CHAPTER 1

Technical Communication in the Workplace

ACADEMIC WRITING	WORKPLACE COMMUNICATION
★ Display your learning to someone who knows the subject more than you ★ Teacher is often the audience ★ Used to explain or persuade	★ Prompting an action/incentive within or outside an organisation ★ Professional audience ★ Informing and prompting ideas

INTRODUCTION:

- ★ Workplace communication can be both oral and written – it is an umbrella term
- ★ Workplace writing is often written to the following groups:
  - Supervisors/superiors
  - Colleagues and peers
  - Subordinates
  - Employees outside the branch/department
  - Clients
  - Vendors/third-party vendors
- ★ Technical communication can be described in away that it:
  - Helps people make decisions and perform certain tasks
  - Responds to the needs of the workplace
  - Conveys verbal and visual information
  - Makes the reader understand information quickly (thus the visuals)

CULTURE IN ORGANISATIONS:

- ★ Organisation's culture: The main features of a particular organisation — firm's history, type of business, management style, values, attitude towards customers, and attitude towards its own employees.
  - Technical writing within an organisation directly influences the:
    - Performance evaluations
    - Professional reputation
    - Productivity and success in the marketplace
- ★ Business climate: The econo-political factors that influence an organisation's priorities, plans and activities. These factors include:
    - Competition
    - Investor interests
    - Regulations
    - Health of the economy
  - Outsourcing: purchasing goods or services from an outside company
  - Offshoring: moving operations to another company (helps reduce labour costs & improve efficiency)

THE GLOBAL WORKPLACE:

★ People in different cultures have different ways of thinking, different ways of acting, and different expectations in communication

HIGH-CONTEXT CULTURES	LOW-CONTEXT CULTURES
★ Homogenous ★ High degree of context during communication ★ Less explicit, as the members share ethnic backgrounds, ethics and education ★ Clear distinction between outsiders/foreigners ★ Focus on relationships, saving face and helping to save face (*izzat rakhni*) ★ Norms govern behaviour Example: Japan	★ Diverse ★ Low degree of context ★ Much less explicit, as members are from various backgrounds ★ Openness to outsiders ★ Focus on logistics and problem-solving, instead of impressions and saving face ★ Universal rules often govern behaviour Example: United States

★ Communicating internationally (often with non-native english speakers):
- Simplify grammar and stylization
- Limit vocabulary to explicit, clear words
- Consistent terminology
- Define technical terms
- Avoid slangs
- Include visuals

ETHICS IN WORKPLACE:

★ Ethical guidelines
- Be honest
- Be fair
- Be professional
- Honour intellectual property rights
- Respect confidentiality
- Do no harm

★ Common legal issues in writing:
- Acknowledge sources for information other than common knowledge
  - Provide sources for all external information used
  - Factual and non-judgemental
- Seek written permission before borrowing extensive text
  - Consult a reference librarian
- Seek written permission before borrowing graphics
- Seek legal advice if complex discourse cannot be resolved

CHAPTER 2

Process in Technical Communication

★ Technical communication aims to:
- inform readers about a subject
- analyse a subject to help the readers understand it and make decisions about it
- persuade readers about the appropriateness of a recommendation

★ Readers of technical communication are often busy and appreciate documents that are clear and easy to follow
- Audiences for technical communication differ in their levels of expertise and their influence over decision making within an organisation
- Writers should keep their audience's needs and interest in mind when collecting and organising information

★ Thorough planning can make the drafting process easier.

★ Revising and editing will produce a clean document that projects a professional image

★ SPlanning Form helps students prepare to write effective documents for their class and in the workplace.

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.

