**Instructor’s Resource Manual**

*for*

Johnson-Sheehan

**TECHNICAL COMMUNICATION TODAY**

***Sixth Edition***

**Richard Johnson-Sheehan**

*Purdue University*

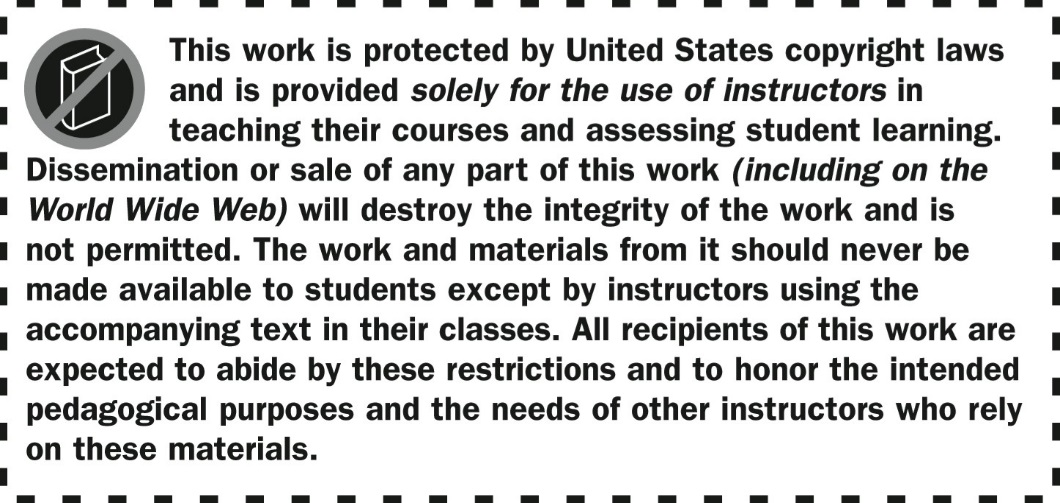
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***An Introduction to* Technical Communication Today**

Richard Johnson-Sheehan

Many instructors consider technical communication their favorite course to teach. Courses in technical communication are intellectually challenging, and the students are highly motivated to learn. Moreover, as our society continues moving further into the Information Age, the importance of technical communication is increasing. So, the relevancy of these courses is already significant and growing only more so.

In this Instructor’s Manual for *Technical Communication Today*, our aim is to provide you with a pedagogical foundation for teaching a basic course in technical communication, usually at the college sophomore, junior, or senior level. This Instructor’s Manual is divided into three areas:

**Part I: Pedagogical Rationale for the Course.** Professor Johnson-Sheehan will discuss the pedagogical principles on which *Technical Communication Today* was developed. He will define technical communication, discuss typical students in the course, and describe your role as the instructor.

**Part II: Model Syllabi, Policies, and Assignments**. These models will give you classroom- tested materials that you can adjust to your own needs. You will learn strategies for writing an effective assignment.

**Part III: Chapter-by-Chapter Teaching Strategies.** Teaching strategies are provided for each chapter, as well as discussions of the exercises and projects at the chapters’ ends. We have also included quizzes you can use to improve student retention.

If you are teaching technical communication for the first time, the aim of this Instructor’s

Manual is to give you a basic understanding of the course, while offering you some strategies for success. If you have taught the course before, this manual should highlight the features and strengths of *Technical Communication Today*, so you can better incorporate this text into your pedagogical approach.

**Pedagogical Rationale for the Course**

Today, it is still fashionable to assign yourself to a pedagogical camp. Some people want to be called *social constructionists.* Others want to be called *cognitivists* or *social cognitivists*. Some see themselves as following an “ideological” approach flavored with Marxism. To be honest, I have always resisted being a card-carrying member of any theoretical camp, preferring to keep my options open. However, if someone were to corner me, I would call myself a *pragmatist* in the American tradition of C.S. Pierce, William James, John Dewey, and Donald Davidson. Pragmatism puts an emphasis on learning through doing. Meanwhile, pragmatism assumes that issues of truth and knowledge are always evolving to suit the practical needs of our society.

In the spirit of pragmatism, you will find *Technical Communication Today* to be a highly practical book that teaches the process of communicating in today’s technical workplace. *Technical Communication Today* is built on three premises:

* Networked computers are the central nervous system of the scientific and technical workplace; therefore, any successful writing process will have networked computers (e.g. laptops, mobile phones, tablets, cloud storage, social networking, etc.) at its core.
* Innovation and entrepreneurship are essential to survival and success in today’s scientific and technical workplace; therefore students need to learn how to think like innovators and entrepreneurs whether they want to work for themselves or enterprise companies.
* The scientific and technical workplace is now inherently global and transcultural; therefore students need to learn how to communicate across cultures and work in diverse teams of people.

Consequently—here is the pragmatist in me—students need to learn technical communication by engaging in the activities of the technical workplace. By centralizing the networked computer, innovation, and transculturalism in the writing process, this book will help you prepare students for careers and lives in the Information Age. My aim is to show them how to survive in a complex scientific and technical workplace that is evolving quickly.

**Defining Technical Communication**

To begin, let us first unpack the definition of technical communication offered in Chapter 1 of

*Technical Communication Today*.

*Technical communication is a process of managing technical information in ways that allow people to take action.*

This definition is different from the typical ones you will find in other textbooks on this subject. In the past, technical communication has often stressed the “translation” or “transfer” of technical ideas. Quite differently, this definition stresses that the communication process itself is an important form of inquiry. Information is something to be creatively explored and managed, not translated or transferred.

The key words in this definition of technical communication offer some insights into how the course should be taught.

