

Writing effective memos

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Technical Communication Program (TCP)

Huang 049

Agenda

- What is the **TCP**? What do I have to do to fulfill **WIM**?
- **Memos**
 - Professional writing and Audience
 - Format
 - Structure
 - Sentence level

The Technical Communication Program (TCP): Huang 049 (basement level)

- The School of Engineering's writing and public speaking center, established in 1976. Instructors specialize in STEM communications.
- All WIM students must meet 1x with a TCP instructor to discuss 1 memo for revision,
- An online sign-up site can be found at

<http://www.signupgenius.com/go/5080F49A9AF2FA5FF2-cs181w>

Please go there to sign up!!!

Professional writing: key characteristics

- Information driven
- Functional—such writing “does work”—to inform, recommend, persuade, etc.
- More “formulaic” and formatted than many other types of writing
- Accessible and clear: writer interprets and explains, makes the big picture clear and explicit
- Not narrative, not aimed at suspense—such writing does not withhold key info until the end!

Audience, audience, audience

Many (*many!*) writing problems arise because writer fails to consider the readers!

Keep readers in mind at all times!

Two important “givens” about
readers in professional contexts
(even if you do not know that
much about them personally)

1. Readers read

▶ QUICKLY

To do so, they look for well-defined sections – often indicated by **headings** and **subheadings** – containing specific types of information.

2. Readers read

▶ SELECTIVELY

They will read some sections first (and sometimes will **only** read these if a document is long) **and pay more attention to openings**—of documents and sections:

- **Executive Summary (or Summary)**: concise summation of document's key points with emphasis on conclusions, findings, recommendations: *the takeaways*
- **Opening sentence(s)** of paragraphs and sections
- In longer docs, reader may also go to a conclusion section

Looking at readers in professional contexts
another way: it may be fair to say that they can be
characterized by the following:

TL;DR

Too long; didn't read

Given the professional reader's MO...

...what do you need to do to write an effective memo?

Ok, first—what are what are memos?

Relatively short professional documents used to **communicate information**: to inform, brief, recommend, present action items, persuade, warn, explain, etc. . . .In some realms can have very formal meanings (legal, contractual, etc.).

Can be used to **move analysis into decision-making sphere** or used to **support decision making**.

Effective documents are not data dumps of loosely strung together observations and facts



Do not bury key information!
Locate main point(s) up front! (“bottom
line up front”
or **BLUF**)

Why?

To allow the most important information to be
easily located, quickly grasped

Use this principle on macro and micro levels

- **Macro level:** include a summary (executive summary) at head of document; this summarizes key points of entire memo
- **Micro level:** include good framing or topic sentences in paragraphs that sum up observation, assertion, finding, or recommendation

Memo Writing: **Key Principle**

Use **labels/headings** (and other visual devices when appropriate, e.g., bullets, lists)

Why?

*To make document more functional, reader friendly by making information **easy to locate***

Hallmarks of good formatting:

- Good use of **white space**
- Minimal indentation
- Content-specific, descriptive, informative **headings**
- *Judicious* use of **formatting devices**: bullets, enumeration, boldface
- Elegance and restraint —**do not overdo the formatting**; avoid excessive underlining, boldfacing, italics , different fonts

Memo format: memo heading

To:

From:

Subject:

Date:

(yes, this is where the email format comes from)

A good subject line can—and should be—
very informative!

To: XYZ

From: ABC

Subject: Recommendations for improved security

Date: 1/15/18

Memo format: summary (executive summary) at the head

Sums up main points of document—and yes, includes findings and recommendations, action items/list

Everything in the summary will be *expanded upon* and *amplified* in body of report!

