Planning and Revision Checklist  inside front cover

How to Use Reporting Technical Information  preceding front matter

Preface  xvii

1  An Overview of Technical Writing  3
   The Matter of Definition  4
   Writing at Work versus Writing at School  4
      Eight Basic Differences  5
   Writing and Communicating at Work  8
   The Foundations of Effective Technical Writing  10
   The Qualities of Good Technical Writing  10
   Exercises  11

PART ONE Foundations  13

2  Composing  15
   The Basic Parts of the Composing Process  16
      1. Analyzing the Writing Situation: Audience and Purpose  16
      2. Choosing/Discovering Content  17
      3. Arranging Content  17
      4. Drafting and Revising  18
      5. Revision  20
      6. Document Design  21
      7. Editing  21
   Using the Composing Process in a Workplace Environment  25
   Understanding the Composing Process: Why Bother?  26
   Exercises  27
3 Writing for Your Readers 29

Goals of Communication 30

The Planning Process 30

  Determining Your Readers 31
  Asking Questions to Analyze Your Readers 33
  Determining Your Purpose 44
  Understanding Your Role as a Writer 44
  Planning the Content 47
  Anticipating the Context in Which Your Writing Will Be Received 47

Thinking about Your Readers: A Summary of Considerations 49

Exercises 51

4 Achieving a Readable Style 53

The Paragraph 54

Basic Principles of Effective Style 58

  Determine Readers' Knowledge of the Subject 58
  Determine Whether a Particular Style Will Be Expected 59
  Anticipate Readers' Comprehension Level in a Given Context 60
  Know Your Relationship to the Readers and How You Want to Sound 60
  Adjust the Style to the Reader, the Purpose, and the Context 62
  Select Your Level of Language; Adjust the Density of Information 62

The Sentence 63

  Watch Sentence Length 63
  Keep Subjects and Verbs Close Together 63
  Omit Verbiage; Use Concrete Verbs 64
  Write “Clean” Prose 67
  Avoid Ponderous Language 67
  Avoid Excessive Use of Is/Are Verb Forms 68
  Use Active Voice for Clarity 69
  Define When Necessary 70
  Avoid Impersonal Language 72

Exercises 77

5 Writing Ethically 85

Ethical Perspectives 86

Your Professional Obligations 86

Codes of Conduct 87

Recognizing Unethical Communication 90

  Plagiarism and Theft of Intellectual Property 90
6 Writing for International Readers 103

Establishing a Perspective on International Communication 104

Understanding Readers from Various Cultures 105

Individualism versus Collectivism: Valuing Either Individuals or Groups 105

Separation of Business and Private Relationships 108

Power Distance between Social Ranks 109

Universal or Relative View of Truth 110

Whether the Entire Message Is Contained in the Text 111

Whether Uncertainty Is to Be Avoided or Accepted 112

The Power and Value of Time 112

Masculine versus Feminine 113

Considering Culture in the Planning Process 113

Example International Documents 116

Writing Business Communications to Readers in Other Cultures 120

Culture and Graphics 124

Format Strategies in Other Cultures 126

A Final Word 128

Guides to Doing Business in Cultures around the World 128

Exercises 132

PART TWO Techniques 135

7 Gathering, Evaluating, and Documenting Information 137

Asking Productive Questions 138

Looking for Answers 139

Interviews 139

Newsgroups 141

World Wide Web 142

Libraries 143
Contents

Evaluating Answers 148
Citing Sources 152
Exercises 153

8 Designing and Formatting Documents 155

Understanding the Basics of Document Design 156

Know What Decisions Are Yours to Make 156
Choose a Design That Fits Your Situation 157
Plan the Design from the Beginning 159
Reveal the Design to the Readers 162
Keep the Design Consistent 162

Designing Effective Pages and Screens 165

Use Blank Space to Frame and Group Information 166
Space the Lines of Text for Easy Reading 169
Set the Line Length for Easy Reading 170
Use a Ragged Right Margin 170

Choosing Readable Type 171

Choose a Legible Type Size 172
Choose a Font That Suits Your Document 173
Use Special Typefaces Sparingly 174
Use Highlighting Effectively 175
Use a Mixture of Cases, Not All Capitals 178
Use Color Cautiously and Consistently 178

Helping Readers Locate Information 179

Write Descriptive Headings 179
Design Distinctive Headings 182
Use Page Numbers and Headers or Footers 185

Designing Web Sites 187

Creating the Site 188
Designing the Pages of the Site 189
Maintaining the Site 190

Testing Your Design 191

Planning the Usability Test 192
Conducting the Test 193
Interpreting and Revising 193

Exercises 196

9 Creating and Managing Text 203

Collecting and Grouping Information 204
Planning Content Development 205
Contents

Reports with Standard Arrangement Patterns 205
Reports Designed for Specific Reader Needs 209
Persuasive Arrangement and Development 209

Strategies for Developing Content 210
Organization and Content Development 218
Other Types of Development 223
Exercises 227

