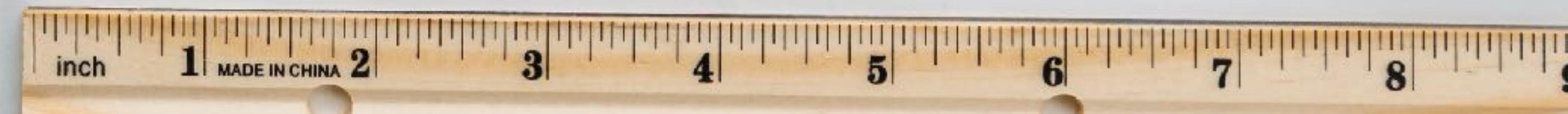




WELCOME BACK!

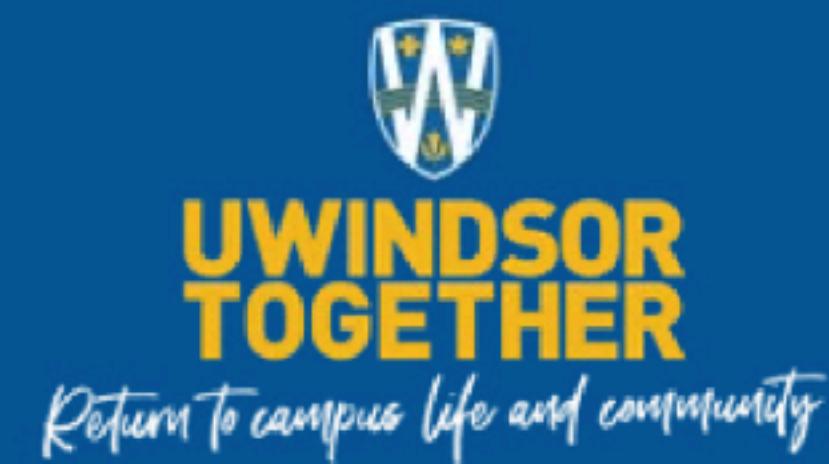
**ENGINEERING
TECHNICAL
COMMUNICATIONS
WEEK #2
LESSON 1**

PRISMACOLOR®
Plastic Eraser
Gomme en plastique



Mask Requirement Guidance for Campus Spaces

Revision Date: January 27, 2022



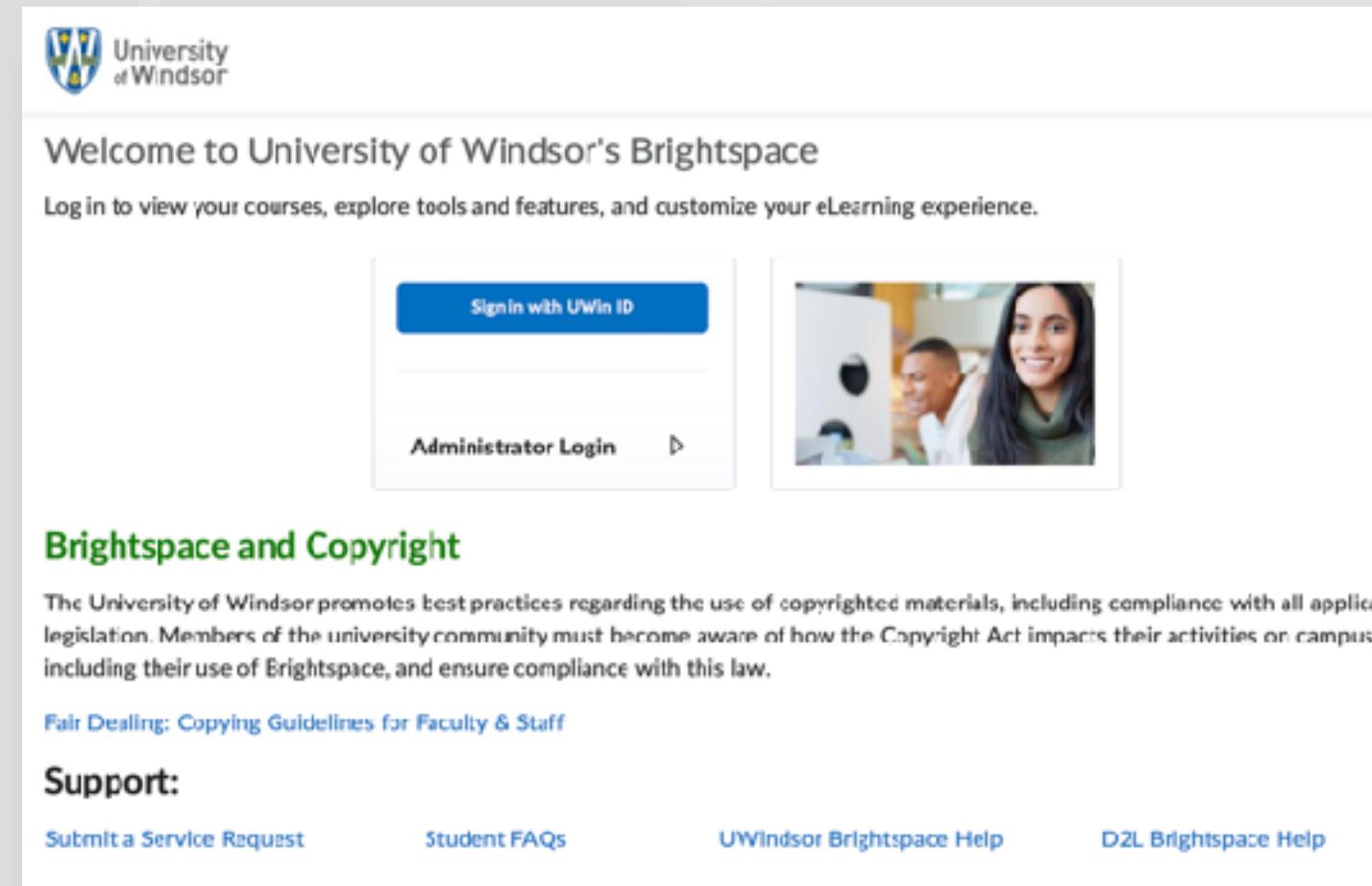
Masks are required in all campus buildings, including common spaces such as classrooms (and other shared instructional spaces), entrances, exits, hallways, stairwells, lounges, washrooms, classrooms and elevators. Masks are also required in work areas where distancing of 2 metres cannot be maintained or where physical barriers are not present.

