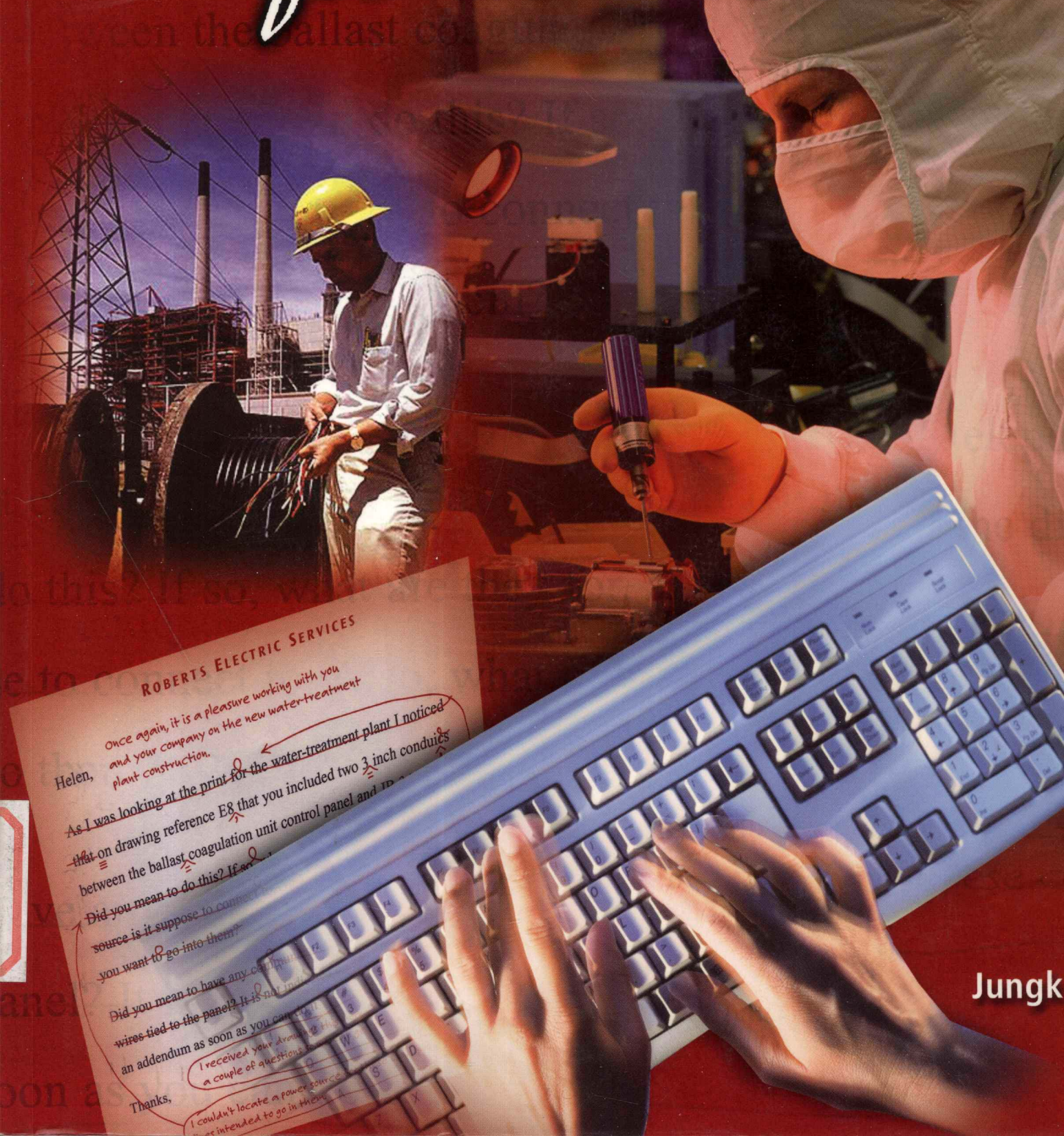


# Applied Writing for Technicians



## ROBERTS ELECTRIC SERVICES

Helen,  
Once again, it is a pleasure working with you and your company on the new water-treatment plant construction.

As I was looking at the print for the water-treatment plant I noticed that on drawing reference E8 that you included two 3 inch conduits between the ballast coagulation unit control panel and ID.