*Process*—Students need to learn that communication is a recursive activity. In other words, they should understand that preparing a document or presentation is not simply a matter of translating the ideas in their heads into words on paper. Rather, they need to see the process itself as a recursive activity of interpretation, discovery, reflection, invention, and expression. While communicating, the student will discover that the activities of researching, organizing ideas, drafting, developing a style, designing, editing, and delivering information are not simply means to an end. Rather, they are important steps in a process of inquiry that helps a person decide what he or she believes and what actions should be taken.

*Managing Technical Information*—In this electronic age, the challenge is to properly manage all the information available. Students need to learn how to sort through the glut of information—some of it contradictory and some of it misleading—to shape their ideas and arguments. Computers have heightened the need for “information management” (IM) approaches to workplace activities. Students should see that information is something that flows. Their role as communicators is to manage that flow.

*People*—More than ever, technical communication needs to put people at the center of concern. At one time, technical communication was more about machines than people. Of course, people were the users of these machines, but the emphasis of technical

communication was primarily on the workings of machines. Today, technical communication is much more about people working and living in a society permeated with technology. Increasingly, issues of ethics, politics, law, and transculturalism need to be addressed in the technical communication classroom.

*Take Action*—Ultimately, taking action with information is the aim of technical communication. Computers allow us to store vast amounts of information, so we are less concerned about retaining information in our own gray matter. Rather, we need to teach students how to use information to do things—take action. Meanwhile, the emphasis in technical documents and presentations has shifted toward giving people only what they need to achieve their goals. Students need to learn how to present information in ways that allow their readers to take action.

More recently, innovation and entrepreneurship have become dominant features of the scientific and technical workplace. As manufacturing has been automated or moved off shore, the North American workplace is now heavily dependent on innovation and entrepreneurship to compete globally. Students can no longer assume that others will come up with new products, services, and methods. They will need to do the innovation themselves!

Fortunately, in my experience, students in science, technology, engineering, and math (STEM) are very eager to be innovators and entrepreneurs. Indeed, one of the most exciting things about teaching technical communication at the college level is the ability to motivate students by tapping into their creativity. They get very excited when I tell them, “We have a problem to solve with a new product or service, and I have no idea what the end result looks like. That’s what I’m asking you to do.” Then, hand over the project to them. They love it.

**Getting to Know Your Students**

New teachers of technical communication often remark to me that they are pleasantly surprised by the intelligence and motivation of the students in the course. You will likely find that students who elect to take technical communication are more studious, mature, and pragmatic than the first-year students you taught in composition. Most technical communication students are working toward careers in technical fields. They want to be engineers, scientists, medical personnel, social workers, archeologists, psychologists, and architects, among other careers. They are typically more focused on their studies than first-year students, and they have a clearer sense about how technical communication will fit into their lives.

In my long experience teaching the course, I have noticed the following two important qualities in my students:

• *They learn best by doing*. Lecture and class discussion are necessary to a point; however, these practical-minded students typically learn best by working on a specific task or project. Therefore, I like to give them plenty of time to work in class on their projects, especially in groups.

• *They are self-motivated*. When I began teaching technical communication, I was pleasantly surprised to see how eager my students were toward doing the work. They were especially motivated by projects that allowed them to apply things they learned in their majors.

A well-crafted course in technical communication takes advantage of these two qualities. The course needs to be oriented around activity, because these students are pragmatic and practical.

Equally important, though, is to remember that they are creative and innovative. STEM students are often mistakenly assumed to be less creative than students in the arts or humanities. Nothing could be further from the truth. They are eager to be innovative. They want to explore new options and concepts. I strongly recommend setting up open-ended experiences that allow them to express their natural creativity through innovation and entrepreneurship.

**Developing Your Role as the Instructor**

The good news is that your students’ motivation and maturity will allow you to adopt a less central role in the classroom. I have always been skeptical about the idea of a completely student-centered classroom. We, as instructors, have an important role to play—and that role isn’t simply showing up each day. Rather, you should see yourself as a *mentor* to these eager students. They are *apprentices* who are here to learn from you. Your students are already being apprenticed as future scientists, engineers, and technicians in their majors.

My best advice, therefore, is to view yourself as a mentor who is helping these students gain the communication skills and formal abilities they need to succeed in the technical workplace. *Technical Communication Today* will help you foster this mentor-apprentice relationship with your students, because the book is built on *process* as a foundational concept. You will see that every chapter leads students step by step through the process of communication, just as a mentor would introduce an apprentice to the activities of his or her career.

One note: Some instructors new to this course are concerned that they are not “scientific” or “technical” enough, because they have never worked in a technical workplace or even taken courses in technical subjects. Of course, a background in technical subjects is helpful to teach this course, but it is not necessary. Your role, after all, is not to be an engineer, scientist, psychologist, architect, etc. Your role is to be an expert in communication. Let your students be the experts in their own fields. After all, none of us would ever be able to master all the technical knowledge of these students’ fields. Usually, after a semester of teaching technical communication, most new teachers’ concerns about not being technical enough are gone.

**Fostering Your Students’ Writing Processes**

When I began teaching writing in the late 1980s, the concept of a “process theory” was still rather strong. Many of the principles of process theory had been developed in the 1970s and enhanced in the 1980s. So, the idea that students should be taught to develop a writing process was rather entrenched and rarely questioned.

Today, in academic journals, there is talk about “post-process” theories of teaching writing, though I find myself questioning what it means to be “post-” (i.e., after-) process. Are we abandoning process theory? Or, are we beyond it in some way? As reflected in *Technical Communication Today*, I’m still a strong believer in process theory; however, I also recognize that the process theory developed in the 1970s is evermore outmoded in this computer-centered

age. After all, the 1970s notion of a writing process was developed around the pen and typewriter

as communication technologies. So, the stages of writing from that era (pre-writing, drafting, revision, and proofreading) were based on pen and typewriter as the media of communication.

