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CS349

WRITING AND COMMUNICATION

HOW WERE YOU TAUGHT TO WRITE IN SCHOOL?

▸ Introduction

  ▸ Includes necessary background information

▸ Thesis statement

  ▸ Summarizes paper's content

▸ Three supporting arguments

  ▸ Always three for some reason…

  ▸ Maybe even addresses counter-arguments

▸ Conclusion

  ▸ Resummarizes paper's content

A GOOD START...

▸ Includes all relevant information

▸ Presents clear trajectory of paper's topics

▸ Kind of boring

   ▸ Note: boring writing is better than incoherent writing — at least in technical writing :)

WHAT IS THE PURPOSE OF WRITING?

▸ Convey something of value to the reader

   ▸ Information, emotion, ideas, etc

   ▸ Can be fact or opinion but the point is to make a point!

   ▸ All writing rules and advice are designed to facilitate this

TECHNICAL WRITING BASICS

▸ Use vocabulary and sentence structure at the reader's level

  ▸ Do not talk down to readers

  ▸ Do not assume knowledge of readers

▸ Provide a clear, coherent narrative of your ideas

  ▸ Technical writing is still telling a "story"

  ▸ It is the writer's job to guide the reader down a path — not the reader's job to find this path

WHAT DOES IT MEAN TO "TELL A STORY?"

KURT VONNEGUT'S 8 RULES FOR WRITING A SHORT STORY

▸ 1. Use the time of a total stranger in such a way that he or she will not feel the time was wasted.

▸ 2. Give the reader at least one character he or she can root for.

▸ 3. Every character should want something, even if it is only a glass of water.

▸ 4. Every sentence must do one of two things—reveal character or advance the action.

▸ 5. Start as close to the end as possible.

▸ 6. Be a Sadist. No matter how sweet and innocent your leading characters, make awful things happen to them - in order that the reader may see what they are made of.

▸ 7. Write to please just one person. If you open a window and make love to the world, so to speak, your story will get pneumonia.

▸ 8. Give your readers as much information as possible as soon as possible. To hell with suspense. Readers should have such complete understanding of what is going on, where and why, that they could finish the story themselves, should cockroaches eat the last few pages.

RULES ADAPTED FOR TECHNICAL WRITING!

▸ **1. Use the time of a total stranger in such a way that he or she will not feel the time was wasted.**

▸ 2. Give the reader at least one main idea to follow.

▸ 3. Explicitly justify every main idea's existence.

▸ 4. Every sentence should follow from the previous sentence or lead into the next sentence.

▸ 5. Start as close to the end as possible.

▸ 6. Be critical — both of other people's ideas as well as your own.

▸ 7. Write for a specific audience.

▸ 8. Give your readers as much information as possible as soon as possible.

1) DO NOT WASTE READER'S TIME

▸ Know what you want to say before your write

▸ Or at least heavily edit if you don't!

▸ Do not pad content with extraneous information

2) PROVIDE CLEAR MAIN IDEAS

▸ Include at least one worthwhile main idea

▸ Main idea should be coherent

▸ Main idea should open up avenues for discussion

   ▸ e.g. No tautologies

3) JUSTIFY MAIN IDEAS

▸ Main ideas should exist in the context of solving a problem

    ▸ Addresses question of "why should we care?"

▸ Main ideas should have a clear purpose within the paper

▸ Main ideas should be supported by evidence

4) PROVIDE A COHERENT NARRATIVE

▸ Technical papers need a narrative, or structure, to help readers understand your reasoning

▸ Readers should be able to follow why each sentence follows from previous arguments

▸ If something feels out of place, consider moving or removing it

   ▸ May also need to elaborate on it!

5) START AS CLOSE TO THE END AS POSSIBLE

▸ The goal of a paper is to provide conclusive evidence about a topic or idea

 ▸ Limit your words to what is important

▸ Note what constitutes "as close as possible to the end" is somewhat topic dependent!

6) BE CRITICAL

▸ Analyze your outside sources with care

  ▸ Consider potential biases and motivations of the writers

▸ Analyze your own motivations and potential biases

▸ Note that being critical does not mean being cruel or rude

  ▸ Side note: there is an accepted way academics can be cruel and rude but it takes finesse…

7) WRITE FOR A SPECIFIC AUDIENCE

▸ Identify your target audience before writing

  ▸ Read other articles/journals in the area

▸ Determine what constitutes obvious, or universally accepted, knowledge is within that field

  ▸ It may be more than you think

  ▸ It may be less than you think!

8) GIVE READERS AS MUCH INFORMATION AS QUICKLY AS POSSIBLE

▸ Identify key points and conclusions at the start of the paper

  ▸ Readers want to understand paper's purpose and big ideas before wading through the details

OTHER TIPS

▸ Humor (especially sarcasm and hyperbole) is really hard to convey in writing

  ▸ Err on the side of caution rather than entertainment

▸ Pick the precise word to convey your point rather than choosing one for variety

▸ Variety and interest can come from changes in sentence structure and cadence but **not** at the expense of clarity

▸ Consider how you could summarize your entire paper in a handful of sentences

  ▸ If you have trouble doing this, your reader will almost certainly have trouble reading it

▸ Read the paper aloud to identify rough spots or confusing parts

TYPICAL ACADEMIC PAPER LAYOUT

▸ Abstract

   ▸ Complete summary of paper

▸ Background

   ▸ Necessary information to frame paper

   ▸ Framing of problem (i.e. why should we care?)