Did you mean to do this? If so, what source is it suppose to connect you want to go into them?

Did you mean to have any conduits wires tied to the panel? It is my intention an addendum as soon as you can.

Thanks,

I received your drawing & this a couple of questions. I couldn't locate a power source intended to go in there.

Jungk



# Applied Writing for Technicians

Dale Jungk



**Higher Education**

Boston Burr Ridge, IL Dubuque, IA Madison, WI New York San Francisco St. Louis  
Bangkok Bogotá Caracas Kuala Lumpur Lisbon London Madrid Mexico City  
Milan Montreal New Delhi Santiago Seoul Singapore Sydney Taipei Toronto

The McGraw-Hill Companies



## Higher Education

### APPLIED WRITING FOR TECHNICIANS

Published by McGraw-Hill, a business unit of The McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY 10020. Copyright © 2005 by The McGraw-Hill Companies, Inc. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written consent of The McGraw-Hill Companies, Inc., including, but not limited to, in any network or other electronic storage or transmission, or broadcast for distance learning.

Some ancillaries, including electronic and print components, may not be available to customers outside the United States.



This book is printed on recycled, acid-free paper containing 10% postconsumer waste.

1 2 3 4 5 6 7 8 9 0 QPD/QPD 0 9 8 7 6 5 4

ISBN 0-07-828357-4

Publisher: *David T. Culverwell*

Developmental editor: *Patricia Forrest*

Senior marketing manager: *Roxan Kinsey*

Lead project manager: *Joyce M. Berendes*

Production supervisor: *Sherry L. Kane*

Lead media project manager: *Audrey A. Reiter*

Executive media technology producer: *Linda Meehan Avenarius*

Senior coordinator of freelance design: *Michelle D. Whitaker*

Cover designer: *Laura Martin*

Cover images: Keyboard image: © *Gary Buss/Getty Images*; Sample letter: © *NETS*

Electrician image: © *Charles E. Rotkin/Corbis*

Computer Cleanroom Technician: © *Steve Niedorf Photography/Getty Images*

Supplement producer: *Brenda A. Ernzen*

Compositor: *Que-Net Media*

Typeface: *11.5/12 Times Roman*

Printer: *Quebecor World Dubuque, IA*

The credits section for this book begins on page 357 and is considered an extension of the copyright page.

# Preface

**Y**ou may have made a decision to enter a technical field that interests you. On the other hand, maybe you're still undecided about which field would be the most satisfying. New challenges can always be a bit daunting. Sometimes, even opening your textbook at the start of a term can be somewhat intimidating, to say the least.

Once you begin thumbing through the pages of *Applied Writing for Technicians*, though, it is hoped that it will become clear that this text was written for you, the student. In the very first pages, you might see yourself and perhaps recognize some of the writing challenges discussed. This text is intended to build your confidence as well as your skills. As you work through the chapters, you should begin to see what you will soon become—a qualified technician with all the necessary writing skills.

Thanks to the help of professional technicians, this book was developed using real-life examples. The writing cases have actually happened in your field, and they are broken down into a step-by-step process designed to take the mystery out of writing.

The basis for this text involved many hours of working with professional technicians, as well as a lot of listening. Many times, these technicians expressed that they wished a book like this had been available when they were in training. *Applied Writing for Technicians* gives you the writing essentials that modern technicians need.

Part 1 guides you through the writing process by providing you with illustrations of professional technicians developing correspondence, as well as application exercises in which to develop your skills. Part 2 helps you master grammar rules that have often plagued so many of us. Along with traditional illustrations, a building-block approach provides you with images that make these rules easy to visualize.

Part 3 gives you clear explanations of punctuation rules that you need to know. Part 4 shows how to prepare documents for sending and how to send them the right way electronically. Finally, Part 5 is a resource of more writing cases and exercises that will reinforce the lessons introduced in the text and take you to a new skill level.

Students, this book was written *to* you as a resource and *for* you to use in your career. Technicians have given me wonderful insight into what you need to know. Learn and enjoy.

# Acknowledgments

Many special people supported this project, and I hope that my few words reflect the depth of my appreciation.

To my parents, my sincerest gratitude and affections, for always believing in me.