C. 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?

CHAPTER 6

Correspondence

GENERAL GUIDELINES FOR CORRESPONDENCE:

- ★ Know your purpose
  - Letter: "As you requested yesterday, I am sending the new samples..."
  - Memo: "This memo explains..."
  - E-mail: "I have attached the most..."
- ★ Know your readers
- ★ Follow correct format
  - Letters have three main formats
    - Block
    - Modified block
    - Simplified
  - Memos have 'Date/To/From/Subject' combination
  - Both letters and memos can have an enclosure or attachments
  - E-mails have a computer generated format
- ★ Follow ABC format
  - Abstract
    - Purpose statement
    - Summary of the document
  - Body
    - Headings
    - Tables
    - Visuals
    - Lists
  - Conclusion
    - Summary of the entire document 2.0
    - A statement for future reference/implications
    - Suggestions
- ★ Use the 3Cs strategy
  - Capture the attention of the reader
  - Convince the reader with supporting points
  - Contact for follow-up correspondence
- ★ Stress the 'You' attitude
- ★ Use attachments for details
- ★ Be diplomatic
- ★ Edit carefully
- ★ Respond quickly

TYPES OF MESSAGES IN CORRESPONDENCE:

- ★ Positive message
  - Example: replying to a customer query, hiring an employee, announcing bonuses, etc

- Guidelines:
  - State good news immediately
  - Congratulate
  - Clear statement of what step comes next

★ Negative message
- Example: delay in delivery, bad news about performance, asking for extra time, etc
- Guidelines:
  - Buffer the bad news, but still be clear
  - Statement of appreciation, before the bad news
  - Strong emphasis on what should be done to improve
  - What step comes next

★ Neutral message
- Example: requesting information about a product, inviting to an event, explaining a new laboratory procedure, etc
- Just make your message clear

★ Persuasive message
- Example: starting a business relationship, funding for a new seminar, etc
- Guidelines:
  - Help reader solve their problems
  - Focus on how the letter/memo will help the reader
  - Be more contextual
  - Order points or facts by importance (most important on top)
  - Offer further explanation or provide future contact information

LETTER	MEMO	E-MAIL
★ Correspondence between a member of one organisation to someone outside the organisation ★ Often have one major point and fit on one page	★ Correspondence between members from within the organisation ★ Cover one main point and no more than a few sub-points; could be longer than one page (though one is preferred)	★ Correspondence (informal) within or outside the organisation ★ Cover one main point, along with attachments

CHAPTER 9

Technical Research

★ Research may be assigned by managers, or be orchestrated by the writers to present results as a report or presentation
★ Important questions to answer before conducting/analysing a research report:
- What type of questions
- What secondary research are most useful
- What are best strategies and tools
- What is the nature of information needed
- What is the best criteria for evaluating — reliability, validity, accuracy, timeliness or POV bias
- What is the copyright situation

SECONDARY RESEARCH

★ Information about a topic that has been shared through print, recorded media, or presentations.
★ Already been conducted and published by others
★ Sources:
- Public library
- Corporate library
- University library
- Web

★ Use keyword and subject search to optimise online research
★ The article cannot be older than five years
★ Cite your sources as you go
★ Verify the credibility of the author, publisher, scope and other relevant information
★ Libraries will have books, periodicals (monthly, weekly, annual, etc), newspapers, company directories, and dictionaries, encyclopaedias, etc

PRIMARY RESEARCH

★ Data collected by researcher through interviews, focus groups, surveys, lab experiments, or field observations

QUANTITATIVE	QUALITATIVE
★ Results can be expressed in numbers	★ Cannot be represented in numbers ★ Analyses words, images, processes or objects ○ Interviews ○ Focus groups ○ Field observations ○ Document analysis

★ VALID if it measures what it was designed to measure
★ RELIABLE if it can be repeated with the same results
★ CREDIBLE if the interviewee's answers are typical to the people of the same background
★ TRANSFERABLE if the findings can be applied generally
★ DEPENDABLE if other researchers may reach similar conclusions

★ Searching on web can be intimidating; here's why:
- Web is huge
- Web is constantly changing
- Search engines don't usually work very well
- Web is unregulated
- Web doesn't have a central index
- Web surfing is time consuming

- Web is full of distractions

★ Conducting interviews:

- Develop a list of objectives
- Make a contact with objectives stated clearly
- Prepare an outline
- Show that you value your interviewee's time
- Ask open ended questions
- Ask close ended questions when you want to nail down an answer
- Constantly summarise the interview

★ Conducting survey:

- Purpose statement: "The purpose of this survey is to ..."
- Limit no. of questions
- Ask objective questions
  - Either/or
  - MCQs
  - Graded-scale
  - Short answer questions
- Unbiased questions
- Use common language
- One variable per question
- Simple questions
- Precise instructions

★ Usability testing: easy to learn, to use and to remember

USING BORROWED INFORMATION CORRECTLY

★ Avoid plagiarism

★ Cite properly

REPORTING YOUR RESEARCH

★ ABC format

- Abstract provides the background information to the reader
  - Identifies the question
  - The problem
  - Issue being researched
  - Reviews published research about the topic
  - Overviews the plan of the document
- Body presents the findings
  - Explains methodology
  - Presents results using visualisations
  - Interprets and analyses the findings
- Conclusion identifies the most significant findings then includes recommendations or predictions

★ Types of abstracts

- Informational
  - Format: includes the major points from the original document

        - Purpose: give readers enough information to grasp the main findings, conclusions, and recommendations of the original document
        - Length: one to three paragraphs
    - Descriptive
        - Format: main topics of the document, without findings, conclusions or recommendations
        - Purpose: help reader decide if the report is worth reading
        - Length: no more than one paragraph

★ Abstract guidelines

- Highlight the main points
- Sketch an outline
- Begin with a short purpose statement
- Maintain a fluid style
- Avoid technical terms readers may not know

CHAPTER 10

Formatting Reports and Proposals

- ★ Informal document: a short document, no longer than five pages of text without attachments. It has more information than a memo or letter, but it is in a letter/memo format.
    - Narrower focus, often on one problem, event or situation
    - May be written by a team, but usually written by one person
    - Few to one reader
    - Two to five pages long
    - Use a letter or memo
    - Has headings to help the reader
    - May or may not include appendixes
- ★ Formal document: minimum six pages of text with various parts that have an elaborate procedural information about a particular project/event/research
    - Address more complex topics
    - Written by a team
    - Multiple readers at different levels
    - At least six pages of text
    - Always have a cover page
    - Has a table of contents, appendix, guidelines, etc

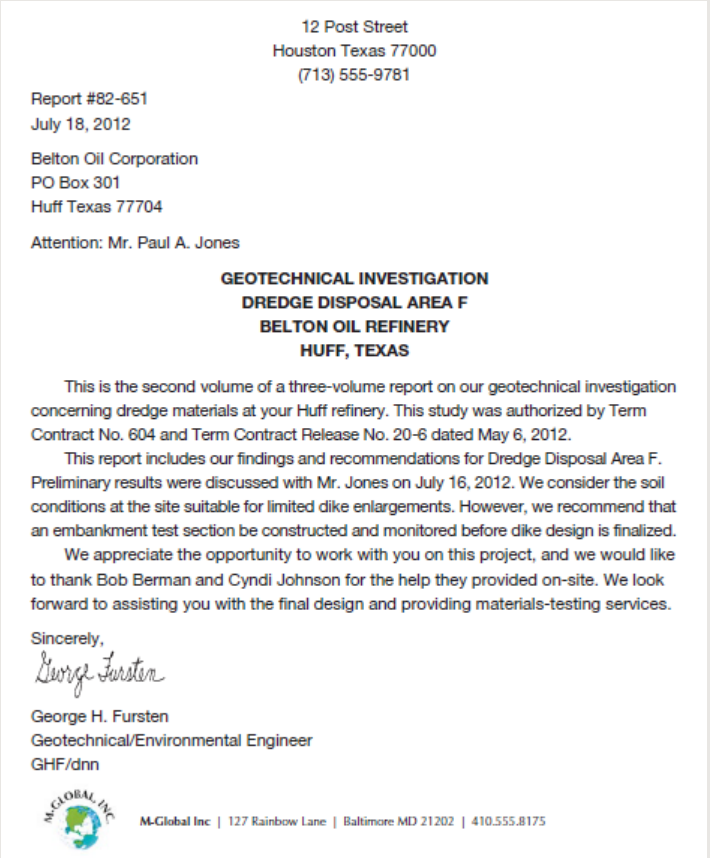
GUIDELINES FOR INFORMAL DOCUMENT:

