper is submitted—or a book published—the writer usually does not have a chance to work at the piece. A great bonus for me in writing this book was that *I had the chance to revise the work, now for the fifth time.*

As in previous editions, this book continues to stress the *process* of preparing a research paper: that searching for information from a variety of sources and synthesizing those findings into writing the finished product is as essential to the student as understanding the form or content of a research paper. To further emphasize the process approach to writing a research paper, this edition introduces students to keeping a Process Log, an ongoing record of ideas and activities from the first thinking about a research paper assignment until the final paper is submitted.

One change in this fifth edition is that conventions of documentation and works cited are now based primarily on those in the *MLA Handbook for Writers of Research Papers*, 2nd edition. However, there is also an expanded section on other kinds of documentation, including many illustrations based on the *Publication Manual of the American Psychological Association*, 3rd edition, which is widely used in the social sciences. Thus, this new edition is useful in courses that stress writing throughout the curriculum; it is also a practical aid for students who need to write research papers in several disciplines.

New to this edition is the inclusion of considerable material on microcomputers. Increasingly, students are (or will be) taking advantage of the capabilities of computers, both as sources to draw information from and as aids in their own note taking, organizing of ideas, and writing. This text recognizes how accessibility to microcomputers is changing the way we go about the research paper process by showing students how to use the technology to advantage.

The ten chapters of this edition follow the format already used successfully by many students and their teachers—but many sections have been augmented or revised. The concept of audience is reiterated during passages about selecting a topic, writing, and revising. In this edition, the chapter on

collecting information begins by suggesting that students follow a search strategy. In response to teacher suggestions, there is now more information on how students can avoid plagiarism, even during the note taking stage. Also in response to teacher suggestions, persuasive writing is stressed in this edition, and the sample research paper (in Chapter 10) is in that mode. Mapping is now introduced in Chapter 6 as another way, besides outlining, of organizing ideas. Chapter 8, in addition to explaining the new MLA style of parenthetical documentation, augments the material in previous editions on how students can integrate reference materials with their own ideas and writing style. Those accustomed to finding the sample research paper in an appendix in previous editions will now find it in Chapter 10, thus putting the end product within the scope of the text itself rather than as an addition. The sample research paper retains the helpful technique of giving marginal comments on both form and content, each in a distinctive color.

In this edition, as in earlier ones, I hope to help students understand that writing a research paper is not an impossibly formidable assignment. Rather, it is a series of steps that lead to a documented paper for academic courses; in the future, that same process might lead to the kinds of papers and reports that many students are called upon to write in their vocation.

The *Instructor's Manual* accompanying this new edition contains many exercises to help students practice the skills they learn in the text. Together with variations for the exercises and the long list of activities coordinated with each chapter in the text, there is ample material for teachers to choose from, depending on student needs and the time available.

Books take a long time to write and revise and revise again, but authors who are lucky—as I am—have many people to help see a book through to publication. To my students over the years who have worked through this material with me, and especially those who permitted me to include their work, I am grateful. Mary Malcolm and other librarians at the Miami-Dade Community College South Campus have been most helpful. Cedric Crocker never got impatient waiting for the manuscript. Pat Tompkins was a most perceptive copy editor and Andrea Cava saw to the myriad details of production in admirable fashion. My thanks, also, to the many colleagues whose comments and suggestions have helped me to continue improving this book. Those who have assisted most recently are Linda Peckham, Lansing Community College; David H. Katz, Community College of Philadelphia, David Elliot, Keystone Junior College; Leslie Harris, Georgia State University; Lorita S. Langdon, Columbus Technical Institute; and Michael G. O'Hara, Muscatine Community College.

Books also take a lot of an author's time away from the family. Fortunately, mine is an understanding one. So again I thank Ray, Sharon, David, and especially Jason. This time I also want to give a special tribute to the people who first showed me how important books and writing and learning are: my parents, Ida and Gene Dynner.

Audrey J. Roth

To the Student

The most exciting kind of education is also the most personal. Nothing can surpass the joy of discovering for yourself something that is important to you! It may be an idea or a bit of information you come across accidentally—or a sudden insight, fitting together pieces of information or working through a problem. Such personal encounters are the “payoff” in education. A teacher may direct you to learning and even encourage you in it—but no teacher can make the excitement or the joy happen. That’s up to you.

