Writing efficiently
Writing efficiently
How to never get stuck and write perfect drafts every time as quickly as you can type:
(I have no idea)
Let’s set realistic expectations

Writing “efficiently”

The way we talk about writing is unrealistic.

By the end of this session you should:

- Have new specific tools to try
- Better understand your writing process
- Writing is hard – “efficient” means not making it harder than it needs to be
THE UNSUCCESSFUL SELF-TREATMENT OF
A CASE OF "WRITER'S BLOCK"

DENNIS UPPER

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Discussion

Where do you get blocked in writing?
What do you want out of a writing process?
What do you do to get into writing?
If it ain’t broke, don’t fix it

If your work is progressing, stay absorbed

To the extent that it gets the job done one method is as good as any other

It’s only when there’s trouble that you need to consider what you’re doing and make a conscious choice to do something else.
When you get stuck, get curious

Questions for when you get blocked

What kind of writing are you trying to do?
How do you approach this task?
At what point, exactly, does progress end?
What do you do up to that point?
When you reach it, what do you do next, and why?
Brainstorm Outline Draft Revise Edit

Divergent  Convergent
You can’t do both at once
Brainstorm Outline Draft Revise Edit

“You can always edit a bad page
You can’t edit a blank page

Jodi Picoult

Generate concepts to include
Bring hidden information to the surface
WriteRoom is a minimalist application for writing. Almost all of my writing happens here.
“Give me 6 hours to chop down a tree and I will spend the first 4 sharpening the axe.”

Abraham Lincoln
Templates can help you fill in the gaps when telling stories.
Brainstorm  Outline  Draft  Revise  Edit

Templates can help you fill in the gaps when writing abstracts

Context
Need
Task
Object
Findings
Conclusions
Perspectives
Brainstorm Outline Draft Revise Edit

Templates can help you fill in the gaps when making slides.
A key time to check in with your advisor!
(or me!)
Brainstorm  Outline  Draft  Revise  Edit

“Don’t get it right
get it written

Build a document from the outline
Jump into sections and fill in the blanks
A key skill is to delay editing
2.3 Analytical model for wall deflection

We developed an analytical model to describe the deflection of two sidewalks under pressure (Supplementary Material S1). The deflection of a beam of uniform thickness and loading fixed at both ends is described by the Euler-Bernoulli beam equation:

\[ u(x) = \frac{w}{24EI} \left( x^4 - 2x^2 + h^2 \right) \] (1)

Where \( w \) is the force per unit length (N/m), \( E \) is the Young's modulus (N/m²), \( I \) is the second moment of area (m⁴), and \( h \) is the height of the sidewalk (m). For further definitions and nomenclature, see Supplementary Material S1. If the aspect ratio of the sidewalk \( h/l \) is less than 10, the contribution of shear deformation should also be taken into account. Timoshenko's beam theory⁴¹ includes a secondary term for the contribution of shear deformation:

\[ u(x) = \frac{w}{24EI} \left( x^4 - 2x^2 + h^2 \right) + \frac{w}{2kGA} (h - x^2) \] (2)

Where \( A \) is the cross-section area of the beam, and \( k \) is Timoshenko's shear coefficient, which is defined for beams with rectangular cross-section as:④²

\[ k = \frac{10(1 + v)}{12 + 11v} \] (3)

\( G \) is the shear modulus, which can be written in terms of Young's modulus and Poisson's ratio \( v \) assuming PDMS is fully elastic and isotropic:
Omit needless words. Vigorous writing is concise. A sentence should contain no unnecessary words, a paragraph no unnecessary sentences, for the same reason that a drawing should have no unnecessary lines and a machine no unnecessary parts.

Strunk & White, *The Elements of Style*
Brainstorm Outline Draft Revise Edit

- Does it contribute to your goals?
- Reading out loud can help
- Moving top to bottom can help
- Look for flow, clarity, logical gaps

Good writing erases its own history
The Science of Scientific Writing

If the reader is to grasp what the writer means, the writer must understand what the reader needs

George D. Gopen and Judith A. Swan

Science is often hard to read. Most people assume that its difficulties are born out of necessity, out of the extreme complexity of scientific concepts, data and analysis. We argue here that complexity of thought need not lead to impenetrability of expression; we demonstrate a number of rhetorical principles that can produce clarity in communication without oversimplifying scientific issues. The results are substantive, not merely cosmetic. Improving the quality of writing actually improves the quality of thought.

The data could be presented by a number of written structures. Here are two possibilities:

| t (time) = 15', T (temperature) = 32°; t = 0', T = 25°; t = 6', T = 29°; t = 3', T = 27°; t = 12', T = 32°; t = 9', T = 31° |
| time (min) | temperature (°C) |
| 0          | 25               |
| 6          | 29               |
| 9          | 31               |
[How] is editing different from revising?
Hemingway App makes your writing bold and clear.

The app highlights lengthy, complex sentences and common errors; if you see a yellow sentence, shorten or split it. If you see a red highlight, your sentence is so dense and complicated that your readers will get lost trying to follow its meandering, splitting logic—try editing this sentence to remove the red.

You can utilize a shorter word in place of a purple one. Mouse over them for hints.

Adverbs and weakening phrases are helpfully shown in blue. Get rid of them and pick words with force, perhaps.

Phrases in green have been marked to show passive voice.

You can format your text with the toolbar.

Paste in something you’re working on and edit away. Or, click the Write button and compose something new.
Everybody walks past a thousand ideas every day. The good writers are the ones who see five or six of them. Most people don’t see any.

Orson Scott
Capture Brainstorm Outline Draft Revise Edit

Scrivener
Don’t make writing harder than it has to be.
Spring: Writing

- JAN 22, 25: Abstracts
- FEB 5, 8: Writing Efficiently
- FEB 19, 22: Emphasis
- MAR 5, 8: Feedback
- MAR 19, 22: Posters
- APR 2, 5: Proposals
- APR 23, 26: Cohesion
"Manuscripts are never finished only surrendered."