

# Technical Communication Fundamentals

## Chapter 1 Introduction to Technical Communication

William Sanborn Pfeiffer  
Kaye Adkins



# Process in Technical Communication

- Defining Technical Communication
- Determining the Purpose of Your Documents
- Planning Your Documents
- Ethics in the Workplace



# Defining Technical Communication

## Features of Academic Writing

- Purpose
- Knowledge of your topic
- Audience
- Criteria for Evaluation
- Graphic elements

## Features of Technical Communication

- Purpose
- Knowledge of your topic
- Audience
- Criteria for Evaluation
- Graphic elements



# Academic Writing

- Purpose
  - Demonstrate your knowledge of the topic
- Your Knowledge of Topic
  - Less than the teacher
- Audience
  - The teacher



# Academic Writing

- Criteria for Evaluation
  - Depth, logic, clarity, unity, and grammar
- Statistical and Graphic Support
  - Sometimes used to explain and persuade
- Examples
  - Essays
  - Exams
  - Papers



# Technical Communication

- Purpose
  - Accomplish a task
- Your Knowledge of Topic
  - Greater than the reader
- Audience
  - Variety of people with differing technical backgrounds



# Technical Communication

- Criteria for Evaluation
  - Clearly organized ideas that meet the needs of busy readers
- Statistical and Graphic Support
  - Used to explain conditions and present alternative courses of action



# Defining Technical Communication

- Features of Technical Communication
  - Examples
    - In-house correspondence
    - Short reports
    - Long reports
    - Proposals
    - Websites





# Defining Technical Communication

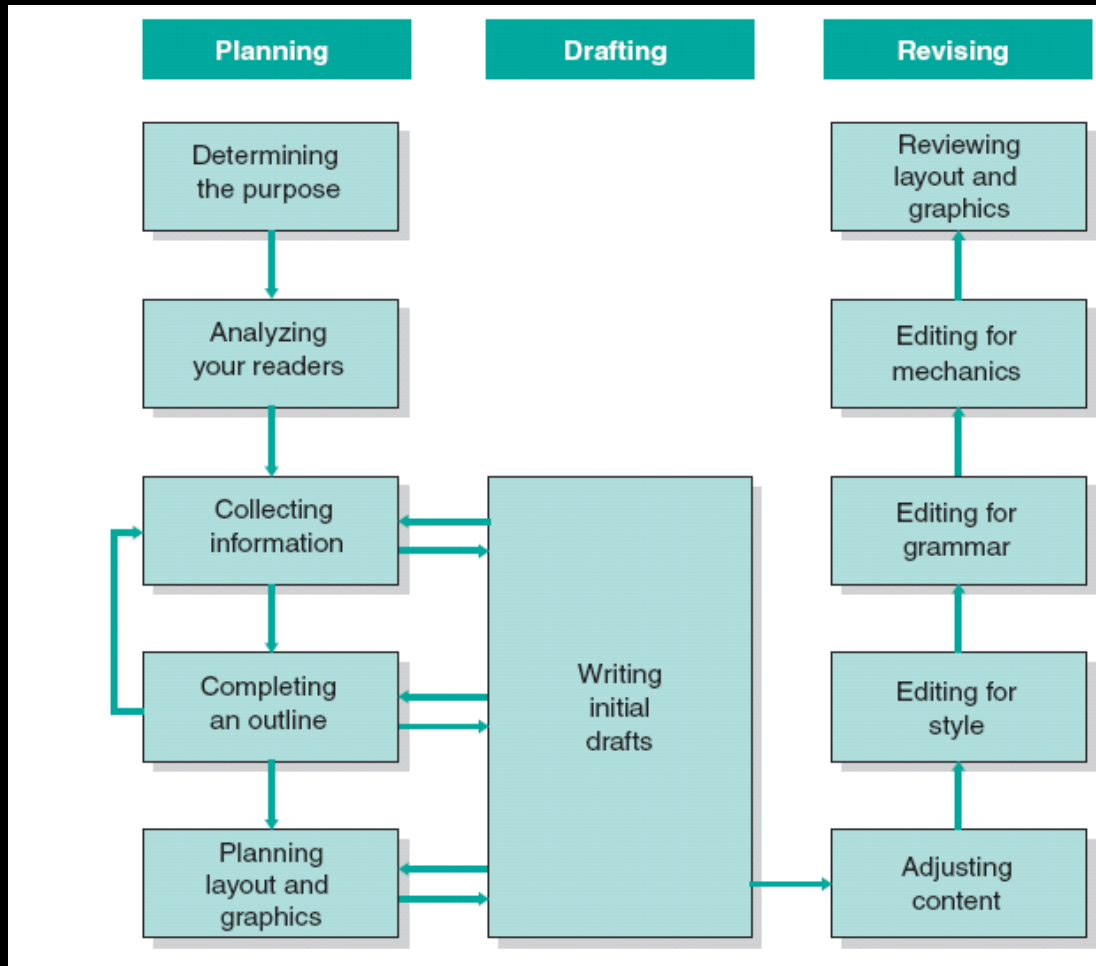
## Academic Writing

- Displays your knowledge
- Completed by a student for a teacher
- Aims to satisfy one person, the teacher