A research paper, assigned in a course and perhaps checked at various stages by an instructor, leads you beyond classrooms, beyond the texts for classes and into a process where the joy of discovery and learning can come to you many times. Preparing the research paper is an active and individual process, an ideal learning process. It provides a structure within which you can make exciting discoveries of knowledge and of self that are basic to education. But the research paper also gives you a chance to individualize a school assignment, to tailor a piece of work to your own inclinations and abilities, to show others what you can do. Writing a research paper is more than just a classroom exercise. It is an experience in searching out, understanding, and synthesizing that forms the basis of many skills applicable to both academic and nonacademic tasks. It is, in the fullest sense, a discovering, an education. So, to produce a good research paper is both a useful and a thoroughly satisfying experience!

To some, the thought of having to write an assigned number of pages, often more than ever produced before, is disconcerting (“I know I could *tell* you about it!”). To others, the very idea of having to work independently is baffling (“How should I *start*?”). But there is no need to approach the research paper assignment with trepidation, and nobody should view the research

paper as an obstacle to overcome. Instead, consider it a goal to accomplish, a goal within reach if you use the help this book can give you.

This book doesn't guarantee to rid you of genuine concerns or to provide a magic formula that makes everything easy. It *does*, however, offer a procedure to follow and a framework to use in preparing a research paper. It will guide you through the entire process, from choosing a topic to submitting a written paper of good quality in acceptable form.

If you have access to a microcomputer, you will find in this new edition many suggestions about using it for taking notes, organizing information by using an "idea processor," and writing your paper with word processing software. You may also be able to find information more readily with the help of computers in the library.

Because *The Research Paper* emphasizes ideas and a process, examples in the text are from technical and vocational studies as well as from the more traditional academic areas (natural sciences, humanities, and social sciences). The diversity is here to show you the wide application of the content of this book. You can use it as a guide in many courses, even if you are left completely on your own to write a research paper. You will probably also find this book a valuable permanent addition to your personal library.

Mostly, I hope this book will help you give meaning to your research and will make it a useful part of your education. I also hope that as you learn increasingly to work on your own and trust your own abilities, you will often make those personal discoveries that are the *real* bases of learning.

Contents

To the Teacher / ix

To the Student / xi

1 Starting the Research Paper / 1

Differences Between Research Papers and Reports / 3

What a Research Paper *Is* / 4

What a Research Paper *Is Not* / 5

Five Steps to a Research Paper / 7

Step 1. Choosing the Topic / 7

Step 2. Collecting Information / 8

Step 3. Evaluating Materials / 8

Step 4. Organizing Ideas / 8

Step 5. Writing the Paper / 9

Why a Research Paper Is Important / 9

Who Reads Research Papers—and Why / 11

Keeping a Process Log / 12

2 Choosing a General Topic / 15

Assigned Topics / 16

Field-of-Study Topics / 16

Your Textbook: A Printed Aid / 17

Course Materials: A Printed Aid / 19

Encyclopedias: A Printed Aid / 19
The Card Catalog: A Printed Aid / 20
Periodical Indexes: A Printed Aid / 23
Your Own Interests: A Nonprint Aid / 26