To Donette Smock, my deepest thanks for her selfless dedication and help in seeing this project through with me to the end.

My thanks to Don Ellis, for offering his ideas and for those long sessions we spent discussing this book. My gratitude to Wayne Major, who supported my every effort. A special thanks to Debbie Grace, for always being available to listen and offer feedback. Finally, my appreciation to the driving catalyst behind my work, John Vatterott, who embraced this idea and to whom I cannot say enough.

## Reviewers and Technical Consultants

**Reviewers** Thanks to the following reviewers for their time and commitment.

Kristine Harrington  
*Kent State University*

Sharon Krickbaum  
*Vatterott College*

Carol Lance  
*Vatterott College*

**Technical Consultants** Thanks to the following people who worked with me to develop authentic case examples and assignments for the technical industries represented.

*Electrical construction services:* Byron Musser

*Dental services:* Jodi Hollingsworth, Tina Pearson

*Computer support services:* Jeff Pfeiderer

*Heating and cooling services:* Bret Doles

*Editorial graphics and design:* Christy Benigno

*Auto collision repair:* Ken Clark

*Medical office services:* Donette S. Smock

*Legal assistant services:* Mark Wissehr, Susan Seals

This text was easy to start but harder to end. I have enjoyed working with each reviewer and consultant very much, and it is exciting to know that they have helped me provide students with the skills they need to become successful.

*Dale Jungk*

# CONTENTS

## **INTRODUCTION 1**

Writer's Block	2
Limbering Up Your Writing Muscles	4
Free Writing	4
Channeled Free Writing	4
Warm-Up Exercises	5

## **PART 1**

## **THE WRITING PROCESS 7**

### **Chapter 1: Planning and Writing Messages, 9**

Understanding the Writing Process	10
Planning Your Messages	11
Workplace Examples of Planning and Writing	11
Case 1: The Routine Form	12
Electrical Construction Services	
Case 2: The Routine Letter	14
Dental Services	
Case 3: The Persuasive Memo	16
Computer Support Services	
Case 4: The Persuasive Letter	19
Heating and Cooling Services	
Application Exercises	22

### **Chapter 2: Choosing the Best Strategies, 29**

Understanding Strategy	30
Finding the Right Words	30
Friendly Words: Goodwill over Indifference	30
What's in a Name: "Hey, Jim," over "Hey, You"	31
Common Words: Simple over Longwinded Words	31
Specific Words: Precision over Generalities	31
"Careful" and "Careless" Words: Tactful over Condescending	32
Connotations: Stable over Unstable Expressions	32
Nonbiased Words: Sensitive over Insensitive Expressions	33
Avoiding Clichés: Vivid Expressions, Not Tired Expressions	33
Jargon and Buzzwords: Clarity over Confusion	34
Direct Words: Useful over Useless Words	35
Redundancy	36

Active and Passive Voice	36
Voice Defined	36
The Strategy of Voice	37
Creating Easy-to-Read Sentences	38
Organizing Sentences into Effective Paragraphs	39
Topic and Supporting Sentences	39
Transitional Sentences	40
Organizing Paragraphs: Coherence over Confusion	40
Applying the Direct and Indirect Approaches	41
The Direct Approach	41
The Indirect Approach	42
Review	43
Application Exercises	45

### **Chapter 3: Revising Your Messages, 51**

First, Read It Through	52
The Revising Process	52
Proofreader's Marks for Revising	53
Case 1: The Routine Form	54
Electrical Construction Services	
Case 2: The Routine Letter	56
Dental Services	
Case 3: The Persuasive Memo	58
Computer Support Services	
Case 4: The Persuasive Letter	61
Heating and Cooling Services	
Application Exercises	64

### **Chapter 4: Editing Your Messages, 67**

Editing	68
Case 1: The Routine Form	70
Electrical Construction Services	
Case 2: The Routine Letter	72
Dental Services	
Case 3: The Persuasive Memo	74
Computer Support Services	
Case 4: The Persuasive Letter	76
Heating and Cooling Services	
Using Proofreading Methods	78
Application Exercises	80

