

Technical Report Writing Today

Daniel G. Riordan
Emeritus Professor of English
University of Wisconsin-Stout

WADSWORTH
1% CENGAGE Learning*

Australia • Brazil • Japan • Korea • Mexico • Singapore • Spain • United Kingdom • United States

Contents

Preface

xxii

SECTION 1	TECHNICAL COMMUNICATION BASICS	1
Chapter 1	Definition of Technical Communication	2
	Chapter 1 in a Nutshell	2
	A General Definition of Technical Communication	3
	What Is Technical Communication?	3
	What Counts as Technical Communication?	3
	Who Creates Technical Communication?	4
	How Important Is Technical Communication?	5
	Major Traits of Technical Communication	5
	Technical Communication Is Audience Centered	5
	I Internet and Interactivity	10
	Technical Communication Is Designed	12
	Technical Communication Is Responsible	14
	Technical Communication Is Global	18
	I Globalization and Cultural Awareness	20
	<i>Exercises • 26 Web Exercise • 31 Works Cited • 31</i>	
Chapter 2	Profiling Audiences	35
	Chapter 2 in a Nutshell	35
	An Example of Technical Writing	36
	Who Is the Audience?	38
	What Are the Audience's Demographic Characteristics?	38
	What Is the Audience's Role?	39
	I Personas Digging Deeper	40
	How Does the Reader Feel About the Subject?	41
	How Does the Reader Feel About the Sender?	42
	What Form Does the Reader Expect?	43
	What Is the Audience's Task?	44

	What Is the Audience's Knowledge Level?	44
	Adapting to Your Audience's Knowledge Level	44
	Finding Out What Your Audience Knows	45
	What Factors Influence the Situation?	46
	What Consequences Will Occur from This Idea?	46
	What Is the History of This Idea?	47
	How Much Power Does the Reader Have?	47
	How Formal Is the Situation?	47
	Is There More Than One Audience?	47
	Creating Audience Profiles	48
	Questions for an Audience Profile	49
	Information-Gathering Strategies	49
	<i>Exercises • 50 Worksheet for Defining Your Audience • 52</i>	
	<i>Writing Assignments • 52 Web Exercise • 54 Works Cited • 54</i>	
Chapter 3	The Technical Communication Process	56
	Chapter 3 in a Nutshell	56
	An Overview of the Process	57
	Planning Your Document	57
	Situate Yourself	59
	Create an Audience Profile	61
	Create a Document Plan	61
	Design Your Information	62
	Design Your Template	63
	Create a Production Schedule	64
	<i>Worksheet for Planning—Short Version • 65 Worksheet for</i>	
	<i>Planning—Long Version • 66</i>	
	Drafting and Revising Your Document	67
	Research to Discover Information	68
	Design Your Information to Help Your Reader	68
	Use Context-Setting Introductions	69
	Place Important Material at the Top	70
	Use Preview Lists	70
	Use Repetition and Sequencing	71
	Use Coordinate Structure	71
	Testing	72
	<i>Worksheet for Drafting • 73</i>	

	Editing or Finishing	74
	Producing the Document	76
	<i>Worksheet for Editing • 77 Exercises • 77 Writing Assignments • 81</i>	
	<i>Web Exercise • 82 Works Cited • S3</i>	
	I Focus on Groups	85
Chapter 4	Technical Communication Style	88
	Chapter 4 in a Nutshell	88
	Sentence Strategies	89
	Write in the Active Voice	89
	Use Parallelism	91
	Use <i>There Are</i> Sparingly	91
	Avoid Nominalizations	92
	Put the Main Idea First	92
	Write Sentences of 12 to 25 Words	92
	Use <i>You</i> Correctly	93
	Avoid Sexist Language	93
	<i>Exercises • 94</i>	
	Eliminate Common Clarity Errors	96
	<i>Exercises • 97</i>	
	Write Clear Paragraphs for Your Reader	97
	Put the Topic Sentence First	97
	Arrange Sentences by Level	98
	I Globalization and Style	99
	Repeat Terms in a New/Old Sequence	101
	Use the Dominant Position	101
	Maintain Class or Membership Relationships	102
	Provide Transitions	102
	Choose a Tone for the Reader	102
	I Focus on Ethical Style	103
	<i>Worksheet for Style • 106 Exercises • 107 Writing Assignments</i>	
	<i>• 112 Web Exercise • 112 Works Cited • 113</i>	
	I Focus on Bias in Language	114