10 Developing the Main Elements of Reports 231

Prefatory Elements 232
Letter of Transmittal 233
Title Page 233
Submission Page 238
Table of Contents 238
List of Illustrations 244
Glossary and List of Symbols 244

Abstracts and Summaries 244
Informative Abstract 247
Descriptive Abstract 248
Summary 249

Discussion or Body of the Report 255
Parts of the Discussion 256
Strategy for Presenting the Discussion 257
Conclusion 258
Recommendations 258
Appendixes 258

Online Reports 258
Exercises 265

11 Creating Tables and Figures 267
Choosing Illustrations 268
Consider Your Purpose 268
Consider Your Audience 268
Consider Your Audience Again 270
Consider Your Purpose Again 271

Creating Illustrations 278
Designing Tables 283
Designing Bar and Column Graphs 283
Designing Circle Graphs (Pie Charts) 290
## PART THREE  Applications 313

### 12  Planning Correspondence and E-Mail 315
- Determining Your Purpose 316
- Analyzing the Audience 322
- Composing Letters, Memos, and E-Mail 323
- Finding the Appropriate Style 326
  - *Direct versus Indirect Style* 326
  - *Conversational Style* 329
- Special Considerations for E-Mail 330
- Special Considerations for International Correspondence 332
- Keeping Copies of Correspondence 335
- Exercises 336

### 13  Creating Reports for Any Occasion 341
- The Variable Nature of Reports 342
- Liability and Report Writing 343
- General Report Requirements 344
- Determining Report Structure 350
- Determining Internal Report Development 355
- Importance of the Introduction and Summary 355
- The Online Report 369
- The Slide/Visual Presentation Report 371
- Exercises 373

### 14  Developing Analytical Reports: Recommendation Reports and Feasibility Studies 375
- Analytical Reports 377
- Recommendation Reports 384
Feasibility Studies 387
  Purpose 389
Environmental Impact Statements 395
Exercises 397

15 Developing Empirical Research Reports 401
Major Sections of Empirical Research Reports 403
  Abstract 403
  Introduction and Literature Review 405
  Summary 405
  Materials and Methods 407
  Results 408
  Conclusion 410
  Acknowledgments and References 410
Other Examples for Analysis and Comparison 411
  Example 1 411
  Example 2 413
  Example 3 418
Exercises 425

16 Writing Proposals and Progress Reports 427
The Relationship between Proposals and Progress Reports 428
Proposals 429
  The Context of Proposal Development 434
  Effective Argument in Proposal Development 435
  Standard Sections of Proposals 436
Progress Reports 447
  Structure by Work Performed 447
  Structure by Chronological Order 454
  Structure by Main Project Goals 455
Physical Appearance of Proposals and Progress Reports 456
Style and Tone of Proposals and Progress Reports 456
Other Forms of Proposals and Progress Reports 459
Exercises 471

17 Formulating Instructions, Procedures, and Policies 475
Planning Instructions and Procedures 476
Structure and Organization 478
  Introduction 478
Theory Governing the Procedure or Instruction 480

Warnings, Cautions, Hazards, and Notes Regarding Safety or Quality 480

Conditions under Which the Task Is to Be Performed 482

Steps in Performing the Task 485

Name of Each Step 486

Procedures 488

Format Considerations for Instructions and Procedures 488

Policies 497

Procedures and Policy Manuals 498

Exercises 501

18 Writing Collaboratively 503

Issues in Collaboration 504

Value of Collaboration 504

Techniques for Developing Collaborative Documents 505

The On-site Collaborative Group 505

The Distributed Collaborative Work Group 506

The Lead Author Work Group 507

Making Collaborative Projects Work 507

Collaborative Projects in Action 508

Exercises 509

19 Preparing Oral Reports: The Basics 511

Understanding the Speaking/Writing Relationship 512

Analyzing the Audience 513

Analyzing the Context 514

Determining the Goal of Your Presentation 515

Choosing and Shaping Content 516

Deciding How to Arrange and Organize the Content 516

Designing Each Segment: Guidelines 517

Choose an Interesting Title 517

Develop Your Presentation about Three Main Divisions 517

Plan the Introduction Carefully 518

Design the Body to Help People Comprehend Your Ideas 518

Design the Conclusion to Reinforce Your Main Ideas 519
Choosing an Appropriate Speaking Style 519
Speaking to Multicultural Audiences 520
Using Techniques to Enhance Audience Comprehension 520
Planning Visuals to Enhance Your Purpose and Your Meaning 526
Designing and Presenting the Written Paper 528
Structuring the Written Speech 532
Writing the Speech 532
Practicing the Presentation 533
Speaking Effectively: Practice, Practice, Practice 535
Exercises 538

20 Understanding the Strategies and Communications of the Job Search 541
Preparation 542
Self-Assessment 542
Information Gathering 545
Networking 547
The Correspondence of the Job Search 548
Letter of Application 548
The Résumé 552
Follow-up Letters 561
Interviewing 563
The Interview 564
Negotiation 566
Before and after the Interview 567
Exercises 570

Appendix A. Handbook 573
Index 605
About the Authors 615
Marking Symbols 616
Proofreader's Symbols inside back cover