In addition, individuals working in shared spaces, those with face-to-face interactions or those cleaning high-touch areas are required to wear eye protection (face shield, safety glasses, goggles or equivalent) and a medical mask when distancing of 2 metres is difficult to maintain.





Is this your first class?



The image shows the University of Windsor's Brightspace login page. At the top left is the University of Windsor logo. Below it, the text "Welcome to University of Windsor's Brightspace" and "Log in to view your courses, explore tools and features, and customize your eLearning experience." are displayed. A blue button labeled "Sign in with UWin ID" is prominent. To its right is a small thumbnail image of two students. Below these are links for "Administrator Login" and a "Help" icon. Underneath the login area, there is a section titled "Brightspace and Copyright" with a detailed paragraph about copyright best practices. At the bottom, there is a "Support" section with links to "Submit a Service Request", "Student FAQs", "UV Windsor Brightspace Help", and "D2L Brightspace Help".

- 1. Access the course Brightspace site (brightspace.uwindsor.ca).**
- 2. Open and read the Syllabus.**
- 3. Open and read the lecture slides from the first class.**
- 4. Purchase an access code to McGraw-Hill Connect and begin that assignment.**
- 5. Email me if you have any questions.**



RECAP

LAST CLASS

- ✓ Kahoot Quiz: The Syllabus
- ✓ The Rhetorical Situation
- ✓ Pathos, Logos, and Ethos
- ✓ Reading: Burton, "The Rhetorical Situation"

Today:

- Announcements
- Discussion Post #1
- Supplementary Writing Resources
- Types of Audiences
- The Writing Process

TODAY

LESSON #3: TYPES OF AUDIENCES/THE WRITING PROCESS

- Announcements
- Supplementary Writing Resources
- Discussion Post #1
- Types of Audiences
- The Writing Process



ANNOUNCEMENTS

For Your Information

Winter Academic Add/Drop Date: *Wednesday, January 18*

- Last day for late registration and change of courses
- Last day for deferral request to a future term

Notice:

**Your Project Teams will be announced
(via Brightspace) on the Thursday,
January 19.**

McGraw-Hill Connect

Why Connect?

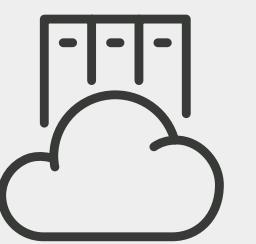
Connect is your personalized digital learning platform that makes studying and getting work done easier and more convenient than ever.



Poll: Have you purchased Connect yet?

Maximize your study time with a personalized learning path.

Save time – access assignments & learning tools in one place.



Achieve better grades & track your progress.

Learn online or offline, anytime, anywhere.



**The Connect Composition module is due on February 15.
You cannot submit this assignment late.**

SUPPLEMENTARY WRITING AND COMMUNICATIONS RESOURCES





GENG 3W | Engineering Technical Com...

Course Home Content Announcements Assignments Discussions Quizzes Grades Class Progress Course Tools

Search Topics 

Bookmarks

Course Schedule

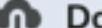
Table of Contents 

Supplementary Writing and Communications Resources 

Supplementary Writing and Communications Resources

 Print

The resources listed below are not part of GENG-8000, but many successful Engineering Technical Communications students take advantage of them each semester. If you believe your written and/or verbal communication has room for improvement, I enthusiastically recommend you consider using of some of the writing support services offered by the University of Windsor, most of which are free.

 Download

100 % 4 of 4 topics complete

Writing Support Desk 
Web Page

Faculty of Engineering Technical Communication Support 
Web Page

English Conversation Group at Leddy Library 
Web Page

University of Windsor Centre for English Language Development 
Web Page

Engineering
Student Support
Services Centre

ENGINEERING COMMUNICATIONS SUPPORT

First-Year
Office
TO
ION



Help



Outreach



Mentoring
Programs



Engineering
Communications
and Co-op

1160
Engineering Student
Support Services

A close-up photograph of a person's hands writing on a piece of paper with a pen. The hands are positioned in the center, with one hand holding the pen and the other providing support. The paper has some faint, illegible markings. The background is dark and out of focus.