## Chapter 5: Communicating Bad News, 85

Bad News 86

Application Exercises 88

## Chapter 6: Developing Your Style and Writing an Application Letter, 97

Developing Your Style 98

How Can You Develop Your Own Style? 98

Who Influences Your Style? 99

Writing an Application Letter 99

Application Exercises 104

## **PART 2** **THE SENTENCE:** **PURPOSE AND DESIGN 113**

## Chapter 7: The Sentence and the Parts of Speech, 115

The Sentence 116

The Parts of Speech 116

Nouns 116

Pronouns 116

Verbs 117

Adjectives 117

Nouns That Can Be Used as Adjectives 117

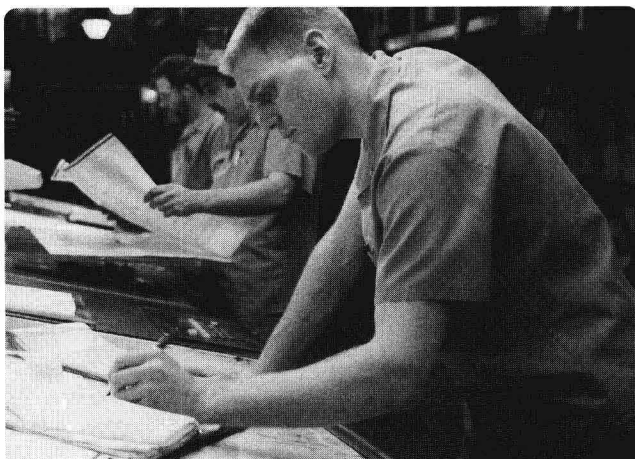
Pronouns That Can Be Used as Adjectives 118

Adverbs 118

Prepositions 119

Conjunctions 119

Interjections 120



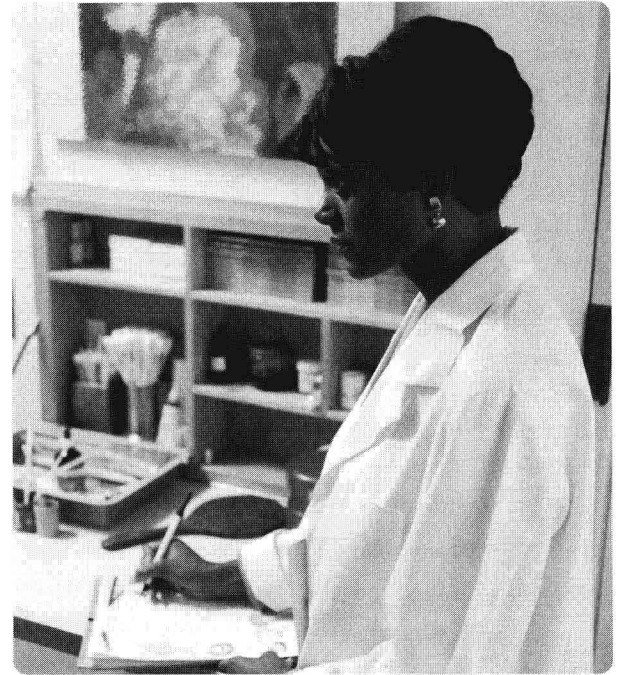
Complements 120

Objective Complements 121

Subject Complements 122

Review 123

Application Exercises 125



## Chapter 8: Sentence Structure, 131

Word Groups 132

Clauses 132

Phrases 132

Sentence Fragments 135

The Four Types of Sentences 136

Simple Sentence 136

Compound Sentence 137

Complex Sentence 139

Compound-Complex Sentence 141

Parallelism 142

Review 143

Application Exercises 145

## Chapter 9: More About Nouns, Pronouns, and Verbs, 151

Nouns 152

Singular Nouns 152

Plural Nouns 152

Singular Possessive Nouns	157
Plural Possessive Nouns	157
Pronouns	158
Personal Pronouns	158
Demonstrative Pronouns	159
Interrogative Pronouns	159
Relative Pronouns	159
Reflexive and Intensive Pronouns	160
Verbs	160
Transitive and Intransitive Verbs	160
Linking Verbs	160
Verb Tenses	161
Review	165
Application Exercises	167