The pedagogical approach you will find in this book is not post-process but rather “new process.” It recognizes that the media of communication have changed due to the advent of the computer; and, as a result, the process of communicating must change to suit these new media. Nevertheless, I believe students still learn best by paying attention to the process of communication. In this book, you will see that the process theory familiar to all of us has been modified to reflect how people invent, compose, revise, and design on their computers.

**Addressing Ethics, Transculturalism, and Mobile Culture**

Finally, before concluding this already-too-long section of the Instructor’s Manual, I will highlight three important features of the textbook: ethics, transculturalism, and visual-spatial thinking.

At every turn, you should try regularly to work issues of ethics and transculturalism into your lectures, discussions, classroom activities, and projects. These issues have always been important in technical communication, but networked computers have made them especially consequential. The Information Age has brought about many new ethical dilemmas and challenges that students

need to learn how to address and solve. Meanwhile, your students will be regularly communicating with people who are from different cultures. You need to prepare them for these new workplace realities.

*Technical Communication Today* should offer you many opportunities to incorporate these issues. Discussions of ethics and transculturalism are regular features in all chapters.

Meanwhile, the case studies at the end of each chapter—most of them involving ethical, entrepreneurial, or cultural issues—should give your students opportunities to explore their opinions and beliefs.

Issues involving mobile issues are also important but less tangible in *Technical Communication Today*. Personally, I believe we are just entering an age of mobility in the workplace. All forms of communication will need to be accessible on mobile devices, even if we expect something to be read on paper. To the best of my abilities, I have tried to create a book that always keeps that mobility in mind.

Therefore, in your lectures, discussions, activities, and projects, seek out ways to keep the importance of mobility in mind. Asking students to hand in something on paper is fine, but you should also ask them how that document could be scaled in a way that fits on a mobile phone or a tablet. How might that document be used on a website or stored on the cloud? How will their work be impacted by social networking or virtual reality?

**Looking Forward**

If this is your first time teaching technical communication, my guess is that you will enjoy teaching the subject more than you expected. I have known scholars trained in the most elevated forms of literature who have quickly fallen in love with this course and its students. Your students will be motivated and enthusiastic. The subject matter is tangible and worldly.

Moreover, this course will allow you to explore issues of ethics, politics, and society in ways that

often cannot be handled in courses that are not as focused on the workplace.

If you have taught the course before, you will be pleasantly surprised by the features of *Technical Communication Today*. My intent was to write a text that would introduce a new generation of technical communication textbooks based on pragmatism, innovation, and transculturalism. You will find that this book reflects your students’ thought processes and the kinds of communicating they will be asked to do in the technical workplace.

**Model Syllabi, Policies, and Assignments**

In this section, you will find model syllabi and policies for 16-week versions of the course. Strategies for writing assignments will also be discussed. You can use these materials for your own course, modifying them as needed to fit your local situation.

***Model Syllabi and Policies***

Writing an effective syllabus and a set of policies is essential to starting the class off right. The standard course in technical communication tends to be taught in two ways: a) sequencing or b)

assignment-by-assignment.

*Sequencing.* The core idea of sequencing is that students are asked to write and revise smaller documents that lead to the development of larger documents. Usually, the course is divided into sequences (four sequences in a 16-week course and three sequences in a 10-week

course). Each sequence becomes a stand-alone unit of two or three smaller assignments and one larger assignment.

*Assignment-by-Assignment.* An assignment-by-assignment course usually covers six to eight different genres during the course. Each assignment typically stands alone and is graded separately; however, some teachers like to “bundle” assignments that respond to each other. For example, a technical description might be bundled with a set of instructions for a similar product.

Either approach works fine for courses in technical communication. The sequencing approach, which I prefer myself, is helpful for teaching revision, because students use smaller texts, especially microgenres, to build up to writing larger texts. For example, the elevator pitch (a microgenre) is used to write a proposal, which is then use to write a formal report. Revised parts of the elevator pitch and the proposal will be used to write the formal report. The assignment-by-assignment approach is helpful for introducing students to a large variety of workplace documents.

**Sequencing Approach**

When using a sequencing approach, you should begin by dividing the semester into three or four sequences, usually 3–4 weeks apiece. Each of these sequences will typically include two smaller assignments that become part of a larger final assignment at the end of the sequence. Personally, I like to start each sequence with a microgenre (technical definition, elevator pitch, bio) that is followed by a medium-sized assignment (technical description, proposal, job application letter). The sequence culminates with a large assignment (specification, formal report, career portfolio).

When using the sequencing approach, the smaller documents in each sequence should be viewed as drafts and therefore receive light commentary. The large document at the end of each

sequence should be graded more thoroughly.

There are two advantages to the sequencing approach. First, students end up writing more documents. In one semester, they will actually write up to ten documents and give one presentation. Second, they will learn to incorporate revision more readily into their writing process. The potential disadvantage of the sequencing approach is the amount of grading required on the instructor’s part. However, if the instructor puts only light commentary on the smaller assignments, the grading load is much reduced.