THE WRITING SUPPORT DESK

Leddy Library

grammar

structure

pre-
writing

thesis
construction



University
of Windsor



English Conversation Group





University
of Windsor



CELD

CENTRE FOR ENGLISH LANGUAGE DEVELOPMENT



Discussion Post #1

- Students have been divided randomly into three discussion groups.
- You are in Discussion Group 1, Discussion Group 2, or Discussion Group 3.
- The Discussion Group posts are *individual* assignments. Your group number, from your perspective, is essentially meaningless.

- Discussion Post prompts will be located in the **Assignments** section of Brightspace, but Discussion Posts are submitted in the **Discussions** section.

The image shows a Moodle course interface. At the top left is the University of Windsor logo. Next to it is the course title "R-2023W | Engineering". To the right are several icons: a grid, a plus sign, an envelope, a speech bubble, a bell, and a user profile for "Jesse Ziter". A gear icon is also present. Below the title is a blue navigation bar with links: Course Home, Assignments, Discussions, Quizzes, Grades, Class Progress, and Course Tools. The main content area features a large yellow double-headed arrow graphic. Below the arrow is a photograph of a metal surface with a plug, and the text "Engineering Technical Communications (Section 4)".

Univ
of Windsor

R-2023W | Engineering

Course Home Assignments Discussions Quizzes Grades Class Progress Course Tools

Engineering Technical Communications (Section 4)

**Discussion Post #1 is due Wednesday, January 25.
Responses are due Friday, January 27.**

STEP 1

Each student is required to create a thread with the answer to the following prompt:

"I am the one who..."

Finish this sentence with a unique fact about yourself, and then elaborate (tell us about yourself).

For example, a participant might say, “I am the one who has finished two marathons.” Then, that person would continue to tell their peers more about themselves.

This post shall have a minimum of 200 words and should be grammatically correct. It must begin with the words “I am the one who.”

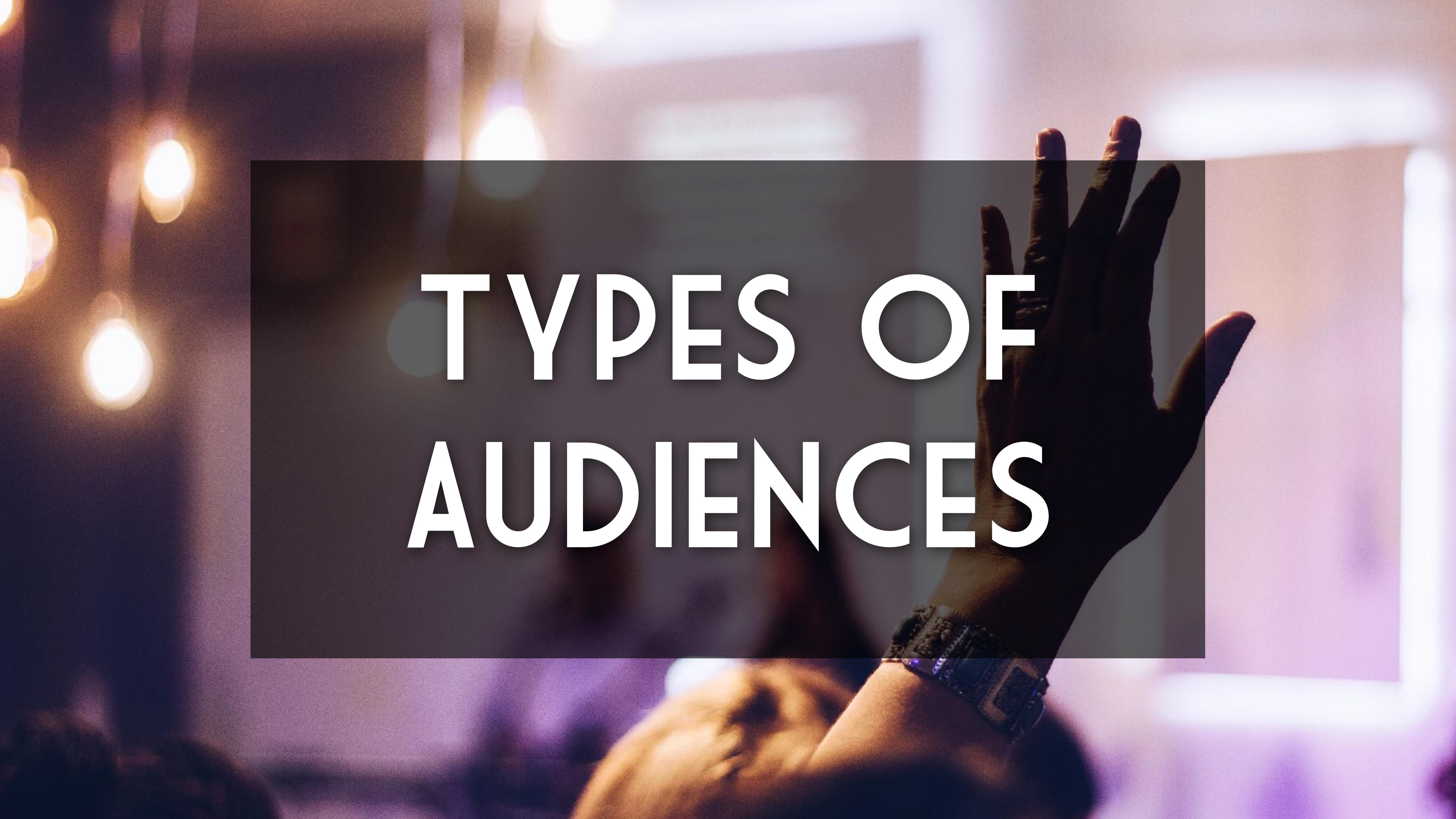
STEP 2

Then, each student must write an *engaging* reply to two students' posts (total 2 replies required).