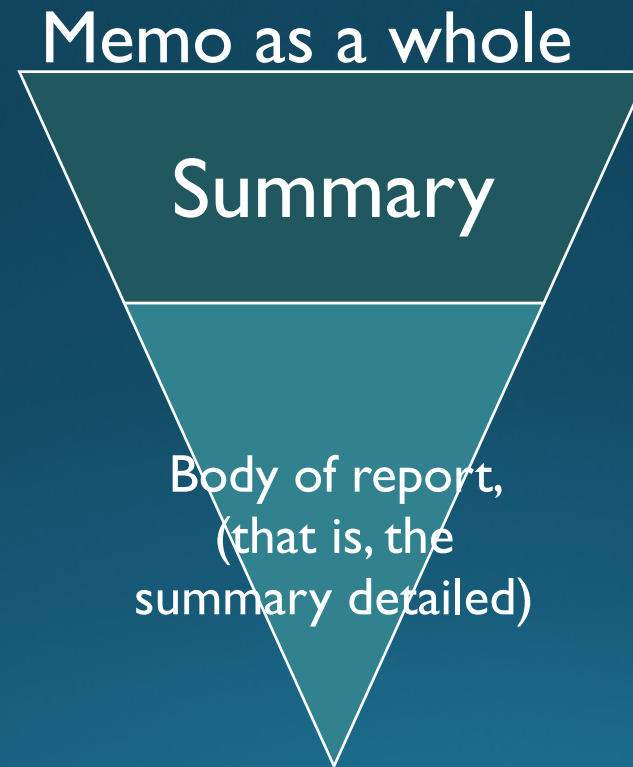
A summary is **NOT** an introduction or a table of contents.

Memo format: memo body

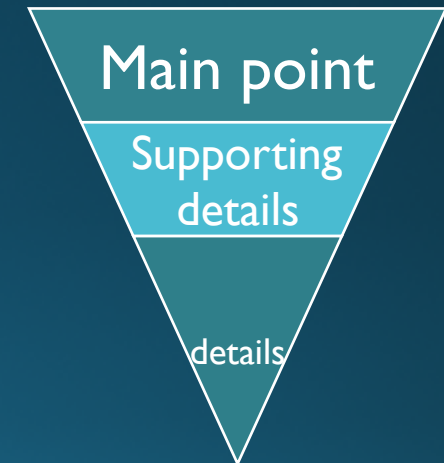
- Paragraphs or short sections—with good topic sentences!
- Internal headings
- White space
- Can use bullet points or lists if they are contextualized

Memo (and any document, really) Structure: The funnel or inverted pyramid: lead from main points, and then provide detail!

- Summary
- Topic Sentences



Paragraph or section level

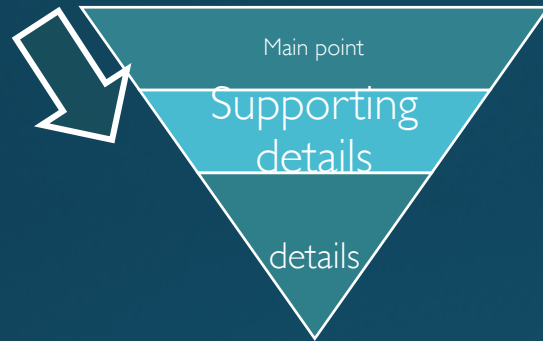


Sentence level

- Use language understandable to target audience
- Define technical terms if necessary
- Be concise—weed out deadwood
- Be clear—avoid vague pronoun refs, overuse of negative constructions; use active constructions
- Be precise—use the same keywords
- Be appropriate—use professional tone

To sum up

BLUF: Lead **FROM** your main points:



Make your memo **reader friendly** by including a **summary of key takeaways for readers up front**

Format, design, and edit your document to make **material visually accessible (and professional looking)** and **your writing clear and concise.**

To: Sarah Kim, Vice President and Head of Design
From: Edwin Zane, Lead on Resource Task Team
Subject: Task Team
Date: October 18, 2016

Even a very simple memo
can benefit from some
tweaking!

The Task Team to identify designers' resource needs is composed of representatives from all six of our sections. We met twice in October with designers from the six sections to discuss our their resource needs. The Team was established in September per management's request.

We did obtain some preliminary findings based on the group meetings each of our representatives held with designers from each section in October. The Team believes, however, that before we present a final report on our investigation, we would benefit from one-on-one interviews with designers from each section and/or surveys that each designer would answer. Some designers have voiced concern that some people may not have had a chance to voice their thoughts given the large group setting of the meetings and the very limited times at which meetings took place.

Thus, we would like your approval to extend this investigation for another month. We also welcome any suggestions you may have for us in regard to gathering information.

The members of the Team believe that if we are granted an extension, we would be able to present a final report by November 30.

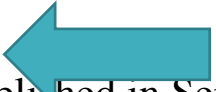
We look forward to your response.

To: Sarah Kim, Vice President and Head of Design
From: Edwin Zane, Lead on Resource Task Team
Subject: Resource Task Team Request for Extension_
Date: October 18, 2016



The Task Team is requesting approval to extend our investigation into resources for designers for another month so that we can speak with designers one-on-one. Based on our initial feedback, we believe we will get more accurate information if we can do this.