**Sample 16-Week Syllabus (Sequencing Approach)**

|  |  |  |
| --- | --- | --- |
| Technical Communication Syllabus | | |
|  | **Topic** | **Readings and Assignments** |
| Week One | Introduction to Technical Communication  Starting Your Career | Reading: Chapters 1, 5  Assign: Resume |
| Week Two | Profiling Your Readers  Writing E-mails, Letters, and Memos | Reading: Chapter 2, 6  Due: Resume  Assign: Application Letter/Personal Statement |
| Week Three | Creating Your Career Portfolio  Organizing and Drafting | Reading: Chapter 15  Due: Application Letter/Personal Statement |
| Week Four | Working in Teams  Writing Descriptions and Specifications  Writing Technical Definitions (in-class assign.) | Reading: Chapters 3, 7  Due: Career Portfolio  Assign: Technical Description |
| Week Five | Managing Ethical Challenges  Thinking Like an Entrepreneur | Reading: Chapters 4, 12 |
| Week Six | Writing Instructions and Documentation  Using Plain and Persuasive Style | Reading: Chapter 8, 16  Due: Technical Description  Assign: Documentation |
| Week Seven | Designing Documents and Interfaces | Reading: Chapter 17 |
| Week Eight | Writing a White Paper  Researching in Technical Workplaces | Reading: Chapters 10, 14  Due: Documentation  Assign: White Paper |
| Week Nine | Writing a Progress Report (in-class assign.)  Creating and Using Graphics | Reading: Chapter 18  Due: White Paper  Assign: Progress Report |
| Week Ten | Writing a Formal Report | Reading: Chapter 11  Due: Progress Report  Assigned: Formal Report |
| Week Eleven | Revising and Editing for Usability | Reading: Chapter 19 |
| Week Twelve | Giving an Elevator Pitch  Writing a Proposal | Reading: Chapter 9  Due: Formal Report  Assign: Poster Presentation |
| Week Thirteen | Preparing and Giving Presentations  Persuading Others | Reading: Chapter 13, 20  Due: Poster Presentation  Assign: Elevator Pitch |
| Week Fourteen | Workshop |  |
| Week Fifteen | Elevator Pitch Presentations | Due: Elevator Pitch |
| Week Sixteen | Elevator Pitch Presentations |  |
| Finals Week |  | Due: Proposal |

**Assignment-by-Assignment Approach**

The assignment-by-assignment approach allows students to concentrate on one genre at a time. For example, in the syllabus included here, the students are asked to complete each assignment separately and move on to the next assignment. First, they complete the technical description; then, they complete a set of instructions; and so on. Each assignment is thoroughly graded as a final assignment (unlike the sequencing approach in which smaller assignments are treated as drafts and receive lighter commentary).

The advantage of the assignment-by-assignment approach is that every project is completed separately. Students master one genre before moving on to learn a new genre. The disadvantage to this approach is that students don’t have much time for revising their documents. They hand in each assignment and move on to the next assignment. As a result, they don’t have much time for revising, and each new assignment might require starting from scratch with a new topic. In contrast, sequencing assignments allows students to stay with a topic for a month, allowing to learn about issues in depth so they can write them in an informed way.

For me, the real problem with the assignment-by-assignment approach is the amount of grading and commentary involved. Since every assignment is separate, I feel the need to comment very thoroughly. I’m just returning one set of papers, and I already have another one waiting. Eventually, instead of trying to improve my students’ writing skills by encouraging revision, I am just trying to stay up with grading their projects.

**Sample 16-Week Syllabus (Assignment-by-Assignment Approach)**

|  |  |  |
| --- | --- | --- |
| Technical Communication Syllabus | | |
|  | **Topic** | **Readings and Assignments** |
| Week One | Introduction to Technical Communication  Writing Technical Definitions | Reading: Chapters 1, 7  Assign: Technical Description |
| Week Two | Profiling Your Readers  Writing Technical Descriptions | Reading: Chapter 2 |
| Week Three | Organizing and Drafting  Writing Instructions and Documentation | Reading: Chapters 15, 8  Due: Technical Description  Assign: Documentation |
| Week Four | Working in Teams  Designing Documents and Interfaces | Reading: Chapters 3, 17 |
| Week Five | Creating and Using Graphics  Writing Brief Reports | Reading: Chapter 18, 10  Due: Documentation  Assign: Brief Report (White Paper) |
| Week Six | Managing Ethical Challenges  Revising and Editing for Usability | Reading: Chapter 4, 19 |
| Week Seven | Writing Formal Reports  Researching in Technical Workplaces | Reading: Chapter 11, 14  Due: Brief Report (White Paper)  Assign: Formal Report |
| Week Eight | Persuading Others  Using Plain and Persuasive Style | Reading: Chapters 13, 16 |
| Week Nine | Writing a Proposal  Thinking Like an Entrepreneur | Reading: Chapter 9, 12  Due: Formal Report  Assign: Proposal |
| Week Ten | Preparing and Giving Presentations  Giving an Elevator Pitch | Reading: Chapter 20 |
| Week Eleven | Elevator Pitch Presentations |  |
| Week Twelve | Starting Your Career  Writing Resumes | Reading: Chapter 5  Due: Proposal  Assign: Career Portfolio |
| Week Thirteen | Writing Application Letters  Writing E-mails, Letters, and Memos | Reading: Chapter 6, 13 |
| Week Fourteen | Assembling a Career Portfolio  Writing for the Internet | Reading: Chapter 21 |
| Week Fifteen | Interviewing Strategies for Jobs |  |
| Week Sixteen | Career Unit Presentations |  |
| Finals Week |  | Due: Career Portfolio |

**Course Policies**

I have found that good course policies are essential to a course in which you are going to give students the freedom to be creative and innovative. You should view your course policies as a contract between you and the students. In the policies, you should be specific about your objectives for the course and your expectations. You should also be clear about issues involving plagiarism, absences, late work, special needs, and other issues. A solid welcome statement at the beginning of the policies sets a nice tone for the course and becomes the basis for introducing your class on the first day of the semester.