Engaging means it must be evident that the student thoroughly read his/her peers' posts; the replies must demonstrate critical thinking and should not simply be "I agree" or "I disagree," or something similar.

There is no strict word limit for the reply. Whether a post is "engaging" will be judged on a case-by-case basis.

TYPES OF AUDIENCES



Engineers
Technicians and Technical Staff
Executives
Clients
The Public and the Public Sector

Engineers – Who?

- Professionally, **engineers** apply scientific and mathematical knowledge to develop solutions for technical problems
- When results, conclusions, or decisions are contrary to expectations or experience, expect engineering audiences to be doubtful
- Engineers have a range of knowledge; be sure to provide sufficient background of your area of expertise

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Engineers – Why?

- Work coordination
- Status updates
- Issue notifications
- Decisions
- Professional advice

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Engineers — How?

- Clearly outline your methodology
- Provide credible evidence
- Use a range of communication types (e.g., e-mail, verbal, memo, short report, etc.)

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Technicians and Technical Staff – Who?

- **Technicians** operate equipment, oversee technical procedures, and manage many of the day-to-day details of laboratories, machine shops, and other industrial facilities (hands-on)
- Technicians' thinking usually concerns a task's practical possibility and ease, taking an instruction and moving as quickly as possible to the efficient, correct, safe way to execute it

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Technicians and Technical Staff – Why?

- Technicians' expert advice is invaluable in foreseeing problems, developing practical alternatives, and saving time and money.
- Engineers need to coordinate with technicians to manage schedules, deadlines, and budgets.

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Technicians and Technical Staff – How?

- Foster trust, creating productive partnerships that take advantage of technicians' expertise
- Avoid verbal work orders: maintain a written record of decisions and specifications

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Executives – Who?

- The title “**executive**” refers to the task of executing or carrying out decisions on behalf of the organization and its stakeholders
- Executives’ education and training may have focused primarily on business, on a technical field, or both.
- In general, design your communication with executives to accommodate a non-expert, non-specialist audience.

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Executives – Why?

- Technical findings
- Status updates
- Requesting resources
- Seeking approval for new ideas

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Executives – How?

- Engineering reports need to be clear enough that executives get an immediate sense of the technical findings’ “big picture” implications
- Avoid “data dump”
- Answers First
- Negotiate hierarchy

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Clients – Who?

- Clients are the individuals, firms, institutions, or government agencies to which engineering firms provide professional services
- Clients may or may not have engineering expertise
- Contracts are critical to avoid misunderstandings – periodic reports on progress are usually required for reassurance that the terms of the contract are being met.

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Clients – Why?

- To **negotiate** professional services
- To **provide** professional services
- To **conclude** professional services

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

Clients — How?

- Focus on the client's needs
- Be a faithful agent of your firm and the client alike
- Document everything

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

The Public and the Public Sector – Who?

- The **public** are those individuals and groups with a stake in engineering outcomes but only an indirect voice in decisions
- The **public sector** are those who provide basic government services
- Public and public sector audiences generally share 3 characteristics:
 - Desire for attention to and action on their concerns
 - Respect for engineers' contribution to society, but mistrust for corporate assurances
 - Dependence on technology and expectation that it will be safe

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

The Public and the Public Sector – Why?

- Plan a project
- Report on progress
- Shape opinion
- Explain failure
- Be a whistleblower

Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

The Public and the Public Sector – How?

- Make technical matters clear while balancing ethical obligations
- Avoid technical jargon; communicate in a way that is technically correct but easy to understand
- Listen empathetically to the concerns of the public
- Express technical opinions only in your area of competence