Chapter 5	Researching	116
	Chapter 5 in a Nutshell	116
	The Purpose of Research	117
	Questioning—The Basic Skill of Researching	117
	How to Discover Questions	117
	How to Formulate Questions	119
	Collecting Information from People	119
	Interviewing	119
	Surveying	121
	Observing and Testing	121
	Collecting Published Information	123
	Develop a Search Strategy	123
	Search Helpful Sources	125
	I Focus on Ethical Citation	130
	Record Your Findings	130
	<i>Worksheet for Research Planning • 134 Exercises • 134 Writing Assignments • 136 Web Exercise • 137 Works Cited • 138</i>	
	I Focus on Google Scholar	139
Chapter 6	Designing Pages	142
	Chapter 6 in a Nutshell	142
	Using Visual Features to Reveal Content	143
	White Space and Chunks	143
	Report Bullets	144
	Head Systems	145
	Headers or Footers, Pagination, and Rules	147
	Using Text Features to Convey Meaning	149
	Highlighters	149
	I Focus on Ethical Design	150
	Font, Font Size, Leading, Columns and Line Length, and Justification	151
	Combining Features to Orchestrate the Text for Readers	154
	Developing a Style Sheet and Template	159
	<i>Worksheet for a Style Sheet • 160 Exercises • 163 Writing Assignments • 169 Web Exercises • 170 Works Cited • 170</i>	
	I Focus on Color	172

Chapter 7	Using Visual Aids	179
	Chapter 7 in a Nutshell	179
	Visual Thinking	180
	The Uses of Visual Aids	180
	Creating and Discussing Visual Aids	181
	How to Create Visual Aids	181
	How to Discuss Visual Aids	182
	How to Reference Visual Aids	183
	Guidelines for Effective Visual Aids	183
	Using Tables	184
	When to Use a Table	184
	Parts and Guidelines	184
	Using Line Graphs	186
	When to Use a Line Graph	186
	Parts and Guidelines	187
	Using Bar Graphs	190
	Parts and Guidelines	191
	When to Use a Bar Graph	192
	Using Pie Charts	193
	When to Use a Pie Chart	193
	Parts and Guidelines	193
	I Ethics and Visual Effects	195
	I Globalization and Visual Aids	197
	Using Charts	198
	Troubleshooting Tables	198
	Flow Charts	199
	Gantt Charts	200
	Layouts	200
	Using Illustrations	201
	Guidelines	201
	Photographs	201
	Drawings	201
	<i>Worksheet for Visual Aids • 203</i>	
	I Create Helpful Visuals	204
	<i>Exercises • 205 Writing Assignments • 208 Web Exercise • 209</i>	
	<i>Works Cited • 209</i>	

Chapter 8	Describing	211
	Chapter 8 in a Nutshell	211
	Planning the Mechanism Description	212
	Consider the Audience	212
	Select an Organizational Principle	212
	Choose Visual Aids	213
	Follow the Usual Form for Descriptions	214
	Writing the Mechanism Description	214
	Introduction	214
	Body: Description of Mechanism	215
	Other Patterns for Mechanism Descriptions	216
	Planning the Process Description	218
	Consider the Audience	218
	Select an Organizational Principle	219
	Choose Visual Aids	219
	Follow the Usual Form for Writing Descriptions	219
	Writing the Process Description	220
	Introduction	220
	Body: Description of the Operation	221
	Conclusion	223
	Planning the Description of a Human System	223
	Writing the Description of a Human System	223
	Introduction	223
	Body: Sequence of a Person's Activities	225
	Conclusion (Optional)	226
	<i>Worksheet for Planning a Description • 226 Worksheet for Evaluating a Description • 227 Examples • 229 Exercises • 238 Writing Assignments • 242 Web Exercises • 243 Works Cited • 244</i>	
SECTION 2	TECHNICAL COMMUNICATION APPLICATIONS	245
Chapter 9	Sets of Instructions	246
	Chapter 9 in a Nutshell	246
	Planning the Set of Instructions	247
	Determine Your Goal	247

	Consider the Audience	247
	I Globalization and Instructions	248
	Analyze the Sequence	250
	Choose Visual Aids	252
	Follow the Usual Form for Instructions	253
	Writing the Set of Instructions	253
	Write an Effective Introduction	255
	Write an Effective Body	255
	Field-Testing Instructions	259
	<i>Worksheet for Preparing Instructions • 260 Worksheet for Evaluating Instructions • 261 Examples • 262 Exercises • 267 Writing Assignments • 270 Web Exercises • 270 Works Cited • 270</i>	
Chapter 10	Informal Reports and E-mail	272
	Chapter 10 in a Nutshell	272
	Basic Strategies for Informal Reports	273
	Introduction	273
	Develop a Consistent Visual Presentation	275
	Types of Informal Reports	276
	IMRD Reports	277
	Brief Analytical Reports	279
	Progress Reports	282
	Summaries and Abstracts	284
	Background or Conceptual Reports	285
	Outline Reports	287
	E-Mail	288
	I Ethics and E-Mail	292
	<i>Worksheet for Planning a Project • 293 Worksheet for IMRD Reports • 293 Worksheet for Informal Reports • 294 Worksheet for Evaluating IMRDs • 295 Examples • 295 Exercises • 305 Writing Assignments • 307 Web Exercise • 309 Works Cited • 309</i>	
Chapter 11	Developing Websites/Using Social Media	311
	Chapter 11 in a Nutshell	311
	Basic Web Concepts	312
	Hierarchy	312