Professionalizing your policies also has an added benefit of demonstrating your abilities as a writer. Your policies are the first “workplace” document that your students will receive from you. Here’s a chance to illustrate what good technical writing looks like, while building their trust in you as an instructor for the course. You can, as they say, practice what you will be preaching in the course—the benefits of clarity, persuasiveness, organization, and design.

Technical Communication

Instructor: Office: Phone:

Office Hours:

E-Mail: Website:

Before we begin discussing the policies for this course, I first want to welcome you to Technical Communication. In this course, you will learn how to communicate effectively and efficiently in scientific and technical workplaces. You will also learn how to be an innovator and even an entrepreneur, whether you want to work for yourself or work for a company.

This semester, you will learn how to write a variety of workplace documents, including technical descriptions, letters, memos, formal reports, and proposals. You will also learn how to confidently present information in public. To sharpen your communication skills, you will learn how to interpret situations in the workplace; then, you will learn how to use techniques of reader-analysis, organization, style, and page layout to develop documents that address those workplace situations. Whenever possible, you will have the option to compose documents that suit your major and your future career.

My aim in this course is to prepare you to communicate clearly and persuasively in the workplace communities that you want to join after you graduate from college. There are no formulas for effective communication in the workplace, but some common genres (e.g., documentation, reports, proposals) and conventions (e.g., plain style, graphics, page design) are used across disciplines. In this class, you will learn how to identify these common genres and conventions, and then you will learn how to shape them to fit your needs as an engineer, manager, architect, scientist, nurse, medical doctor, etc.

We will also discuss real or realistic situations to prepare you to communicate in workplace situations. You will learn to interpret complex workplace situations and then use problem-solving strategies to develop documents that take action in those situations.

The rest of these policies will be devoted to the specific policies of this course. Please read through these policies carefully so you have a good idea of how this course will be conducted. If you have any questions, please ask.

**Course Texts and Materials**

The following book can be found at the bookstore:

Johnson-Sheehan, Richard. *Technical Communication Today,* 3e. New York: Pearson, 2018.

**Projects and Grading**

This course is divided into four sequences. Each sequence includes two smaller documents that will form the basis of a larger document. Your grade for the course will be determined according to the following percentages:

*Sequence One: Creating a Career Portfolio*

Résumé 5 percent Letter of Application 5 percent Career Portfolio 10 percent

*Sequence Two: Writing a Procedure*

Technical Definition 2 percent Technical Description 5 percent Documentation 13 percent

*Sequence Three: Writing a Formal Report*

White Paper 5 percent Progress Report 2 percent Formal Report 18 percent

*Sequence Four: Writing a Proposal*

Elevator Pitch 2 percent Poster Presentation 3 percent Proposal 20 percent

*Professionalism (Participation & Attendance)* 10 percent

Here’s the meaning behind the grades I put on your paper (you can use these comments as clues about how to work toward a higher grade):

A- to A You did what the assignment asked for at a high-quality level, and your work shows originality and creativity. Work in this range demonstrates all the qualities listed above for a B; but it also demonstrates that the you took extra steps to be original or creative in developing content, solving a problem, or developing a verbal style or visual design.

B- to B+ You did what the assignment asked of you at a high-quality level. Work in this range needs little revision, is complete in content, is organized well, and shows special attention to style and visual design.

C- to C+ You did what the assignment asked of you. Work in this range tends to need some revision, but it is complete in content and the organization is logical. The style and visual design are straightforward but unremarkable.

D- to D+ You did what the assignment asked for at a low-quality level. Work in this range tends to need significant revision. The content is often incomplete and the organization is hard to discern. Verbal style and visual design are often non- existent or chaotic.

F Failure means you did not do what was asked of you. If you gave an assignment an honest try and still received an ‘F,’ you may not be ready to succeed in this course.

**Plagiarism**

Plagiarism is defined as the improper use of someone else’s work. Improper use means

1) copying or paraphrasing from a published or unpublished work without citing it, 2) using the ideas of others without citing them, or 3) handing in work for a grade that you or one of your group members did not produce. Plagiarism is not as hard to detect as you may think. The Internet offers me an easy way to check whether your assignment was taken from another source.

Your best course of action is to do your own work and learn something in this course. Academic dishonesty hurts only you and your classmates. After all, if you cannot write in professional workplaces, you will not be able to hide behind your inflated GPA. Meanwhile, plagiarism cheats the students who are honestly completing the work.

If you plagiarize, you will fail the course in most cases. Then, your case will be referred to the

Dean of Students who will decide whether stronger measures are needed.

**Grammar**

In this class, we will talk about grammar issues when appropriate, but only briefly. You should have mastered English grammar by this point in your academic career. Grammar problems will annoy me as much as they will annoy your future employer. If I find grammatical mistakes in your work, they will negatively affect your grade. More importantly, though, they will hurt your career. After all, your boss might not recognize good style or organization, but he or she *will* know when you make grammar mistakes or spelling errors.

If you have issues with grammar, please consult the Grammar and Punctuation Handbook (Appendix A) in our textbook, *Technical Communication Today*. A few hours of dedicated study will often clear up grammar problems in your writing.

**Late Work**

If you must be late with an individual assignment, write me a memo or e-mail that tells me that you will be late and when I should expect the assignment. I don’t need excuses. However, the absence of the memo will cost you a half grade per day (i.e., A becomes an A-, B- a C+, etc.).

Keep in mind, though, that this class moves quickly. Late work tends to lead to more problems down the line. Therefore, you should turn in your work late only in the most exceptional cases.

**Attendance**

I will take attendance. I expect you to be here almost every class day, ready to work. If you miss more than four class periods, I will penalize you by lowering your course evaluation one grade

(A- becomes B-, etc.). After that, I will penalize you one grade for each day you miss. If you miss seven or more classes, I will fail you for the course.