- ★ Plan well before you write
    - Document's purpose
    - Types of readers
    - Expectations, especially of the decision makers
    - Outline of the main points
    - Strategies for writing
- ★ Use letter or memo format
    - Letter
        - Replace greeting with attention line
        - Title comes immediately after the inside address
    - Memo
        - date/to/from
        - 4-5 words max for topic
- ★ Make text visually appealing
    - Use lists
    - Numbers
    - Headings
- ★ ABC format
- ★ Abstract → introductory summary
- ★ Put important information in the body
    - Use headings
    - Use subheadings with a lead-in passage (eg: "this section will cover the three...")
    - Move from general to specific in paragraphs

- ★ Separate fact from opinion
  - Findings
  - Conclusions
  - Recommendations
- ★ Focus attention in your conclusion
  - Either restate the conclusion
  - Or write them in details
- ★ Use attachments for less important details
  - Tables and figures
  - Costs
- ★ Edit carefully

GUIDELINES FOR FORMAL DOCUMENTS:

- ★ Cover/title page
- ★ Letter or memo of transmittal
- ★ Table of contents
- ★ List of illustrations
- ★ executive summary
- ★ Introduction
- ★ Discussion sections
- ★ Conclusions and recommendations
- ★ End material



12 Post Street
Houston Texas 77000
(713) 555-9781

Report #82-651
July 18, 2012

Belton Oil Corporation
PO Box 301
Huff Texas 77704

Attention: Mr. Paul A. Jones

GEOTECHNICAL INVESTIGATION
DREDGE DISPOSAL AREA F
BELTON OIL REFINERY
HUFF, TEXAS

This is the second volume of a three-volume report on our geotechnical investigation concerning dredge materials at your Huff refinery. This study was authorized by Term Contract No. 604 and Term Contract Release No. 20-6 dated May 6, 2012.

This report includes our findings and recommendations for Dredge Disposal Area F. Preliminary results were discussed with Mr. Jones on July 16, 2012. We consider the soil conditions at the site suitable for limited dike enlargements. However, we recommend that an embankment test section be constructed and monitored before dike design is finalized.

We appreciate the opportunity to work with you on this project, and we would like to thank Bob Berman and Cyndi Johnson for the help they provided on-site. We look forward to assisting you with the final design and providing materials-testing services.

Sincerely,

George Fursten

George H. Fursten
Geotechnical/Environmental Engineer
GHF/dnn

M-Global Inc | 127 Rainbow Lane | Baltimore MD 21202 | 410.555.8175

Memo of transmittal

CHAPTER 11

Reports for Information Analysis

1. INFORMATIVE REPORTS

ACTIVITY	PROGRESS	REGULATORY	LAB
★ Time period, project or event covered ★ List of activities and how they went (anything relevant to the reader) ★ Future actions, plans for next report	★ Project and general progress (time period) ★ Chronological tasks, completion status, dead ends, yields, explanation and attachments ★ Confidence or concern about the overall project; changes or adjustments	★ Reference to standard regulations, summary of findings, summary of recommended actions ★ Detailed information of all observations and problems observed, data supporting claims ★ Recommendations, time deadline, consequences if not fixed	★ Summary of experiment, purpose, nature, material used, equipment, summary of results ★ Procedure, methodology, results ★ Recommendations, further work