## Technical Communication

- Plays a practical role on the job
- Completed by an informed writer to an uninformed reader
- Read by many readers

# Defining Technical Communication





# Determining the Purpose

- Question 1: Why am I writing this document?
  - Answer in one or two sentences
  - Move to the beginning of your outline
- Question 2: What response do I want from readers?
  - Pinpoint what you want your audience to know, think, or feel



# Analyzing Your Readers

- Obstacles for Readers
- Ways to Understand Readers
- Types of Readers



# Analyzing Your Readers

- Obstacles for Readers
  - Readers Are Always Interrupted
  - Readers Are Impatient
  - Readers Lack Your Technical Knowledge
  - Most Documents Have More Than One Reader



# Analyzing Your Readers

- Ways to Understand Readers
  - Write Down What You Know About Your Reader
  - Talk With Colleagues Who Have Written to the Same Readers
  - Find Out Who Makes Decisions
  - Remember That All Readers Prefer Simplicity



# Analyzing Your Readers

- Technical Levels
  - Managers
  - Experts
  - Operators
  - General Readers



# Analyzing Your Readers

- Types of Readers

- Managers

- These readers expect...

- background information
      - definitions of technical terms
      - lists and other format devices that highlight points
      - clear statements about what should happen next





# Analyzing Your Readers

- Types of Readers

- Experts

- These readers expect...

- thorough explanations of technical details
      - data placed in tables and figures
      - references to outside sources used in writing the report
      - clearly labeled appendices for supporting information



# Analyzing Your Readers

- Types of Readers

- Operators

- These readers expect...

- clear table of contents
      - easy-to-read listings for procedures or instructions
      - definitions of technical terms
      - clear statement of how document affects their jobs



# Analyzing Your Readers

- Types of Readers
  - General Readers - “Laypersons”
    - These readers expect...
      - definitions of technical terms
      - frequent use of graphics like charts and photos
      - clear distinction between facts and opinions



# Analyzing Your Readers

- Decision-Making Levels
  - Decision-Makers
  - Advisers
  - Receivers



# Analyzing Your Readers

- Decision-Making Levels
  - First-Level Audience: Decision-Makers
    - Translate information into action
  - Second-Level Audience: Advisers
    - Give advice to those who make decisions
  - Third-Level Audience: Receivers
    - Receive information contained in document

# Analyzing Your Readers

**PLANNING FORM**

Name: \_\_\_\_\_ Assignment \_\_\_\_\_

I. Purpose: Answer each question in one or two sentences.

A. Why are you writing this document?

B. What response do you want from readers?

II. Audience

A. Reader Matrix: Fill in names and positions of people who may read the document

	Decision Makers	Advisers	Receivers
Managers			
Experts			
Operators			
General Readers			

B. Information on Individual Readers: Answer these questions about the primary audience for this document. If the primary audience includes more than one reader (or type of reader) and there are significant differences between the readers, answer the questions for each (type of) reader. Attach additional sheets as necessary.

Primary audience:

1. What is this reader's technical or educational background?
2. What main question does this person need answered?
3. What main action do you want this person to take?
4. What features of this person's personality might affect his or her reading?

III. Document

A. What information do I need to include in the

1. Abstract?
2. Body?
3. Conclusion?

B. What organizational patterns are appropriate to the subject and purpose?

C. What style choices will present a professional image for me and the organization I represent?

# Planning Your Documents

Experts	Operators	Managers	General Readers
Option A Organize information for technical readers			
		Option B Organize information for less-technical readers	
Option C Organize information for all readers			



# Three Principles of Organization

- Write Different Parts for Different Readers
- Emphasize Beginnings and Endings
- Repeat Key Points