If you need to miss class, please call or e-mail me so I can tell you what we will be doing in class on the day you are absent. If you e-mail or call, your absence will still count against the limit, but at least you will be aware of what the class did that day.

**Special Needs or Disabilities**

If you have a special need or disability that might require individual accommodations, please make me aware of it as soon as possible. I will need a letter from the Office of Adaptive Services in the Dean of Students Office that spells out what kinds of accommodations you need. That way, we can work together to develop a plan for helping you succeed in this class.

**Professionalism**

We will be discussing contentious subjects in this class, and the workload is heavy. I expect you to behave as a professional at all times. You should listen respectfully to the opinions of others. You should show your classmates and me the respect we deserve. If you are disruptive to the activities of this class or if you choose not to participate, I will ask you to leave. You will be marked absent for that day, which will count against your absences for the course. If you are asked to leave the class more than two times in the semester, I will either ask you to drop the course or I will fail you.

Professionalism also means participating in the course, and I have reserved 10 percent of the course grade for participation and attendance. In class, I will be keeping track of who is speaking up and contributing in class discussion. I will be paying attention to who is participating in team projects.

I know speaking up in class can be uncomfortable for some people. I know team projects can be difficult. However, in any career, you will be expected to participate in meetings and discussions. Non-participation will harm your career because your supervisors and colleagues will assume you are not doing your share of the work or have nothing to contribute. This class will offer you a safe place to practice speaking up, sharing your ideas, and working with teams of others.

***Assignments***

There are, of course, countless assignments that could be devised for a course in technical communication. Some assignments, though, are richer and more engaging than others. In this section, some strategies for writing effective assignments will be covered.

As you design an assignment, you should always remember that our goal as teachers is not simply to show students how to write a memo, a set of instructions, or a report. Rather, our aim is to teach students how to use communication to take action in the technical workplace. So, you should focus on creating projects that simulate the activities of the technical workplace.

**Genre, Conventions, Issues**

Assignments in a technical communication course usually concentrate on specific *genres*, such as instructions, reports, or proposals. An assignment, for example, might be designed to teach students how to write a formal report. The assignment sheet would describe a situation in which a formal report is needed to complete a task.

Assignments should also be written to teach students specific *conventions*, while exposing them to common workplace issues. For example, your formal report assignment might also be designed to teach students specific conventions, such as a) analyzing readers, b) writing in plain language, and c) using graphics to illustrate important points. You cannot, of course, cover all aspects of technical communication in each assignment. So, design each assignment to focus on specific conventions that students can master.

In each assignment, you should incorporate issues of workplace ethics and politics that *complicate* each project. For example, perhaps you are asking students to write a formal report on “alternative energy.” In your assignment sheet, mention that the president of the university (one of the report’s readers) has recently challenged the university community to reduce its dependence on fossil fuels. Mention the ethics and politics involved in researching and making recommendations about such an issue.

Figure 1 shows a helpful table for designing an assignment. On the left, you should identify the genre or genres that you would like the assignment to address. Then, in the middle column, list the three to five conventions that you would like students to master while completing the assignment. And finally, in the right-hand column, identify one or two issues that you would like students to confront as they are completing the project.

**Figure 1: Sketching the Elements of an Assignment**

|  |  |  |
| --- | --- | --- |
| **Genre** | **Skills** | **Issues** |
| Formal Report | ➣ Analyzing readers  ➣ Using plain language  ➣ Using graphics  ➣ Composing effective introductions and conclusions | ➣ Politics of alternative  energy on campus  ➣ Ethics involved in converting to alternative energy sources |

Typically, an assignment will address only one genre and a limited number of conventions. However, you may want to sequence a few assignments together, exposing students to a few different genres and a broader set of conventions.

**Setting Objectives and Specifying Outcomes**

Once you have identified the genres, conventions, and issues involved in the assignment, you should specify five to seven *objectives* that you want the project to reach. For each of these objectives, describe what kinds of outcomes you expect. Your outcomes should describe a “good” response to the assignment and an “excellent” response.

Again, a table can be helpful toward sorting out your thoughts. Figure 2 shows an Objectives and

Outcomes Chart for an assignment.

**Figure 2: Objectives and Outcomes Chart**

|  |  |  |
| --- | --- | --- |
| **Objectives** | **Good Outcome** | **Excellent Outcome** |
| Write a formal report. | Uses genre to organize ideas. | Uses genre as an invention tool. Innovates with the genre. |
| Analyze master reader. | Shows awareness of primary reader’s needs. | Actively anticipates needs of primary, secondary, and tertiary readers. Choices about organization, style, and design reflect needs of all readers. |
| Learn to use graphics in a large document. | Uses properly placed and labeled graphics to reinforce written text. | Graphics tell a clear story, provide a second path for understanding material, and create access points into  the text. |
| Learn to use plain language. | Sentences consistently make the “doer” the subject and put the action in the verb. Paragraphs use clear claims and support sentences. | Sentences are efficient and concise with maximum understanding. Paragraphs are woven together with effective subject alignment and given/new techniques. |
| Improve abilities to write strong introductions and conclusions. | Introduction and conclusion identify the subject, purpose, and main point. | Introduction captures readers’ attention, making them want to read. Conclusion drives main points home, persuading the readers to take action. |
| Learn to interpret politics and ethics involved in energy issues. | Shows awareness that change can be threatening to specific interest groups on campus. | Anticipates and addresses political and ethical complexities, allowing readers to see a clear path toward saying “yes” to the ideas in the report. |

Once you have identified your objectives and outcomes, you can develop an assignment that targets these goals. Of course, any given assignment is not going to address all technical communication conventions and issues. So, you should identify the abilities you want the students to master in each assignment. Some assignments will allow you to teach specific abilities than others. Then, focus on these abilities in class and in your assignment.