## Chapter 10: Agreement, Verbs and Mood, and Misplaced and Dangling Modifiers, 175

Agreement	176
Subject-Verb Agreement	176
Agreement with Nominative Pronouns	177
Agreement with the Predicate Nominative	177
Agreement with Objective Pronouns	177
Agreement with Indefinite Pronouns	177
Verbs and Mood	178
Indicative Mood	178
Imperative Mood	178
Subjunctive Mood	178

Misplaced and Dangling Modifiers	179
Misplaced Modifiers	179
Dangling Modifiers	180
Review	181
Application Exercises	183

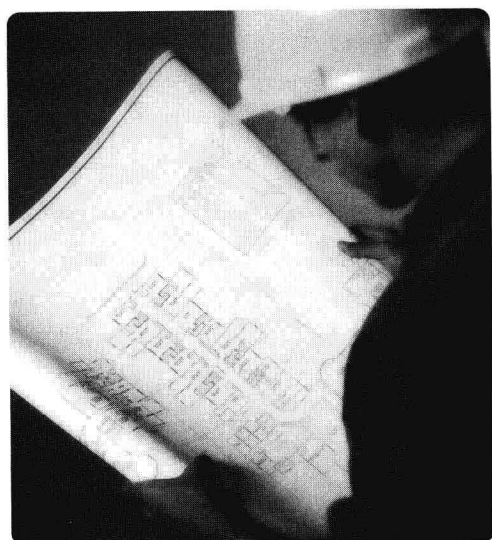
## Chapter 11: Capitalization, 189

Beginning Sentences	190
Direct Quotes	190
Questions within Sentences	190
Word Units after a Colon	191
Word Units in a List	191
Proper Nouns	191
Names or Nicknames	191
Family Terms	191
The Pronoun I	192
Cities, Counties, States, Provinces, and Countries	192
Places	192
Directions of Geographic Regions	192
Historic Events and Eras	193
Months, Weekdays, and National Holidays	193
Formal Titles before Names of People	194
Appositives	194
Official Titles	194
Proper Adjectives	195
Titles of Written Works	195
Additional Uses	195
Rules Summary for Capitalization	196
Review	197
Application Exercises	199

## **PART 3** **PUNCTUATION AND** **THE MECHANICS** **OF WRITING 201**

### Chapter 12: Commas, Semicolons, and Colons, 203

Commas	204
Introductory Words, Phrases, and Clauses	204
Nonessential Expressions	205
Essential Phrases and Clauses	206
Phrases and Clauses after the Main Clause	206





Items in a Series	207
Compound Sentences	207
Independent Adjectives before a Noun	208
Contrasting Expressions	208
Statement and Question Sentences	208
Omitted Words	208
Quotations	209
Special Cases	209
Additional Uses	209
Semicolons	209
Independent Clauses	210
Items in a Series	210
Transitional Expressions	211
Colons	211
Items in a Series	211
Items in a List	212
Quotations	212
Additional Uses	212
Rules Summary for Commas, Semicolons, and Colons	213
Commas	213
Semicolons	214
Colons	214
Review	215
Application Exercises	217

## Chapter 13: Dashes, Hyphens, and Parentheses, 219

Dashes	220
Introductory Listings	220
Appositives	220
Parenthetical Expressions	220
Special Uses	220
Hyphens	221
Compound Adjectives before Nouns and Pronouns	221
Compound Adjectives that Appear after a Noun and Follow a <i>to Be</i> Verb	221
Compound Nouns Used as Compound Adjectives	221
Proper Nouns Used as Compound Adjectives	222
Prefix and Root Combinations	222
Suspension in Hyphenation	222

Compound Numbers between Twenty-One and Ninety-Nine	222
Inclusive Numbers	222
Fractions	223
End-of-Line Words	223
Parentheses	223
Nonessential Expressions	223
Directions and References	224
Numerical Expressions	224
Acronyms and Letters	224
Rules Summary for Dashes, Hyphens, and Parentheses	225
Dashes	225
Hyphens	225
Parentheses	226
Review	227
Application Exercises	229