2. ANALYTICAL REPORTS

PROBLEM ANALYSIS	RECOMMENDATION	FEASIBILITY STUDY	EQUIPMENT EVALUATION
★ Purpose, summary of problems ★ Background information, data to support, consequences of the problem ★ Restatement of the main problem, degree of urgency, suggested next step	★ Purpose, reference to problem, summary of recommendations ★ Details of the problem, description of options, data that support recommendations, benefits and drawbacks ★ Restatement, your offer, benefits upon change	★ Summary, who authorised the study, criteria, reference ★ Fact to opinion, compare advantages and disadvantages, describe evaluation criteria, what was evaluated and how ★ Restate conclusion and recommendations	★ Purpose, reason, summary ★ Well organised critique,, data, attachments ★ Restatement of findings, recommendations

CHAPTER 12

Formatting Reports and Proposals

- ★ Proposal: a document written to convince your readers to adopt or support an idea, product or service.
  - In-house proposals: inside your own organisation
  - Sales proposals: outside, to your clients
  - Grant proposals: organisations that fund research and other activities
- ★ Basic types of proposals:

UNSOLICITED	SOLICITED	GRANT
★ Suggests changes within an organisation or recommends service to a potential client without being asked for it ★ A: big picture, the problem and summary of the solution ★ B: gives details of what you are proposing to do ★ C: drives home the main benefit and clearly states the next step	★ Suggests ways to solve problems or improve practices within an organisation, or meets with a client's needs, when asked to present a proposal ★ A: scope of the proposal ★ B: details of the proposed plan, bg information, data, etc ★ C: benefits of accepting the proposal	★ Requests support for an internal/external project ★ A: overview of the project, statement of need, your mission ★ B: details of the proposal, bg info, data, importance to the community ★ C: importance of the project, community benefits, main reason why you are best suited

GUIDELINES FOR PROPOSALS:

- ★ Plan well before you write
- ★ Make text visually appealing
  - Use lists
  - Follow reader's preferences in font, size, type, line spacing, etc
  - Use headings and subheadings
- ★ Edit carefully

UNSOLICITED:

- ★ Description of the problem and its significance
- ★ Proposed solution or approach
- ★ Personnel
- ★ Schedule
- ★ Costs
- ★ Your interest in doing this work
- ★ What should happen next
- ★ Enable contact

SOLICITED PROPOSAL:

- ★ Statement of need
  - Purpose of proposal
  - Reader's main need
  - Main features you offer
  - Overview of proposal sections to follow
- ★ Details of information requested

- ★ Criteria for awarding the contract
- ★ Formatting requirements
    - Title page
    - letter/memo of transmittal
    - Executive summary
    - Appendixes
- ★ Submission requirements
- ★ Technical sections
    - Subheadings
    - Organisation requirements
- ★ Management sections
    - Who will do the work
    - When
    - Graphs
- ★ Cost sections
    - Easy to read
    - Graphical!!!
    - Clear about add-ons etc

WHITE PAPERS:

- ★ A document designed to educate industry customers or to help solve a problem
    - No longer than 15 pages
    - Objective in tone
        - Can be persuasive
    - Made to build customer confidence, trust and loyalty
- ★ Guidelines:
    - Know your audience
    - Include the problem and the solution in the title
    - Use analogies and metaphors
    - Use graphical elements to provide information
    - Cite sources correctly
- ★ A: definition of the problem
- ★ B: historical background, evidence data, criteria for solution, your solution
- ★ C: Summary, review, benefits, bibliography

CHAPTER 15

Presentations

HOW DO PRESENTATIONS HELP YOU?