Some instructors share their Outcomes and Assessment Chart for each assignment with their students, using it as a rubric for evaluating the work. That way, the students have a clearer sense of the teacher’s objectives for the assignment and what qualities show excellence. Whether you choose to share your objectives and outcomes or not, they will provide you with a way to target specific abilities in a project, and they offer you a touchstone for assessing your students’ work.

**Writing the Assignment Sheet**

Occasionally, to simulate the workplace, technical communication instructors will give assignments verbally; however, in most cases, you should provide your students with a detailed assignment sheet that describes the project you want them to complete. That way, students can refer to the assignment sheet to check whether they are properly completing the project.

Minimally, your assignment sheet should identify or anticipate the four basic elements of the project’s rhetorical situation: subject, purpose, readers, and context of use. For example, an assignment sheet for a formal report on using alternative energy on campus would include some or all of the following elements:

*Subject:* Alternative energy on campus

*Purpose:* Your assignment is to conduct research and compose a formal report that discusses the feasibility of converting a feature of the campus to an alternative energy source.

*Readers:* Your formal report will be submitted to the president of the university and an alternative-energy task force of faculty, staff, and students.

*Context of Use:* The report will be presented at an “Energy Summit” in which plans will be made to begin converting parts of the campus to alternative energy sources.

Once you have defined the elements of the rhetorical situation, you should use them to help you compose a narrative that introduces the assignment to your students. Your narrative will specify the *who, what, where, when, why*, and *how* of the assignment.

In your narrative, you do not need to mention all the elements of the rhetorical situation. For example, perhaps you want the students to identify their own readers for the report. If so, don’t name specific readers in your assignment sheet. You should, however, anticipate the kinds of readers your students might choose. Then, in class, make sure you leave time to discuss how to choose the appropriate readers for the report.

Another helpful strategy for writing assignments is to incorporate local issues. Using current events where possible, give your students the opportunity to study issues related to their campus or the community. The benefits of local issues are three-fold:

➣ Students will address an issue that is part of their lives, making it more meaningful to them.

➣ The assignment will be narrow enough for them to handle in a smaller document.

➣ The opportunities for plagiarism are much reduced. After all, the Internet has plenty of websites about a topic such as *violence*, but there is probably very limited information on violence on your campus or community.

Figure 3 shows a model assignment sheet for a formal report assignment. (Other model assignments are available in the Instructor’s Companion in *TCT Online*.) In this assignment, the subject, purpose, readers, and context of use are spelled out for the students. Also, notice how the local angle makes the assignment more relevant to the students’ lives.

**Figure 3: Model Assignment**

Technical Communication

Memorandum

Date:

To: Technical Communication Class

From: Your Instructor

Subject: Formal Report Assignment

Recently, the president of the university announced that she would be holding an “Energy Summit” in February to devise strategies for reducing the university’s dependence on fossil fuels. Though she stressed energy conservation as the most immediate solution, she also challenged researchers on campus to study other energy sources, such as solar, wind, biomass, nuclear, and hydrogen fuel cells as potential solutions to the university’s energy needs.

For our next project, our class is going to take up the president’s challenge. We will explore opportunities to use alternative energy sources on our campus. Your assignment is to collaborate with three other members of our class to write a formal report in which you discuss the feasibility of converting some feature of our campus (e.g., a building, the football stadium, campus shuttle busses, a cafeteria) to an alternative energy source.

Your report should be addressed to the president of the university, but keep in mind that other readers will look over your report. Compose and design your report so it can be used effectively in the Energy Summit. Use visuals to illustrate your points.

You should also keep in mind that alternative energy can be controversial in this region because the local economy is tied to the oil, gas, and coal industries. The university receives financial support from these industries in the form of grants and gifts.

This assignment is due on December 10 in class. It should be about 5–10 pages in length, double-spaced. Include a letter of transmission addressed to the president of the university.

In this assignment, note how the subject, purpose, readers, and context of use are all mentioned in the narrative. The assignment sheet also highlights a potential political/ethical concern that students should consider.

When writing an assignment sheet, leave plenty of room for the students to interpret and

innovate. Avoid describing projects in which only one or two approaches are acceptable. Instead, write assignments that allow students to achieve the objectives of the assignment in their own way. Students will appreciate assignments that allow them to use their imagination and initiative to solve problems.

As you hand out the assignment sheet, spend some time discussing the objectives and expected outcomes of the assignment. You could simply give your students your Objectives and Outcomes Chart. Or, list out the objectives and let students determine what constitutes “good” and “excellent” outcomes.

Finally: A couple more assignment memo examples are included in the manual. One is not included for every chapter, but there are enough to give you a sense of what to include in an assignment memo.

***Chapter-by-Chapter Previews***

The purpose of this part of the Instructor Resource Guide is to preview each chapter to help you prepare. Each chapter is divided into five topics:

1. *Student Outcomes:* You will probably notice that the student outcomes listed in the teacher’s manual are different from those listed in the textbook. The revised objectives that appear in the manual represent what students ought to be able to do at the end of every chapter. Thus, they are concrete and, most importantly from the instructor’s perspective, demonstrable and therefore easily evaluated. The assignments, exercises, and projects that appear at the end of each chapter are designed around these demonstrable objectives in order to produce evidence of student learning. If the students can complete the assignments at the end of every chapter, then they have demonstrated that they have met the chapter’s objectives.