## Chapter 14: Apostrophes, Periods, Question Marks, and Exclamation Points, 231

Apostrophes	232
Singular and Plural Possessive Nouns	232
Inanimate Possessives	233
Individual and Joint Ownership in Compound Subjects	233
Indefinite Pronouns	233
Possessive Pronouns	233
Possessive Personal Pronouns	233
Indirect Placement	234
Time and Money	234
Contractions	234
Additional Uses	234
Periods	235
Ends of Sentences	235
Abbreviations and Acronyms	235
Enumeration	236
Courtesy Titles, Professional Titles, Initials	236
Question Marks	236
Direct Questions	236
Questions in a Series	236
Questions within Statements	237
Exclamation Points	237

Rules Summary for Apostrophes, Periods, Question Marks, and Exclamation Points	237
Apostrophes	237
Periods	238
Question Marks	238
Exclamation Points	238
Review	239
Application Exercises	241

## **PART 4**

### **LETTER STYLES AND ELECTRONIC MESSAGES: FORMATS AND GUIDELINES**

## **243**

#### Chapter 15: Letter Formats, 245

The Parts of a Letter	246
-----------------------	-----

Fonts	247
-------	-----

Punctuation Styles	247
--------------------	-----

The Five Format Styles	247
------------------------	-----

Review	253
--------	-----

#### Chapter 16: E-mail Messages, 255

E-mail and Its Advantages	256
---------------------------	-----

Basic Parts of an E-mail Message	256
----------------------------------	-----

Provider Systems	258
------------------	-----

Common Abuses of E-mail	259
-------------------------	-----

Other Business E-mail Misuses	259
-------------------------------	-----

E-mail Cautions	260
-----------------	-----

Preparation of E-mail Messages	260
--------------------------------	-----

Security and the Disadvantages of E-mail	261
--	-----

Review	262
--------	-----

## **PART 5**

### **ADDITIONAL EXAMPLES AND ASSIGNMENTS**

## **265**

#### Chapter 17: Cases: Examples and Assignments, 267

Case Examples: Illustrated	268
----------------------------	-----

Case 5: The Routine Form	269
Editorial Graphics and Design	

Case 6: The Routine Letter	276
Auto Collision Repair	

Case 7: The Persuasive Memo	283
Medical Office Services	

Case 8: The Persuasive Letter	290
Legal Assistant Services	

Case Assignments: Application	297
-------------------------------	-----

Electrical Construction Services	298
----------------------------------	-----

Dental Services	300
-----------------	-----

Computer Support Services	302
---------------------------	-----

Heating and Cooling Services	303
------------------------------	-----

Editorial Graphics and Design	305
-------------------------------	-----

Auto Collision and Repair	308
---------------------------	-----

Medical Office Services	311
-------------------------	-----

Legal Assistant Services	315
--------------------------	-----

Forms for Assignments	320
-----------------------	-----

## **APPENDICES**

A: Usage Tips	341
---------------	-----

B. Proofreader's Marks	347
------------------------	-----

## **GLOSSARY**

## **349**

## **INDEX**

## **359**

# INTRODUCTION

**D**o you remember that English teacher who always had you writing and rewriting essays? By now, you probably don't have to be convinced that good writing comes with practice.