Web Structure	313
Reader Freedom	314
Guidelines for Working with Web Structure	319
Planning a Website or Web Document	320
Decide Your Goal	320
Analyze Your Audience	320
Evaluate the Questions the Audience Will Ask	321
Determine Genre Guidelines	321
Evaluate and Select a Delivery Technology	321
Plan for Maintenance	322
Drafting for Screens	322
Online Reading Habits	322
Page Layout, High- and Low-Fidelity	
Wireframes, and Mock-ups	323
Organizational Schemes and Navigation	325
Navigation	326
Document Design Decisions	327
Testing	328
Audience Effectiveness	328
Consistency	329
Navigation	329
I Ethics and Websites	330
The Electronic Environment	330
Clarity	331
<i>Worksheet for Planning a Website or Document • 332</i>	
<i>Worksheet for Evaluating a Website • 332 Examples • 334</i>	
I Globalization/Localization and Websites	339
I Social Media and Technical Writing	340
<i>Exercises • 349 Writing Assignment • 350 Web Exercise • 351</i>	
<i>Social Media Exercises • 351 Works Cited and Consulted • 352</i>	
I Focus on HTML	354
Chapter 12 Formal Reports	356
Chapter 12 in a Nutshell	356
The Elements of a Formal Report	357

	Front Material	358
	Transmittal Correspondence	358
	Title Page	358
	Table of Contents	359
	List of Illustrations	360
	Summary or Abstract	361
	Introduction	362
	Conclusions and Recommendations/Rationale	365
	The Body of the Formal Report	367
	Paginating	367
	Indicating Chapter Divisions	367
	End Material	367
	Glossary and List of Symbols	367
	References	368
	Appendix	368
	<i>Worksheet for Preparing a Formal Report • 368</i>	
	<i>Examples • 370 Exercises • 379 Writing Assignments • 381</i>	
	<i>Web Exercise • 381 Works Cited • 381</i>	
Chapter 13	Recommendation and Feasibility Reports	382
	Chapter 13 in a Nutshell	382
	Planning the Recommendation Report	383
	Consider the Audience	383
	Choose Criteria	383
	Use Visual Aids	385
	Select a Format and an Organizational Principle	386
	Drafting the Recommendation Report	387
	Introduction	387
	Conclusions	389
	Recommendations/Rationale Section	389
	Discussion Section	390
	Planning the Feasibility Report	390
	Consider the Audience	391
	Determine the Criteria	391
	Determine the Standards	391
	Structure by Criteria	391
	Writing the Feasibility Report	391
	Choose a Format	392
	Write the Introduction and Body	392

	<i>Worksheet for Preparing a Recommendation/Feasibility Report • 393</i>	
	<i>Worksheet for Evaluating Your Report • 394</i>	
	<i>Worksheet for Evaluating a Peer's Report • 395</i>	
	<i>Examples • 396</i>	
	<i>Exercises • 404</i>	
	<i>Writing Assignments • 408</i>	
	<i>Web Exercises • 409</i>	
	<i>Works Cited • 410</i>	
Chapter 14	Proposals	411
	Chapter 14 in a Nutshell	411
	Grant Proposals for Non-Profit Organizations	412
	Background of Non-Profits	412
	How Foundations Announce That They Support Non-Profits	413
	Planning the Proposal	414
	Read the Foundation's Guidelines Carefully	414
	Collect All the Relevant Data	415
	Writing the Non-Profit Grant Proposal	415
	The Internal Proposal	424
	Planning the Internal Proposal	424
	Consider the Audience	424
	I Ethics and Proposals	425
	Use Visual Aids	425
	Organize the Proposal	426
	Design the Proposal	430
	Writing the Internal Proposal	431
	Use the Introduction to Orient the Reader	431
	Use the Discussion to Convince Your Audience	432
	<i>Worksheet for Preparing a Proposal • 432</i>	
	<i>Worksheet for Evaluating a Proposal • 434</i>	
	<i>Examples • 435</i>	
	<i>Exercises • 442</i>	
	<i>Writing Assignments • 445</i>	
	<i>Web Exercise • 445</i>	
	<i>Works Cited • 456</i>	
Chapter 15	User Manuals	447
	Chapter 15 in a Nutshell	447
	Planning the Manual	448
	Determine Your Purpose	448
	Consider the Audience	448
	Determine a Schedule	449
	Discover Sequences	449