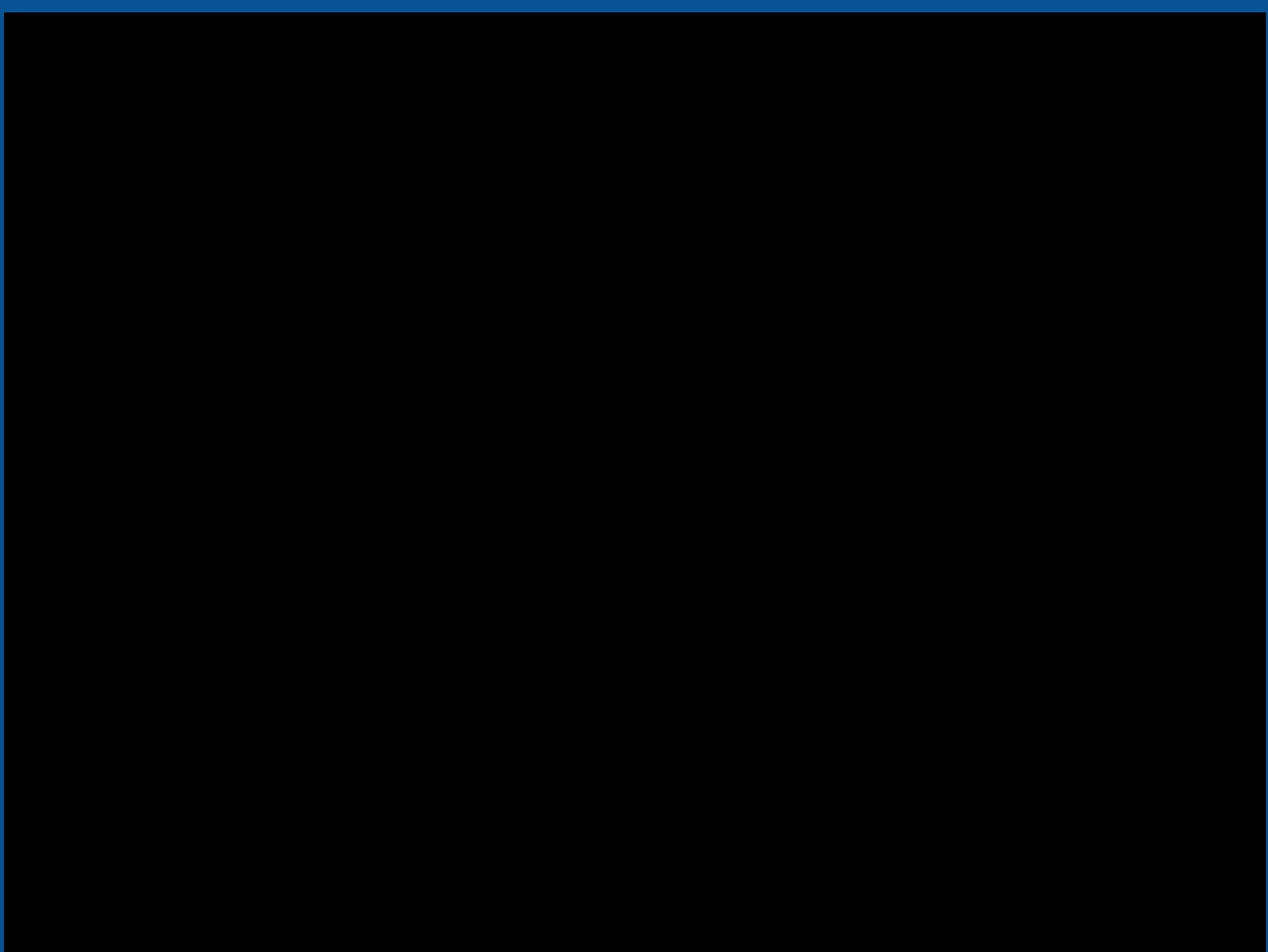
Source: House , R., Layton, R., Livingston, J., & Mosely, S. (2017). The engineering communication manual. (pp. 75-109). New York, N.Y.: Oxford UP.

EXAMPLES

Who is this message for?

Rockwell Retro Encabulator

<https://www.youtube.com/watch?v=RXJKdh1KZ0w>



Who is this message for?