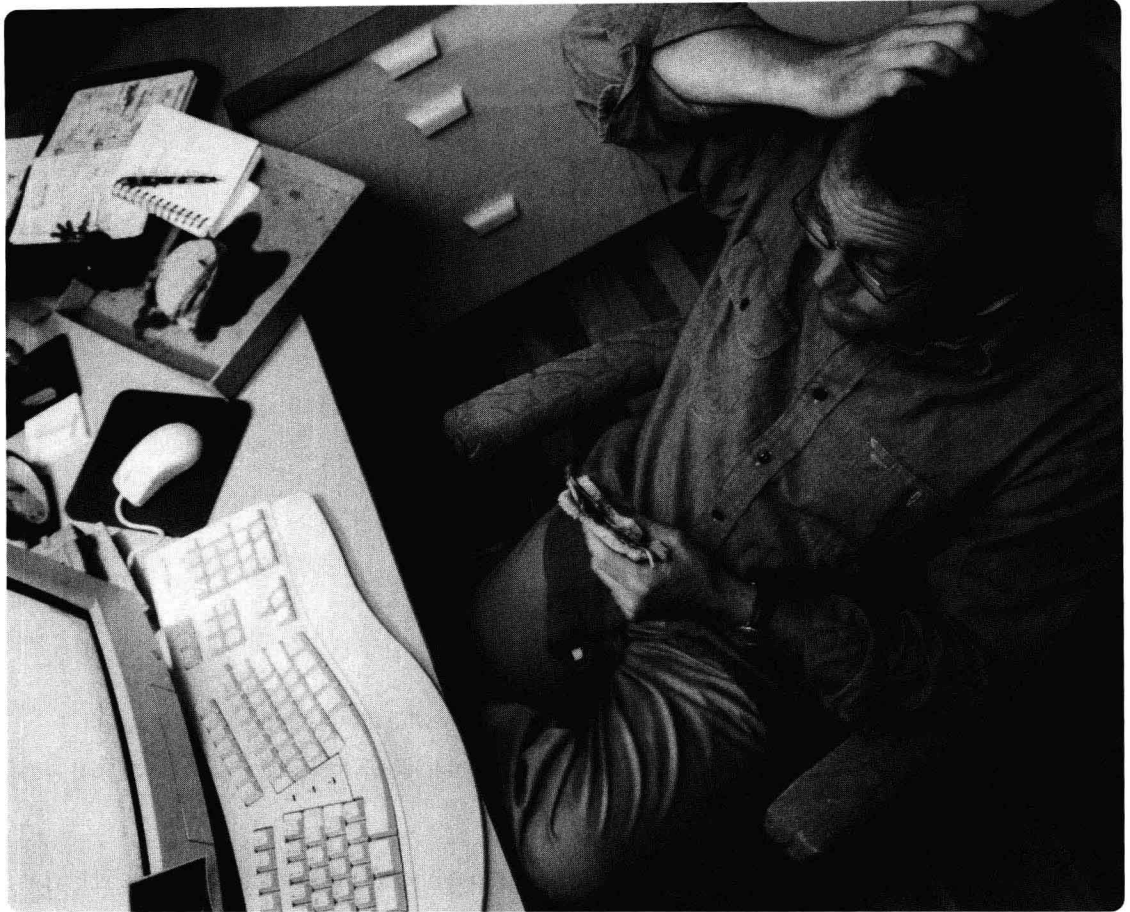
Further, your common sense tells you that a hastily constructed message is likely to be misunderstood. In technical fields, a misunderstanding can lead to lost business, and, in some cases, even physical danger.

So why do so many of us still find ourselves wringing our hands and staring at a blank computer screen when composing even the simplest memo? The answer is actually quite simple; we are so afraid of making mistakes, that we begin to panic. As the deadline grows closer, we might hurriedly hammer out the correspondence and hope for the best.

If the best doesn't happen, we might be tempted to say, "My reader just didn't understand what I was saying." We would be correct, but for what reasons? During a more reflective moment, we might look inward and think

*I've never been any good at writing.  
I can never get started.  
I never know what I want to say first.  
I'm afraid my writing won't sound professional.  
Writing makes me sick.*

As you may have already guessed, we call these feelings *writer's block*.



*When you have writer's block, you are trying to approach the project in an impossible way.*

## Writer's Block

When writer's block strikes, all concentration is lost, and writing becomes overwhelming.

When you have writer's block, you are trying to approach the project in an impossible way. Do you recognize your work style as one of the following impossible approaches?

### **Brick-and-Mortar Approach**

The first sentence must be perfect before you attempt a second.

### **Roll-the-Dice Approach**

You're a "first-and-only-draft" writer, a risk-taker.



With the brick-and-mortar approach, you don't have to look far for an excuse to stop writing. Your work area needs straightening, there is dust on the wall clock, or your coffee cup is empty. It's easy to get frustrated after staring at the same sentence for twenty minutes. You don't like what you've written, but you don't know how to fix it. Good ideas are getting lost, and your head is spinning.

With the roll-the-dice approach, you just want to get it over with, as fast as you can. The potential consequences of an ineffective document are less of a concern than prolonging the fear. You may tell yourself, "Writing just isn't my thing."

Both of these approaches are impossible for the same reason—the writer is afraid of writing poorly.

## How can writer's block be defeated?

### Don't be afraid to write poorly!

Why would anyone want to write poorly? How can this be the best way to overcome writer's block? Experienced writers know the answer. They know that well-written material evolves from first-draft material, which is rarely perfect.