Analyze the Steps	451
Analyze the Parts	451
Select Visual Aids	452
Format the Pages	453
Writing the Manual	456
Introduction	456
Arrange the Sections	456
Test the Manual	461
<i>Worksheet for Preparing a Manual • 464 Examples • 465</i>	
<i>Exercises • 480 Writing Assignments • 481 Web Exercise • 481</i>	
<i>Works Cited • 481</i>	

SECTION 3 PROFESSIONAL COMMUNICATION 483

Chapter 16 Presentations 484

Chapter 16 in a Nutshell 484

Planning the Presentation 485

 Plan for Your Audience 485

I Focus on Annoying PowerPoint Issues 486

 Plan for the Situation 486

 Plan Your Organizational Pattern 487

 Plan Your Presentation 487

Making an Effective Presentation 503

 Learn to "Dance" with Your Slides 503

 Develop the Introduction 504

 Navigate the Body 504

 Develop a Conclusion 505

 Rehearse Your Presentation 505

 Deliver Your Presentation 506

I Globalization and Oral Presentations 507

Worksheet for Preparing an Oral Presentation • 509 Worksheet for Evaluating an Oral Presentation • 510 Exercises • 510 Speaking Assignment • 512 Writing Assignment • 512 Web Exercises • 513 Works Cited • 513

Chapter 17	Job Application Materials	516
	Chapter 17 in a Nutshell	516
	The Basic Format of a Letter	517
	Block Format and Modified Block Format	517
	Elements of a Letter	517
	Internal Elements	517
	Analyzing the Situation	520
	Understand Your Goals	521
	Understand Your Audience	521
	Assess Your Field	521
	Assess Your Strengths	523
	Assess the Needs of Employers	523
	Planning the Resume	524
	Information to Include in a Resume	524
	Resume Organization	524
	Writing the Resume	527
	Planning a Letter of Application	530
	Analyze the Employer's Needs	530
	Match Your Capabilities to the Employer's Needs	530
	I Ethics and Resumes	531
	Writing a Letter of Application	531
	Apply in the Introduction	531
	Convince in the Body	532
	I Globalization and Job Applications	532
	Request an Interview	534
	Select a Format	534
	Interviewing	536
	Prepare Well	536
	Use Social Tact	536
	Perform Well	537
	Ask Questions	537
	Understand the Offer	537
	Writing Follow-Up Letters	538
	<i>Worksheet for Preparing a Resume • 538 Worksheet for Writing a Letter of Application • 539 Worksheet for Evaluating a Letter of Application • 539 Examples • 540 Exercises • 548 Writing Assignments • 552 Web Exercise • 553 Works Cited • 553</i>	
	I Focus on Electronic Resumes	555

Appendix A	Brief Handbook for Technical Writers	558
	Problems with Sentence Construction	558
	Identify and Eliminate Comma Splices	
	<i>Exercises • 560</i>	559
	Identify and Eliminate Run-On Sentences	
	<i>Exercises • 560</i>	560
	Identify and Eliminate Sentence Fragments	
	<i>Exercises • 563</i>	562
	Place Modifiers in the Correct Position	
	<i>Exercises • 564</i>	563
	Use Words Ending in <i>-ing</i> Properly	
	<i>Exercises • 564</i>	564
	Make the Subject and Verb Agree	565
	<i>Exercises • 566</i>	
	Use Pronouns Correctly	566
	I Controlling Pronouns	566
	Problems with Number	567
	Problems with Antecedents	568
	Problems with <i>This</i>	568
	<i>Exercises • 568</i>	
	Punctuation	569
	Apostrophes	569
	Brackets	570
	Colons	570
	Commas	571
	Dashes	572
	Parentheses	572
	A Note on Parentheses, Dashes, and Commas	573
	Ellipsis Points	573
	Hyphens	573
	Quotation Marks	575
	Semicolons	575
	Underlining (Italics)	576

	Abbreviations, Capitalization, and Numbers	576
	Abbreviations	576
	Capitalization	577
	Numbers	578
	<i>Works Cited</i> • 579	
Appendix B	Documenting Sources	580
	How In-text Citation Works	580
	APA Method	581
	MLA Method	581
	The "Extension" Problem	581
	The APA Method	582
	APA Citations	582
	APA References	583
	Article from an Online Periodical	586
	The MLA Method	588
	MLA Citations	589
	MLA Works Cited List	590
	<i>Examples</i> • 594 <i>Exercises</i> • 597	
	<i>Writing Assignment</i> • 600 <i>Works Cited</i> • 600	
	Index	601