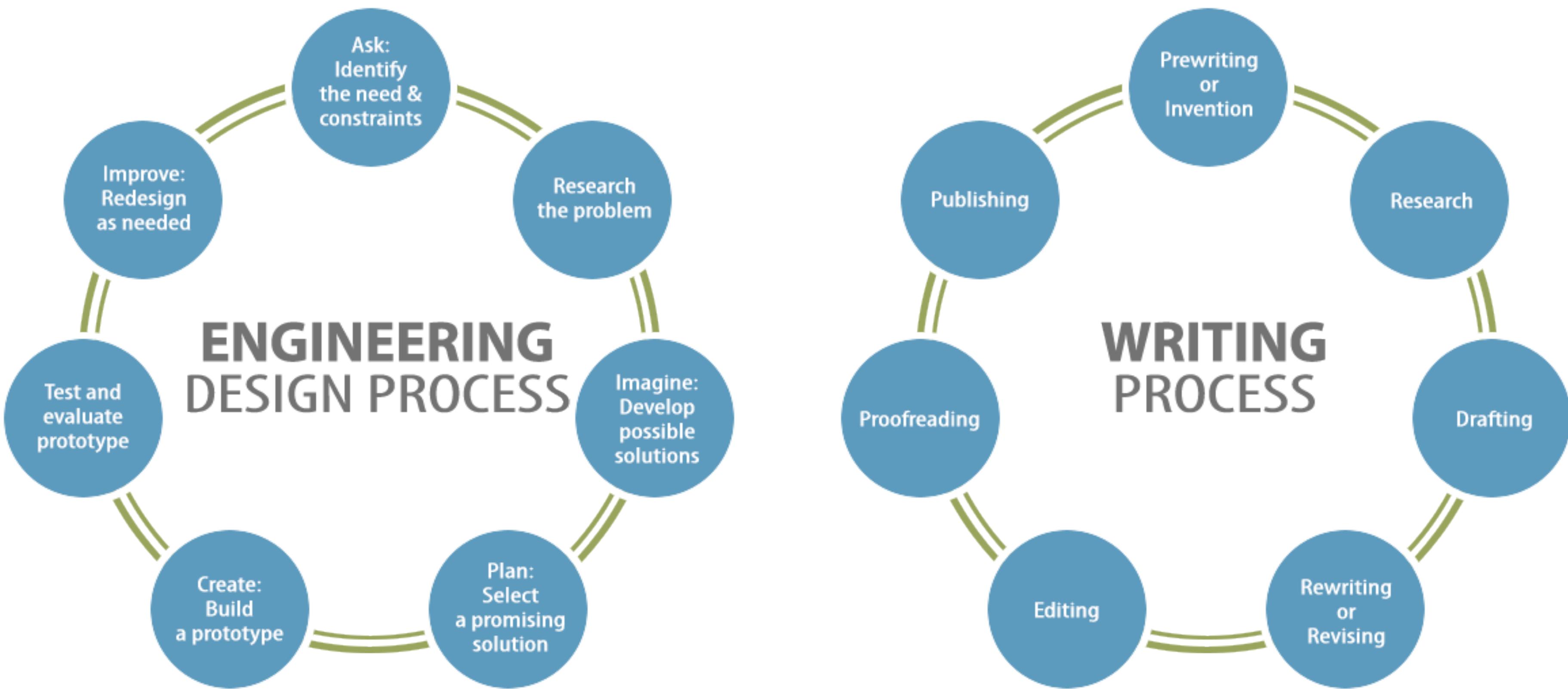
Presently, we monitor our distribution system using after-the-fact indicators such as interruption reports, meter readings, and trouble alarms. This system is inadequate in two respects: first, it fails to give an accurate picture of the distribution system. Last year, we overproduced by 7 percent, resulting in a loss of \$273,000. Second, it is expensive. Escalating labour costs and an increasing number of “difficult to access” residences have led to higher costs. Last year, we spent \$960,000 reading the meters of 12,000 such residences. The proposed pilot project implements a radio-based distribution monitoring system in these homes.

The basic system consists of a base unit (built around a PC), a radio link, and a remote unit. It is a feasible alternative to our current methods because it is more accurate than after-the-fact indicators currently used, small enough to replace existing meters, and simple to use. Initial capital costs would be recouped within 3.9 years. We recommend installing the basic system on a trial basis; if the trial proves successful, the radio based system could provide a long term solution to the current problems of inaccurate and expensive data collection.



THE WRITING PROCESS

The writing process resembles the engineering design process.



Writing is just thinking on paper.

Quote source: Zinsser, W. (2006). *On writing well: The classic guide to writing nonfiction*. New York, NY.