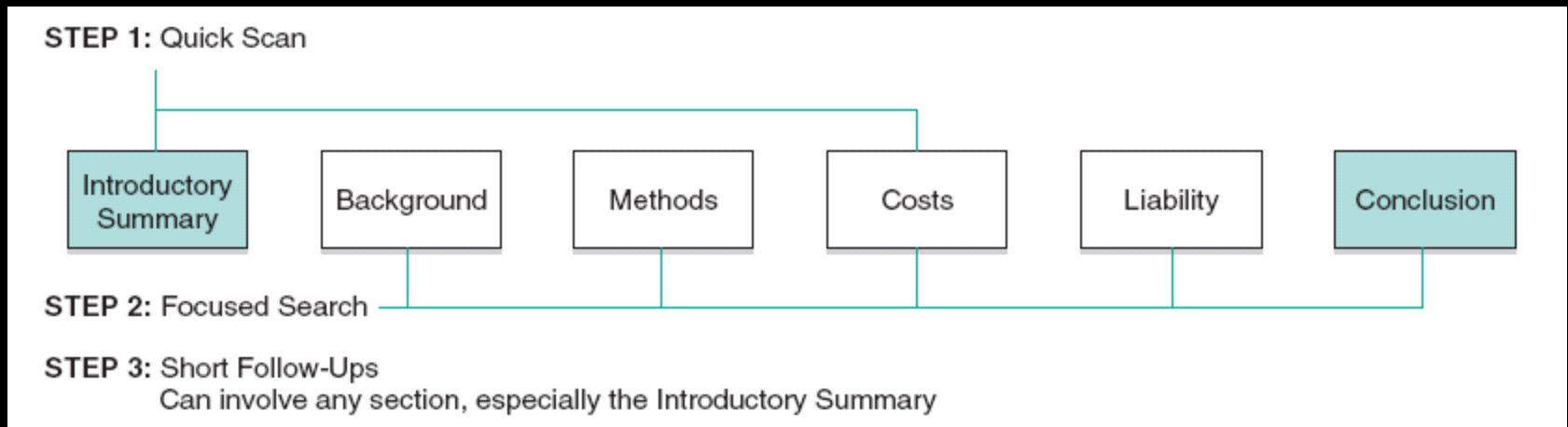




# Three Principles of Organization

- Write Different Parts for Different Readers
  - Readers use the “speed-read” approach for lengthy documents
    - Write in a way that responds to the “speed-reader”
    - Direct each section to those most likely to read that particular section
    - Shift the level of technicality from section to section

# Three Principles of Organization





# Three Principles of Organization

- Emphasize Beginnings and Endings
  - Busy readers expect to find information in predictable places such as...
    - The beginning of the entire document
    - The beginnings of report sections
    - The beginnings of paragraphs



# Three Principles of Organization

- Repeat Key Points
  - Use the *redundant* approach to organization
    - Repeat important information in different sections for different readers
  - Help readers find the answer to “So what?”



# ABC Format for Documents

- *Abstract*: The “Big Picture” for Decision-Makers
- *Body*: Details for All Readers
- *Conclusion*: Wrap-Up Leading to Next Step



# ABC Format for Documents

- *Abstract*: The “Big Picture” for Decision-Makers
  - Includes brief overview of document’s main points
    - Clear purpose statement
    - Most important points for decision-makers
    - List or description of main sections that follow abstract



# ABC Format for Documents

- *Abstract*: The “Big Picture” for Decision-Makers
  - Common headings include...
    - Summary
    - Executive Summary
    - Introductory Summary
    - Overview
    - Introduction



# ABC Format for Documents

- *Body: Details for All Readers*
  - Includes supporting information
    - Background of the project
    - Field, lab, office, or other work upon which the document is based
    - Details of any conclusions, recommendations, or proposals





# ABC Format for Documents

- *Body*: Details for All Readers
  - Separate fact from opinion
  - Adopt a format that reveals much structure
  - Use graphics whenever possible
- Headings identify topics in each section



# ABC Format for Documents

- *Conclusion: Wrap-Up Leading to the Next Step*
  - Brings readers back to one or more central points mentioned in body
  - Provides closure to the document
  - Leads to the next step in writer's relationship



# ABC Format for Documents

- *Conclusion: Wrap-Up Leading to the Next Step*
  - Common headings include...
    - Conclusion
    - Closing
    - Closing Remarks
    - Conclusions and Recommendations



# ABC Format for Documents

- *Conclusion: Wrap-Up Leading to the Next Step*
  - Drive home your message using one of these two formats:
    - Listings
    - Summary paragraphs



# Ethics on the Job

- Ethical Guidelines for Work
- Ethics and Legal Issues in Writing



# Ethics on the Job

- Ethical Guidelines for Work
  - Be Honest
  - Do No Harm
  - Be Fair
  - Honor Intellectual Property Rights
  - Respect Confidentiality
  - Be Professional



# Ethics on the Job

- Ethical Guidelines for Work
  - Be Honest
    - Relate information accurately and on time
    - Convey the same information to others that you would want presented



# Ethics on the Job

- Ethical Guidelines for Work
  - Do No Harm
    - Use positive words and actions
    - Consider the impact words and deeds have on others
    - Make the working world a better place





# Ethics on the Job

- Ethical Guidelines for Work
  - Be Fair
    - Treat others fairly, regardless of differences in race, religion, disability, age, or gender
    - Respect differences in culture



# Ethics on the Job

- Ethical Guidelines for Work
  - Honor Intellectual Property Rights
    - Respect copyright, patent, and trademark laws
    - Credit the work of others
    - Show appreciation to collaborators



# Ethics on the Job

- Respect Confidentiality
  - Remember that you are acting on behalf of your employer and clients
  - Obtain written permission before sharing employer or client materials



# Ethics on the Job

- Be Professional
  - Represent your profession well
  - Act honorably
  - Meet deadlines
  - Remain current on research and technology in your field
  - Join a professional organization



# Ethics on the Job

- Ethics and Legal Issues in Writing
  - Acknowledge Sources for Information Other Than Common Knowledge
  - Seek Written Permission Before Borrowing Extensive Text
  - Seek Written Permission Before Borrowing Graphics
  - Seek Legal Advice When You Cannot Resolve Complex Questions