Academic writing:
process and desired outcome
+
DAT096 writing tasks

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2019-03-04

Outline

- Reading scientific papers
- Writing scientific papers
    - The writing process
    - The intended outcome
        - HISS criteria
- Upcoming writing tasks

Reading a scientific paper

- Start by reading this blog post:
- http://www.sciencemag.org/careers/2016/03/how-seriously-read-scientific-paper
    - Paper copies available
- Read at least the first part “How do you approach reading a paper”

[5–10 min]

Discuss in groups

- Did you learn anything new from the first section of the blog post?

- Any thoughts about what to think about when you **write** an academic text?

Observations

- Scientific/academic papers are NOT read in linear order.
- The linear order help readers find the information they seek.
- Conventions!
    - Details differ from field to field.

Writing process

1. Pre-writing
2. Drafting
3. Editing
4. Proofreading
5. (Publishing)

1. Prewriting. What? Why?

- Describe experiment
- Outline theory
- Summarize study
- Give input for decisions
- Teach students, colleagues
- Argue for solution
- Get passing grade
- …

Make sure you know “what” and “why”!

It will affect all subsequent stages!

1. Prewriting. For whom?

- What level of background knowledge can you expect from reader?
  - Student: may be seeing contents for first time
  - Professor: should be familiar with it
  - Manager: will need reminding :-)
- <u>Every reader will be short of time!</u>

1. Prewriting. Organize!

- Collect material/references.
- Team issues:
- Decide on tools, guidelines?
- Who does what?
- Feedback possibilities?

2. Drafting

- When you put “the pen” to the paper.
- Does not have to be full sentences to start with!
- Get something down on paper.

2. Drafting

- Develop a more cohesive text
- Organize thoughts
- Explain examples/ideas
- Uncover transitions
- Discover central argument/points
- Elaborate on key ideas

Source: Strunk & White

3. Revising

- Find out what you really trying to say!
- Reorganize.
- Remove unnecessary parts.
- Check connections and flow.

4. Editing (proofreading)

- Unclear things?
- Consistency
- Spelling
- Abbreviations
- Repetitions
- Other errors

HISS criteria

- Overall impression 20%
- Content & understanding 40%
- Structure 20%
- Language 20%

Groups of 4-5 persons

- Each group member: Select one of the 4 sections of the HISS criteria.

- Take 5–10 minutes to read through your section.

- Explain to each other what the section is about and how a perfect paper should be according to the criteria. (20 minutes)

Upcoming writing tasks

HT report contents?

- Preferably, a substantial draft of your final report
  - More polish on earlier parts
- Refer to https://writing.chalmers.se/chalmers-writing-guide/thesis-and-report-writing/parts-of-a-thesis-report/
- Note: generic guidelines, so generic section titles
  - Also, “Methods” may not be applicable in a report on a design project

Feedback on half-time report

- Separate document organised according to HISS criteria.
  - + extra comments on visuals
- Detailed comments also in your pdf.

How handle feedback?

- We give feedback on what you provide
  - A better draft yields more useful comments
- We are always short of time
  - Fix <u>all</u> instances of the problems we point out!

Documentation

- Documentation aimed at other engineers who are to continue your work
  - Include test procedures and protocols
- No end-user documentation