- ★ Getting hired
- ★ Getting customers
- ★ Keeping customers
- ★ Contributing to your profession
- ★ Contributing to your community
- ★ Getting promoted

GUIDELINES:

- ★ Know your listeners
  - Listeners cannot rewind your presentation
  - Listeners are impatient
  - They need to be brought back to attention
  - They might underestimate your presentation skills
- ★ Use preacher's maxim
  - Tell them what you're going to talk about
  - Talk about it
  - And tell them what you talked about
- ★ Stick to a few main points
  - Groups of three
  - ABC format
    - Overview
    - Key topics
    - Review main ideas
- ★ Put your outline on cards or paper
  - Don't read it out
  - Don't memorise the speech
  - 3x5 or 4x6
    - Easy to carry
    - Can lead to smooth delivery
    - Can be held in one hand
    - May cause confusion if not in correct order
    - May need repetitive flipping
  - Sheet of paper
    - All points in birdseye view
    - No flipping required
    - Tend to tie you to the podium
    - May need extra focus to maintain your last location on the page
- ★ Practice, practice, practice!
  - Before a mirror
  - Audio recording
  - Video recording

- Live audience

★ Speak vigorously and deliberately
★ Avoid filler words
★ Use rhetorical questions
★ Maintain eye contact
★ Use appropriate posture and gestures

GRAPHICS GUIDELINES:

★ Listener preferences
★ Match graphics to content
★ Keep message simple
★ Consider alternatives to bulleted lists
★ Use colours carefully
★ Learn the tools available to you
★ Leave graphics up for long enough
★ Avoid handouts
★ Maintain eye contact while using graphics
★ Include graphics in your practice session
★ Plan for technology to fail

OTHER POINTS:

★ Poster sessions provide an excellent opportunity for students and professionals to share their research in a casual setting.
★ Posters should follow the general organisation for presenting research, but they should be visually interesting and designed for easy reading.
★ At a poster session, researchers are expected to discuss their research with fellow conference participants.
★ Speakers can help prevent nervousness by visualising a great presentation.
★ Speaking organisations can help you overcome nerves.
★ Preparation for a speech includes arranging the room as you want, having a glass of water nearby, and engaging members of the audience in informal conversation.

CHAPTER 16

The Job Search

RESEARCHING OCCUPATIONS AND COMPANIES:

- ★ Do basic research
- ★ Build a network of professional contacts in your field
    - Casual networks
    - Professional networks
    - Online networks
- ★ Interview someone in your field of interest
    - Your college placement office
    - Your college alumni association
    - Your college major advisor
    - Your own family or friends
- ★ Find information about companies in your field
- ★ Do intensive research on a selected list of potential employers
    - Annual reports
    - Web sites or media kits
    - Personnel manuals
    - Graduates of your college working in that firm
    - Company newsletters
    - Business sections of newspapers and magazines
    - Professional organisations
    - Stock reports
    - Accrediting agencies
    - Former employees of the company
    - Current employees of the company
- ★ Use computer to gather information

JOB CORRESPONDENCE

- ★ Job letters: type of sales letter where you sell yourself to your potential employer
    - Company reads job letters in stacks
    - They are impatient
    - They are tired
    - They become grammar nazis
    - They want attention grabbers but not slickness
    - ABC FORMAT
        - A: apply for a specific job, refer to ad, friend, or other source, briefly state how you can meet the need of your employers
        - B: specify understanding of your reader's needs, provide main and relevant qualifications, highlight points from the resume, discuss skills listen on the resume that coordinate with the job requirement, keep body paragraph lower than six lines, maintain 'you' attitude
        - C: refer to your resume, make availability known, establish contact
- ★ Resume: often accompany job letters
    - Emphasis on few major points

- Length of ONE page
- Arrange in a way that's pleasing to the eye
- Three types of resumes:
  - Chronological resume
  - Functional resume
  - Hybrid resume
- Short and easy to read OBJECTIVE section
- Proud GPA, honours, minors and key courses in EDUCATION section
- Relevant experience in EXPERIENCE section
- Activities, recognitions, interests
- REFERENCES by writing available upon request, list names, addresses and phone numbers at the end also!

OTHER POINTS:

- ★ Prepare for a job interview by learning about the organisation, writing out answers to possible interview questions, and practising beforehand.
- ★ Portfolios allow technical communicators to demonstrate their abilities through sample projects.
- ★ During an interview, present a professional image, be assertive, and offer specific answers to questions.
- ★ Follow up an interview with a thank you letter.