Why an extension?



The Task Team was established in September per management's request to identify designers' resource needs; it is composed of representatives from all six of our sections. Although we do have some preliminary feedback from the group meetings held in October, the Team believes that we would benefit from one-on-one interviews with designers from each section and/or surveys that each designer would answer. Some designers have voiced concern that some people may not have had a chance to honestly voice their thoughts given the large group setting of the meetings and the very limited times at which meetings took place.

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We look forward to your response and welcome any suggestions you may have.



BEFORE:
first page of a
memo.
Even though it
may not be long
and is logically
organized, this
may get a TL;DR

To: Richard Hernandez, Director
Orange Grove Products
From: Taylor Chen, Environmental Engineer
Agarwal, McKee, and Stein Engineers
Subject: Recommended Citrus Processing Waste: Treatment System
Date: October 14, 2015

In your letter of August 20, 2015, you asked me to suggest a treatment process for the wastewater from your new citrus processing plant. You stated that any treatment process selected should exhibit performance effectiveness under average and adverse flow conditions and exhibit cost superiority in terms of initial cost and yearly spending. I have compared three treatment alternatives using the data you supplied and your criteria as a basis for comparison. This report recommends a process for economically and efficiently treating citrus processing waste.

After considering three treatment processes, the activated sludge process, the anaerobic lagoon, and the aerated lagoon, I recommend an aerated lagoon as the most efficient and economical method for treating citrus processing waste. The advantages of the aerated lagoon over the other treatment processes are as follows: The aerated lagoon is the only alternative which could meet the federal pollution standards under adverse flow conditions. It exhibits significantly better performance under all conditions through more consistent BOD reduction and higher organic loading potential. The aerated lagoon affords significantly lower initial and yearly costs due to its ease of construction, operation, and maintenance. Per lagoon, the estimated initial cost is only \$400,000 and the annual operating cost \$65,800, approximately half as much as the more economical of the other two options.

To give you more detail, aerated lagoons consistently produce a better-quality effluent than do activated sludge processes or anaerobic lagoons. Aerated lagoons exhibit better BOD reduction and higher organic loading potential under both average and adverse flow conditions that do either of the other treatment schemes. The standard for BOD, as published in the *Federal Register* of July 1, 1990, states that all discharges into receiving streams shall contain no more than 30 mg/liter of BOD. Table 1 shows aerated lagoons with 95% BOD reduction potential to be capable of producing effluent in compliance with federal standards under both average and adverse flow conditions. Activated sludge processes and anaerobic lagoons, on the other hand, can only effectively treat wastewater of average BOD values.

To: Richard Hernandez, Director
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After: same info and text, more reader friendly formatting.
Note that not all subjects will lend themselves to this kind of numbering!

In your letter of August 20, 2015, you asked me to recommend a treatment process for the wastewater from your new citrus processing plant and stated that any treatment process selected should

1. exhibit performance effectiveness under average and adverse flow conditions
2. exhibit cost superiority in terms of initial cost and yearly spending

I have compared three treatment alternatives using the data you supplied and your criteria as a basis for comparison. This report recommends a process for economically and efficiently treating citrus processing waste.

Summary

After considering three treatment processes, the activated sludge process, the anaerobic lagoon, and the aerated lagoon, **I recommend an aerated lagoon as the most efficient and economical method** for treating citrus processing waste. The advantages of the aerated lagoon over the other treatment processes are

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1 Performance Superiority of Aerated Lagoons

Aerated lagoons consistently produce a better-quality effluent than do activated sludge processes or anaerobic lagoons. Aerated lagoons exhibit better BOD reduction and higher organic loading potential under both average and adverse flow conditions that do either of the other treatment schemes.

1.1 Superior BOD Reduction by Aerated Lagoons

The standard for BOD, as published in the *Federal Register* of July 1, 1990, states that all discharges into receiving streams shall contain no more than 30 mg/liter of BOD. Table 1 shows aerated lagoons with 95% BOD reduction potential to be capable of producing effluent in compliance with federal standards under both average

1.2 Superior Organic Loading Potential of Aerated Lagoons

Seasonal shockloads typical of citrus processing plants are easily handled by aerated lagoons but tend to pose problems for activated sludge processes and anaerobic lagoons. Production within the plant will be a one-shift-a-day operation and may shut down completely on weekends and holidays etc. etc.....

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