Free-Choice Topics / 28

Qualities of a Good Topic / 36

Topics to Avoid / 38

An Addendum / 40

3 Narrowing the Topic / 41

Some Limitations / 41

Focusing on a Subject for Research / 44

Subdividing / 44

Free Association / 45

The Five Ws / 46

Combined Method / 48

Finding an Approach / 49

Examining or Analyzing / 50

Evaluating or Criticizing / 51

Comparing and Contrasting / 51

Relating / 52

Arguing or Persuading / 53

Wording Approaches and Final Titles / 54

4 Collecting Information / 56

A Search Strategy / 57

Primary and Secondary Sources / 59

Preliminary Citations / 60

Reasons for Preliminary Citations / 62

Conventions of Preliminary Citation Cards / 62

Content of Preliminary Citation Cards / 64

Sources of Print Information / 69

Encyclopedias / 69

Other Reference Books and Indexes / 71

Abstracting Services / 76

The Card Catalog / 77

Author Card / 78

Title Card / 80

Subject Card / 81

“See Also” Cards / 81

Catalog Customs / 81

Computer Databases / 84

Periodical Indexes / 87

Magazines and Journals / 91

Newspapers / 92

More Sources of Print Information / 94

Sources of Nonprint Information / 96

Audiovisual Materials / 96

Radio and Television Programs / 96

Interviews / 98

Lectures and Speeches / 100

Questionnaires / 101

A Final Check / 102

5 Recording Information / 104

Evaluating Source Materials / 105

Before You Read / 105

When You Read / 107

Qualities of Good Notes / 107

Legibility / 108

Accuracy / 109

Completeness / 109

Conventions of Writing Notes / 110

Reading to Take Notes / 116

Taking Notes / 116

Summary Notes / 118

Paraphrase Notes / 119

Direct Quotation Notes / 120

Personal Comment Notes / 121

Combination Notes / 122

Number of Note Cards / 123

Plagiarism—and How Not to Commit It / 124

Common Knowledge / 127

A Note About Photocopying / 128

If You Use a Computer . . . 128

6 Organizing Ideas / 130

What a Thesis Statement *Is* / 132

What a Thesis Statement *Is Not* / 133

How a Thesis Statement Evolves / 135

How an Outline Evolves / 137

Ways of Organizing Content / 138

Time / 140

Known to Unknown or Simple to Complex / 141

Comparison and Contrast / 141

General to Particular or Particular to General / 141

Problem to Solution or Question to Answer / 142

Cause to Effect or Effect to Cause / 142

Some Structuring Strategies / 143

Outlines / 144

Forms of Outlines / 146

Outline Conventions / 147

Outline Content / 150

Revising Outlines / 154

Mapping / 156

Computer Aids to Outlining / 157

Before Moving Ahead . . . / 158

7 Writing the Paper / 160

Writing Style / 161

Starting the Paper / 163

Good Openings / 163

Bad Openings / 168

Writing the Body of the Paper / 169

Unity and Coherence / 170

Adequate Support / 171

Emphasis / 172

Concreteness and Specificity / 172

Integrating Resource Information / 174**Ending the Paper / 174**

Good Endings / 175

Bad Endings / 178

Revising the Paper / 179

Word Choice and Sentence Structure / 180

Mechanics / 182

Selecting a Title / 183**8 Documentation / 185****Parenthetical Documentation / 186**

Special Kinds of Parenthetical Documentation / 189

Documenting Quotations / 192

Documenting Visual Material / 194**Using Notes with Parenthetical Documentation / 195****Other Documentation Systems / 196**

Author and Date System / 196

Works Cited Form in Author and Date System / 198

Footnotes / 198

Full In-Text Documentation / 198

Numbering Sources / 199

Endnotes / 200

Note Numbering System / 201

First References: Books / 202

First References: Periodicals / 204

First References: Other Print Sources / 206

First References: Nonprint Sources / 207

Subsequent References / 210

Documentation in Other Disciplines / 211

APA In-Text Documentation / 212

APA Reference Forms / 215

APA Typing Customs / 220

9 Forms for Works Cited / 221

What to Include / 222

Conventions / 223

Standard Forms for Works Cited / 225

Books / 225

Periodicals / 234

Other Print Sources / 237

Nonprint Sources / 240

10 Final Presentation / 248

Typing / 249

Page Numbering / 249

Proofreading / 250

First Page / 250

Outline Page / 251

Preface / 252

Synopsis or Abstract / 252

The Text / 253

Illustrative Materials: Charts, Tables, Graphs, Pictures / 253

Endnotes / 255

Works Cited / 255

Annotation / 257

Appendix / 259

Sample Research Paper / 261

Appendix A. Selected List of Reference Works Available in Libraries / 281

General Reference Works / 283

Natural Sciences / 286

Social Sciences / 288

Humanities / 290

Vocational Studies / 293

**Appendix B. Reference Words and
Abbreviations / 295**

**Appendix C. Sample of Alternate Title
Page / 297**

Appendix D. APA Form Title Page / 298

Index / 299

1 / Starting the Research Paper

The word *research* may conjure up any number of pictures in your mind. Perhaps your picture is that of a white-coated laboratory scientist working amid containers of chemicals and intricate glass tubing. Or it may be that of a bespectacled scholar searching through musty volumes in a library alcove. Or perhaps it is of a modishly dressed interviewer stopping people in a shopping center to ask about their preference in toothpaste.

Actually, each picture illustrates one kind of research, for although each activity is different, each person noted above is carrying out a careful, serious, and systematic investigation.

The English word *research* comes from a prefix and a root word that mean “to seek out again.” Most college research is, indeed, a matter of seeking out ideas and materials already found or developed by others; the researcher is making discoveries—usually in order to put together in new ways what is found. Some research, however, is aimed at finding what has never before been known; it is truly invention. In any case, whenever anybody wants to find out about something and undertakes a thorough study of the subject, that person is doing research.