▸ Previous work

   ▸ Ideas do not exist in a vacuum — be honest about where yours came from

▸ Main ideas

▸ Justification and/or methodology of main ideas

▸ Results

▸ Conclusions

▸ Future Work

WHICH PARTS OF A PAPER ARE HARDEST TO WRITE?

▸ In my experience, the introduction and abstract take the *vast majority* of the writing/editing time

  ▸ Must convince reader to care

  ▸ Must convey the most amount of information in the shortest space possible

  ▸ Often requires lots of reworking/peer-review to get right

WHAT ABOUT CONCLUSIONS?

▸ In "101" writing, the conclusion is usually just a restatement of the thesis statement

    ▸ I am personally not a huge fan of this (feels a little like padding or time-wasting)

▸ Better (but harder) is using the conclusion to "go beyond" your thesis statement

    ▸ You have presumably proven your thesis statement before the conclusion

    ▸ Give me the larger implications of what you proved

    ▸ Give me the logical conclusions (or next steps) of what comes out of your work or ideas

UNDERSTANDING EDITS AND CRITIQUE

WRITING EXERCISE — CAPTURING BIG IDEAS

▸ Read a neighbor's essay

▸ Underline the article's main ideas

▸ Put brackets around sentences that directly support these main ideas

▸ At the bottom of the work, write out in your own words "why you should care" and put an asterisk by the sentence that most closely supports this

▸ Return your neighbor's paper and consider how they interpreted your work versus what you intended

GRAMMAR BASICS

▸ Sentences need at least subject and a verb (i.e. a clause)

▸ Four sentence structures:

  ▸ Simple sentences (contain one independent clause)

  ▸ Compound sentences (contain multiple independent clauses)

  ▸ Complex sentences (contain an independent and subordinate clause)

  ▸ Compound-complex sentences (contain multiple independent and subordinate clauses)

WHEN TO USE DIFFERENT SENTENCE STRUCTURES?

▸ Simple sentences emphasize a point

  ▸ Draw attention to content

▸ Compound sentences allow for comparison

  ▸ Displays relationship between two ideas

▸ Complex sentences

  ▸ Provides additional information (subordinate clause) qualifying main idea (independent clause)

▸ Compound-complex sentences

  ▸ Allows for great degree of nuance in more complex ideas

SENTENCE STRUCTURE IN PRACTICE

▸ Word choice and structure are *critical* for conveying complex ideas

▸ "This sentence has five words. Here are five more words. Five-word sentences are fine. But several together become monotonous. Listen to what is happening. The writing is getting boring. The sound of it drones. It's like a stuck record. The ear demands some variety. Now listen. I vary the sentence length, and I create music. Music. The writing sings. It has a pleasant rhythm, a lilt, a harmony. I use short sentences. And I use sentences of medium length. And sometimes, when I am certain the reader is rested, I will engage him with a sentence of considerable length, a sentence that burns with energy and builds with all the impetus of a crescendo, the roll of the drums, the crash of the cymbals–sounds that say listen to this, it is important."

▸ Gary Provost

WRITING EXERCISE — WORKING ON DETAILS

▸ Go through your own essay post line by line

▸ Box each sentence's subject

▸ Circle all the verbs

▸ Tally up your use of simple, compound, complex, and compound-complex sentences

▸ Reread your essay and consider line by line flow

PRACTICE MAKES PERFECT...

Dude, sucking at something is the first step towards being sort of good at something

PRESENTING VERSUS WRITING

▸ These things are very similar!

  ▸ Convey a narrative about the information

  ▸ Created for a particular audience

▸ But a presenter can adapt to the audience

  ▸ Same knowledge as writing but with a social component

PRESENTATION BASICS

▸ Speak at an audible volume

▸ Make eye contact with audience

    ▸ Look at just one person if you need to

    ▸ Look at the back wall just above everyone's head

    ▸ Scan the audience's faces to gauge reaction

▸ Practice beforehand

    ▸ Take notes

    ▸ Speak out loud to self or to friends

    ▸ Time yourself if talk is timed

GUIDING THE AUDIENCE

▸ No one wants confusing/off-topic questions!

  ▸ Derails talk

  ▸ Confuses other participants

▸ Anticipate points of confusion and be ready

▸ Devise strategies for bringing audience back on track

  ▸ CS favorite: "Let's take this offline…"

BEING A PRESENTER

▸ How formal should you be?

   ▸ Depends on your personal comfort and the venue

▸ Be yourself

   ▸ Presentation is performative but remember that the audience is there for you

   ▸ Also remember that presenting is a developable skill — not a personality trait

▸ The energy you put into the presentation is the energy you'll get out of the audience!

REFERENCES

▸ <http://blog.bookbaby.com/2013/11/kurt-vonneguts-8-rules-for-writing-a-short-story/>

▸ <http://uwc.utexas.edu/handouts/sentence-structure/>

▸ A great resource in general:

   ▸ <http://uwc.utexas.edu/handouts/>