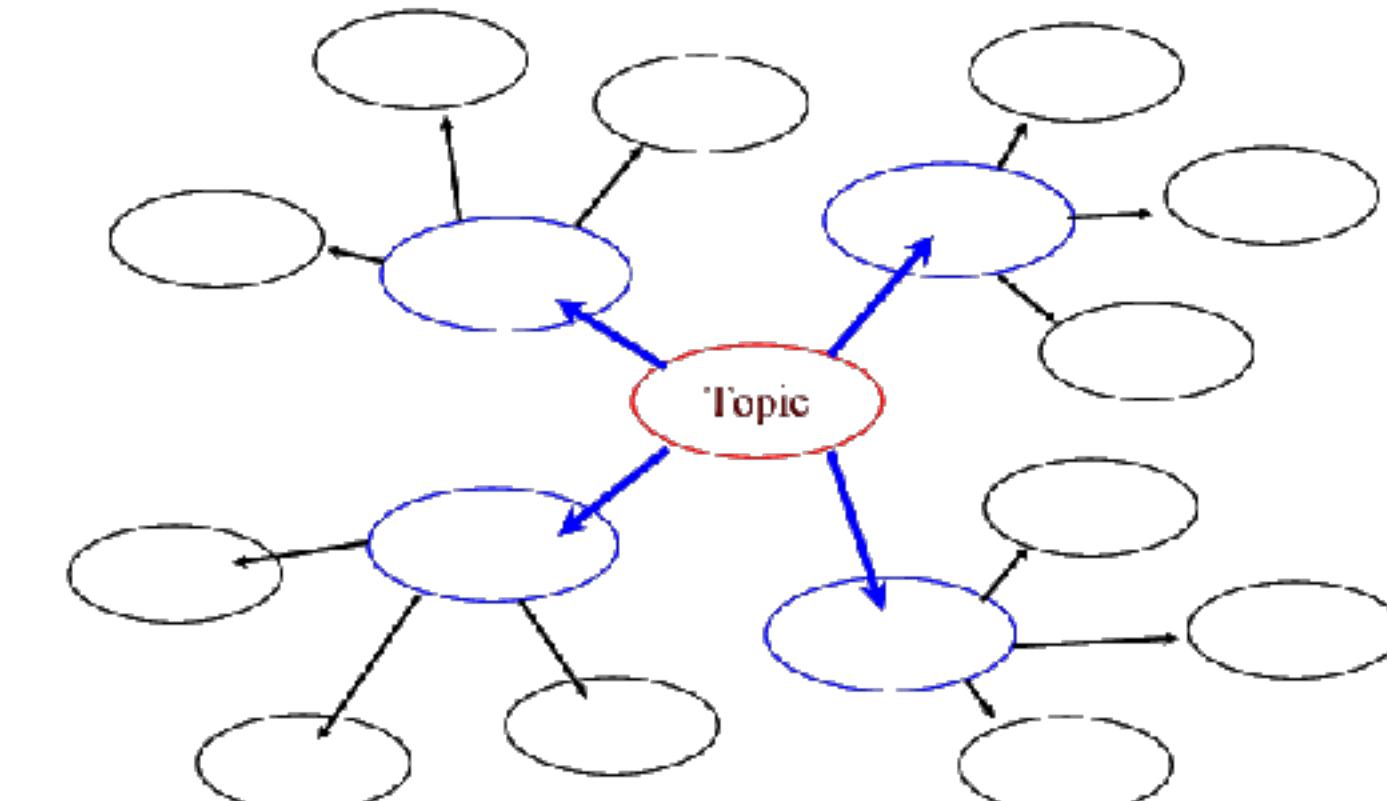
Pre-write



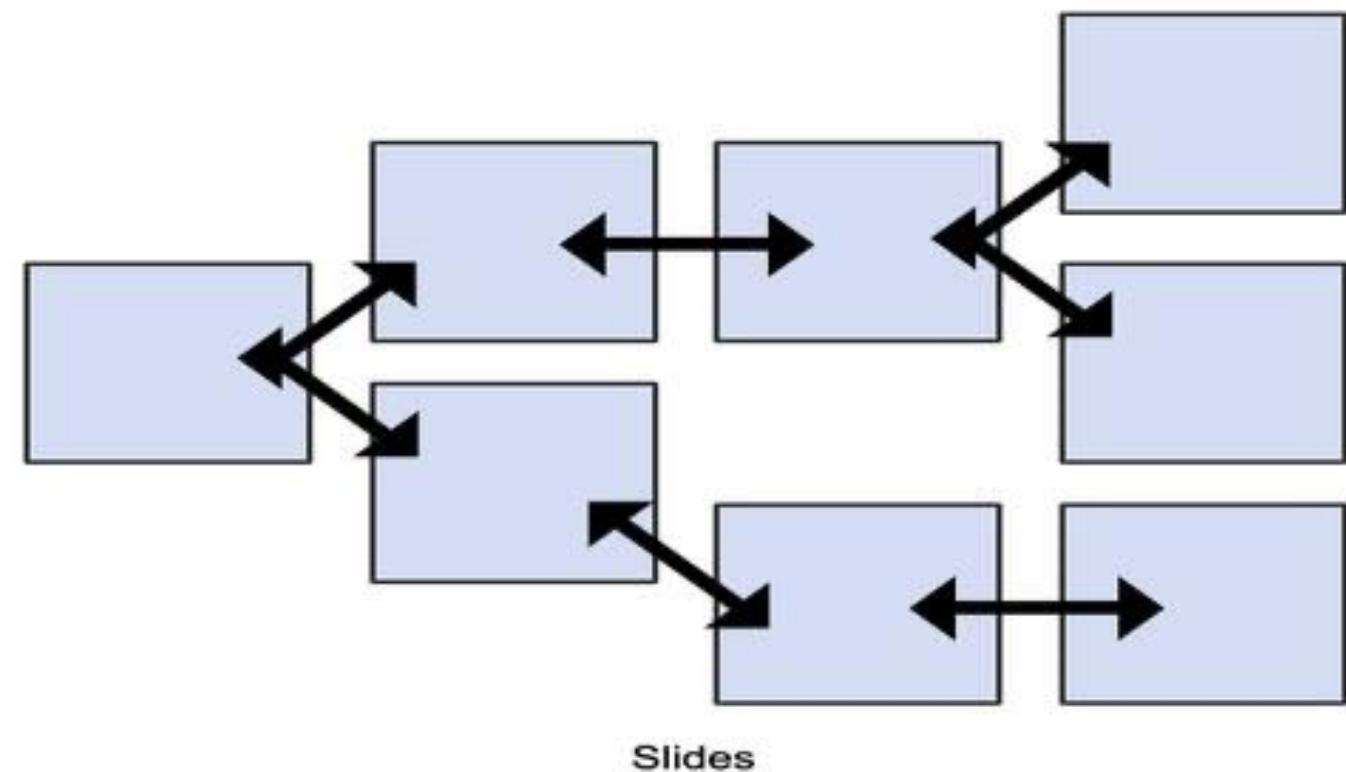
Asking journalistic questions



Freewriting



Clustering

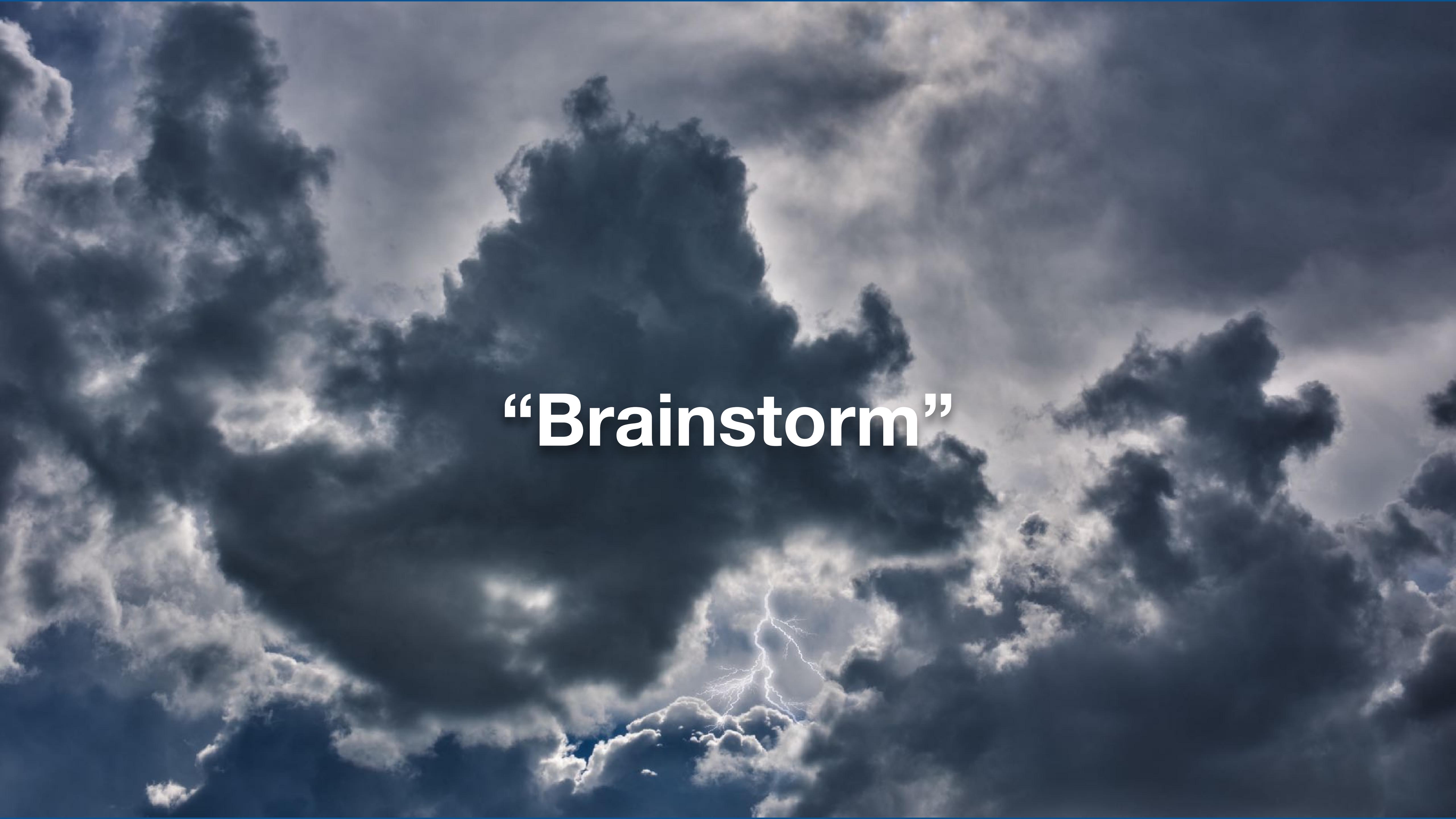


Branching



Listing





“Brainstorm”

Research

- Researching prior and current work in a technical field will stimulate new ideas, improve processes, and help you make better decisions
- More about this in **Week 3: Information Literacy**

Organize Content: Outline

- Identify the needed sections and subsections for the document
- For each section and subsection, identify the needed evidence and sources that need to be cited
- If you can transform your list of section topics into assertions, you will advance both your thinking about the topic and the speed with which you can draft sections of your first draft

Draft the Document

- Authentic engineering design and research involves a great deal of uncertainty; you must continually ask yourself critical questions:
 - Have the results been tainted by flaws in the design of the experiment?
 - Have I taken the correct measurements using the correct techniques?
 - Do my findings contradict prior work by other researchers?
 - Are my recommendations fully warranted by the evidence?
- Ask yourself: What am I arguing?

Draft the Document

- The first drafts are **prototypes** of your final document
- Later drafts are produced after you have:
 - Thought critically about the necessity of all of the information present in the draft
 - Made all necessary adjustments to the scope of the document
 - Identified sections or content areas that need the most additional development

Revise

- This means to **review** your work (or look at your work again).
- Revise in stages.
- Focus on large questions:
 - Audience
 - Purpose
 - Subject

Edit and Proofread

- **Editing:** The process of checking the draft to improve its grammar, punctuation, style, usage, diction (word choice), and mechanics (such as use of numbers and abbreviations).
- **Proofreading:** The process of checking to make sure you have typed what you meant to type.

Source: Source: Markel, M. (2010). Technical communication (pp. 51-53). Boston, MA: Bedford / St. Martin's.

Tips for Revising, Editing, and Proofreading

- Fix large, organization problems first, and then move on to sentence-level changes.
- Do several passes of your work, looking for different things each time (e.g., one pass to check if the information is appropriate for your audience; another pass to see whether your claims are well supported, etc.)
- Have a friend, peer, or expert review your work.
- Read your work out loud, or have someone else read it to you out loud.

ANY QUESTIONS?

Next:

- Routine Professional Correspondence
- Letters
- Memos
- Emails