Those who traveled on the early space shuttle flights conducted research experiments. The people who design the entertainments at Disney World have an on-site library to help them obtain research sources they need. Governmental committees often commission research studies. (The one by Alan Westin in the Works Cited of the sample research paper on page 280 is an

example of such a study.) Inventors must do research to make sure they are not merely replicating something already developed. Lobbyists research not only the subject they are interested in but also the interests and voting patterns of legislators they seek to influence. There are even corporations whose sole purpose is research.

Pure research is sometimes done by scientists working in laboratories, but it might also be done by a landing vehicle scooping up surface samples from Mars or by people feeding into computers the radio signals sent to earth from orbiting satellites. This type of research, usually associated with the natural sciences, aims at adding new knowledge to the totality of what people have been able to learn, even if such knowledge seems to have no immediate or practical use.

Scholarly research is similar to pure research, except that the searcher works principally with written records rather than with the materials of the physical world. Such research fits the most literal definition of the word—that is, “to find again.” Students do scholarly research when they prepare research papers for their courses; their teachers do it when they write papers for journals and prepare speeches they give at their professional conferences.

Applied research is the practical application of what has already been discovered or what has been theorized. After nylon was developed in the laboratory, for instance, people engaged in applied research found ways to use it in such diverse products as hosiery, carpets, and fishing line.

Technical or business research is one form of applied research. A person who must make practical decisions such as choosing a new location for a manufacturing plant relies on this kind of research. Studies might be done on availability of natural resources, transportation access, financing, population trends, local employment, and educational resources—all part of such research—before a final decision about the location is reached.

Market research is the study of what consumers want. Uncounted new and different goods and services have resulted from this kind of research; roll-out refrigerators, snowmobiles, nonstick zippers, and dog-walking services are among them.

Although the purposes of these different kinds of research vary, the method of each is essentially the same. In all of them, information is gathered (from sources outside the researcher) and interpreted so that conclusions can be drawn.

Students are often asked to do one or more of these kinds of research. The assignment may be called a “term paper,” a “library report,” an “investigative report,” a “documented paper,” or a “research paper.” The names are often used interchangeably. Whatever the name, the assignment will require that you locate information on a given subject (generally, but not always or exclusively, in a library) and write down conclusions based on your *findings*.

Differences Between Research Papers and Reports

Perhaps in elementary or high school you did some library work or even a library paper—recording the facts you discovered and handing in the result. If you only compiled information without evaluating or interpreting it, you were actually preparing a **report**—not a research paper. Typical subjects for reports might be the preparations for the first moon landing, decisive battles led by General Montgomery in World War II, how certain special effects were achieved in the *Star Wars* movies, requirements for membership in the local electricians' union, an explanation of how dolphins breathe, or a summary of the plot of *A Tale of Two Cities*. Any of these reports could simply record a series of facts that you found, often from a single source. No evaluation or interpretation, none of your own ideas is expected in a report.

A **research paper** differs from a report in one major way: you *are* expected to evaluate or interpret or in some other way add to and participate in what you write. You *are* expected to consider the why and how of the topic you choose. The research paper requires that you develop a point of view toward your material, take a stand, express some original thought.

To record the ideas of others when you write a report is adequate. It is not enough to stop at that point when you write a research paper. Of course, you will become familiar with the ideas of others on the subject of your study, but you should also consider, and perhaps include in your paper, new ideas or perspectives that came to you through this particular research. When you prepare a research paper, you are expected to analyze, interpret, evaluate the information you gather, and then to draw conclusions from it. Certainly you may even challenge the beliefs of others, provided you can substantiate the case you make.

A report can be on one subject alone: whales, direct mail advertising, presidential party platforms, privacy. It may be (and often is) book length. Reports do have many practical applications outside of fulfilling school assignments. They are so much a part of business, industrial, and governmental practice that courses are given in writing reports (though such reports may also be based upon the same kind of research process you will read about in this text).

In a research paper, however, you narrow down the general area by taking a specific approach to the material, an approach which is often reflected in the thesis or underlying idea of the research paper. Thus, rather than choosing “whales” as a topic, you might examine how available evidence on whale sounds has led to theories of animal communication. A direct mail advertising campaign could be linked to other media campaigns, and a research paper on presidential party platforms could be developed by comparing those plat-