First drafts are just that, first drafts. Expect them to have flaws. No one just fires off one perfect sentence after another, no matter how good the writer is. You will be able to think better when you write if you're not overwhelmed with thoughts of failure.

Have you ever awakened in the middle of the night with a solution to a problem that had plagued your mind all day? Good ideas come when the fear level is low and the subconscious takes over the self-conscious. Unfortunately, we can't always wait until bedtime to write, but we can condition ourselves to write with less fear.

Writing can be difficult, I'll admit. There is no magic formula to replace hard work. But so much of the anxiety we experience is unnecessary. The key to relaxing is gaining confidence in a solid writing approach. Although no two writers create in quite the same way, those who achieve the best results apply approaches very similar to the one you are about to learn. In the chapters ahead, we will study writing as a planned process. We will practice together. We will take the beginning steps toward success in writing professional technical documents.

Let us begin with some easy warm-up techniques to put us in the right frame of mind to write.

## Remember,

### *No Fear!*

## Limbering Up Your Writing Muscles

Some days, you may feel that you don't have the time to warm up before writing or that you don't need an exercise to get started. But you will most likely save time by investing ten to fifteen minutes warming up those writing muscles.

### Free Writing

As its name suggests, free writing is writing down anything and everything that comes to mind. You pay no attention to what leaves your pen; you simply move forward, recording your thoughts. The writing is often gibberish, words and phrases with no apparent connection. At some point, you may begin to focus on a topic and associations will follow. What's important is to write nonstop for at least ten minutes.

### Channeled Free Writing

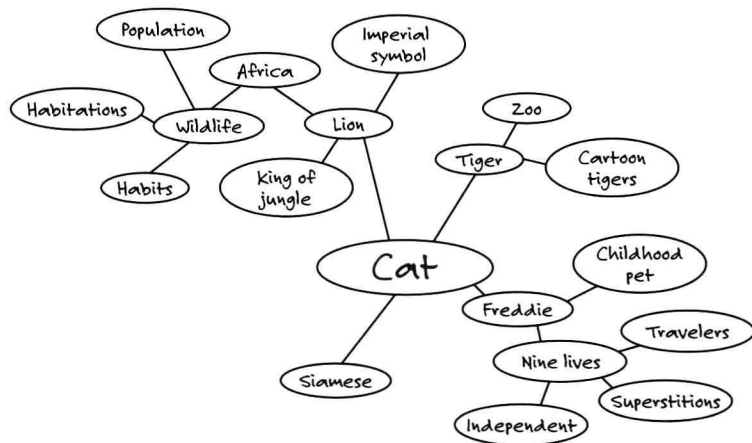
In channeled free writing, you write one word in the center of the page and circle it. Next, you think of words you associate with the central word and connect these words to it. You circle the words and continue branching off with new words from your secondary words.

This exercise is also a great problem-solving tool that can be used to explore relationships among any topics you wish.

Let's look at Figure I-1, which diagrams the word *cat*. Notice the relationships shown to the words connected to the word *cat*, then the surrounding words connected with those words. You can see why channeled free writing is sometimes called *cluster diagramming*.

**Figure I-1**

Cluster diagram showing free writing about the word *cat*.



## Review

## 1

## Warm-Up Exercises

**Complete the following warm-up exercises.**

1. Free writing exercise. Practice free writing for ten to fifteen minutes. Use another sheet, if necessary. Write down anything that comes to mind.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

2. Channeled free writing exercise. Create a cluster diagram. Begin with the name of your career field, then identify associations, and branch out from there.

## Review

## 1

**Complete the following warm-up exercises.**

3. “Talking on paper” exercise. After completing Exercise 2, choose a partner with whom to “converse” about your career choice. Write to each other what you would normally say aloud. What you will actually be doing is having a conversation on paper. Use another sheet, if necessary. Try talking on paper with your partner for about fifteen minutes.

[illegible]



# PART 1

## THE WRITING PROCESS

### CHAPTERS

- 1** Planning and Writing Messages
- 2** Choosing the Best Strategies
- 3** Revising Your Messages
- 4** Editing Your Messages
- 5** Communicating Bad News
- 6** Developing Your Style and Writing an Application Letter