Some of the outcomes are less demonstrable than others. As students move into higher order thinking, they are doing many things and using many skills at the same time. Thus, it becomes harder to find a simple, straightforward way to evaluate whether students can, for example, evaluate, critique, and, of course, write. That is why assignment memos and example rubrics have been included. Hopefully, they will be useful to you as you design higher order assignments.

2. *In-Class Activity:* These activities are designed to provide some guidelines for day-to-day lesson plans. They are not crafted so finely that an instructor must follow them to the letter; rather, they are sketches of ideas that can then be adapted by the instructor to meet the needs of the particular class. The textbook itself suggests many activities in these sections: Exercises and Projects, Collaborative Projects, and the Case Studies. Because so many of these activities can be done in class, this manual suggests only one or two more in-class ideas.

3. *Exercises and Projects:* These sections of the manual correspond to the Exercises and Projects sections that close each chapter of the textbook. The exercises develop threads woven into the chapters already. You will see that answers or explanations are not provided for every exercise; some are fairly self-explanatory, and others are too complex to be reduced to an answer key.

4. *Case Study:* The central idea of the Case Studies is that there is no single or simple answer to the problem we’ve posed. The Case Studies should encourage discussions that will help students discern their interests, values, and responsibilities as future professional writers. This process of discernment can occur only if there is no simple solution to the problem presented. Black-and-white “conflicts” don’t help students think. In a black-and-white conflict, everyone always does the right thing in the best way and achieves the desired results. As we all know, the world doesn’t always work that way. Therefore, while this manual does present some guidelines on how to approach these discussions, it does not present any “right” answers. Having said that, the discussions we’ve provided represent one, and only one, opinion. If you look at the situations in a different way or would like to take a different approach, that’s great. But if you’re stuck, perhaps the discussions we’ve provided can get you started.

5. *Quiz:* Though writing is a process that can’t be tested very easily, at least in the traditional sense, any technical writing course does offer content that students need to know. Many of the book’s student outcomes refer to concepts that students should be able to define, describe, or discuss, so it’s worth taking the time to see whether students

have achieved these objectives. As you will see, such material doesn’t fit into a multiple- choice quiz: Either the concepts are too complex, or the right answer will be too obvious. Instead, the quizzes offer questions that students can answer with just a sentence or two.

***Chapter 1: Technical Communication in the Entrepreneurial Workplace***

**Student Outcomes**

By the end of Chapter 1, students will be able to do the following things:

1. Define technical writing.

2. Explain, orally and in writing, the importance of technical writing in the workplace.

3. Explain, orally and in writing, what is meant by the following statements:

a. Technical communication is interactive and adaptable. b. Technical communication is reader-centered.

c. Technical communication is reliant on teamwork. d. Technical communication is visual.

e. Technical communication is bound ethically and politically. f. Technical communication is international and transcultural.

4. Explain, orally and in writing the eight traits of a successful entrepreneur: innovator, leader, listener, network savvy, self-reliant, ethical, resilient, communicator.

5. Articulate why technical communication will be important to their careers.

**Strategies**

As the introduction to the textbook, Chapter 1’s primary purpose is to define technical communication and to persuade students that writing is central in the workplace. Many students will already be convinced of this; they’ve signed up for a technical communication course, after all. Others might have heard soft platitudes about the importance of writing too often. Chapter 1 also assumes that technical writing has built-in advantages that can combat indifference.

Unfortunately, students may be all too used to writing that has been assigned with no purpose, no context, and no audience other than the instructor. Technical writing demands that these

questions be addressed before a writer even begins to brainstorm (and, therefore, it has a lot to teach traditional composition). It’s important, then, to emphasize the central ideas of this chapter, which are listed in the chapter.

Our suggestion is that you feature the ‘entrepreneurship’ aspects of this chapter, using it to stress the importance of writing to innovation in the technical workplace.

These ideas can make technical writing meaningful to the student writer by contextualizing writing. You can also summarize these questions into these four areas: subject, purpose, audience, and context of use—four ideas that will become a foundation for the entire class.

**Individual or Team Projects**

1. Students will be using the Internet quite a bit in this course, so it makes sense to begin right away. This assignment asks students to do some simple Internet research and to start thinking about genre. They can find example documents on the textbook’s website, but

it’s a good idea to ask them to find something on their own.

If students ask how they are to know whether something is a technical document, go back to the basic qualities of technical communication. Is the document *interactive and adaptable? How do you know? Is it reader-centered? How? Has it been produced collaboratively? Is it visual? How is it bound ethically and politically? Is it international and transcultural?*

If students resist the idea of finding documents, or ask later in the semester for example documents, remind them that can and should use the Internet in the workplace as a resource for gathering samples of documents they will produce.

2. This assignment also asks students to do Internet research using a search engine. It also introduces students to the reality of writing in the day-to-day workplace and the process of networking with professionals. Moreover, the exercise can introduce students to the writing process by having them brainstorm about ideas for questions.

3. By thinking of their own goals for the class, students can begin the process of reflecting on their own writing, a process that will continue throughout the course. Many assignments will ask students not only to write the assignment, but also to write *about* the assignment. This sort of meta-writing can cement learning. In the case of this assignment, this meta-writing can help students increase their personal investment in the course.

**Collaborative Project**

This project extends the work begun in Exercise 3, in which students thought about their own goals. It also previews the sort of teamwork students will be performing throughout the course. Because the modern workplace centers on collaboration, you may want to stress to students that teamwork is something they will constantly engage in.

Students can look on the website both for example mission statements and for advice on how to write mission statements, so they should have little trouble going about this work. Given that they already have a syllabus that has stated goals, you may want to ask them not to consult their syllabus. If they do consult the syllabus, then they might be inclined to parrot your expectations of the class. The point of this exercise, however, is for them to think about their own expectations.