

Mindful Reading &
Intentional Writing:
Research and Strategies
for Effective Writing

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Why is Writing Important?

- predictor of **school** performance
- essential to **academic** scholarship
- desirable and necessary in the **workplace**
- value for **learning** and **self-expression**

Kellogg, R. T., & Raulerson III, B. A. (2007). Improving the writing skills of college students. *Psychonomic Bulletin & Review*, 14(2), 237-242.

Arnold, K. M., Umanath, S., Thio, K., Reilly, W. B., McDaniel, M. A., & Marsh, E. J. (2017). Understanding the cognitive processes involved in writing to learn. *Journal of Experimental Psychology: Applied*, 23(2), 115-127.



Employment

Minus 1 for Writing Proficiency

The Most Commonly Lacking Skills
Among Recent Grads

44% of managers feel writing proficiency is the hard skill lacking the most among recent college graduates. Public speaking follows with 39% of managers feeling this way.

Young one, you lack writing proficiency, public speaking and critical thinking.
You must learn these skills to succeed.



When listing the most-commonly lacking hard and soft skills they'd like to see in recent grads, hiring managers called out writing proficiency as the hard skill most commonly lacking and critical thinking/problem solving as the most commonly lacking soft skill. Public speaking and attention to detail follow for the second-most-lacking hard and soft skills, respectively.

Overview

- purpose is to offer a **research-based approach** for improving your writing
- offer **9 lessons** related to developing an **understanding** of writing, deliberate **practice**, and **cultivating resources**
- these are **not shortcuts**... but they are **under your control**

Understanding Writing

The Nature of Writing

- what **is** writing? what is it **for**? **who** is it for? **how** can we make words goodly?
- understanding and **beliefs about writing** influence how we approach writing
- effective writing begins with the **right mindset** toward the process

LESSON #1:

Approach writing as a process of iterative, user-centered design.

Pop Quiz!

- a) the purpose of writing is to **share accurate and established ideas** with clear sources
- b) writing is a way to **express, explore, and develop one's own ideas** and feelings
- c) writers must **iteratively and recursively refine their ideas** over time
- d) writers must adapt their ideas and writing style to **meet the needs of the audience**

Beliefs about Writing

- “all of the above,” but some beliefs are **more sophisticated** than others
- more expert writers understand that writing is an **iterative, recursive process** that must **adapt to the audience**
- “telling” vs. “transforming” vs. “crafting”

Beliefs about Writing

Knowledge-Telling

- **author**-focused
- communicates the author's ideas
- reports ideas gathered from other sources with little synthesis
- difficulty separating intended meaning from communicated meaning

Knowledge-Transforming

- more **text**-focused
- refines the author's ideas and expression
- synthesizes and uses sources to support author's main ideas
- revises and refines the text to better express authors' meaning

Knowledge-Crafting

- more **audience**-focused
- anticipates the needs, reactions, and ideas of the readers
- revisions consider reader interpretation, confusion, agreement



writing proficiency and expertise

Design Cycle Analogy



LESSON #2:

Focus on the writing process rather than the written product.

Writing is a Process

- written products (e.g., articles, books) are tangible but their **origins are invisible**
 - good writing may even seem “effortless”
- but **effective writing** only emerges from careful **planning, drafting, and revising**
 - i.e., good process → good product

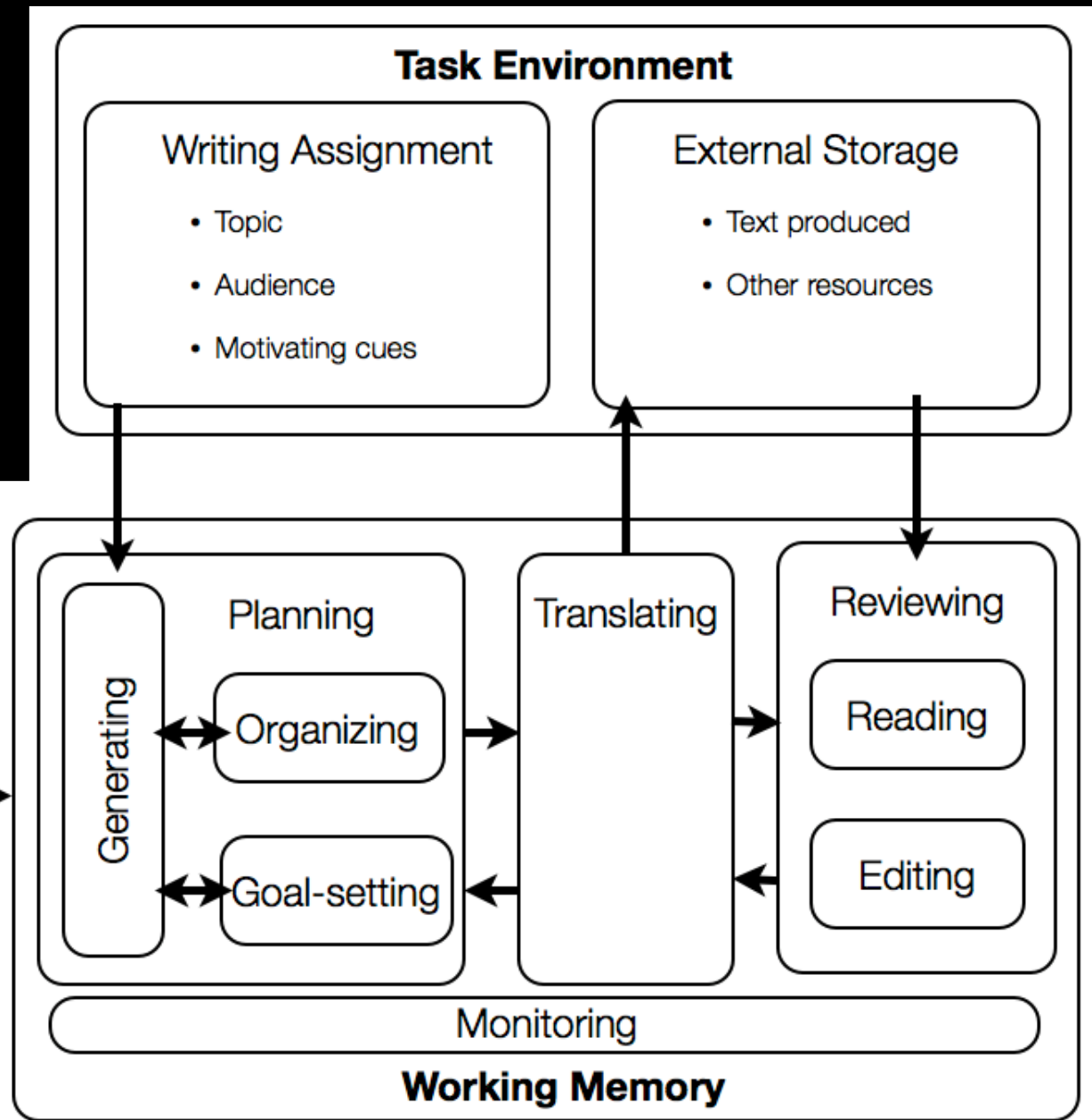
It's Not Called "Pieing"



It's Called "Baking"



it's not called
“papering,” it's
called **writing**



LESSON #3:

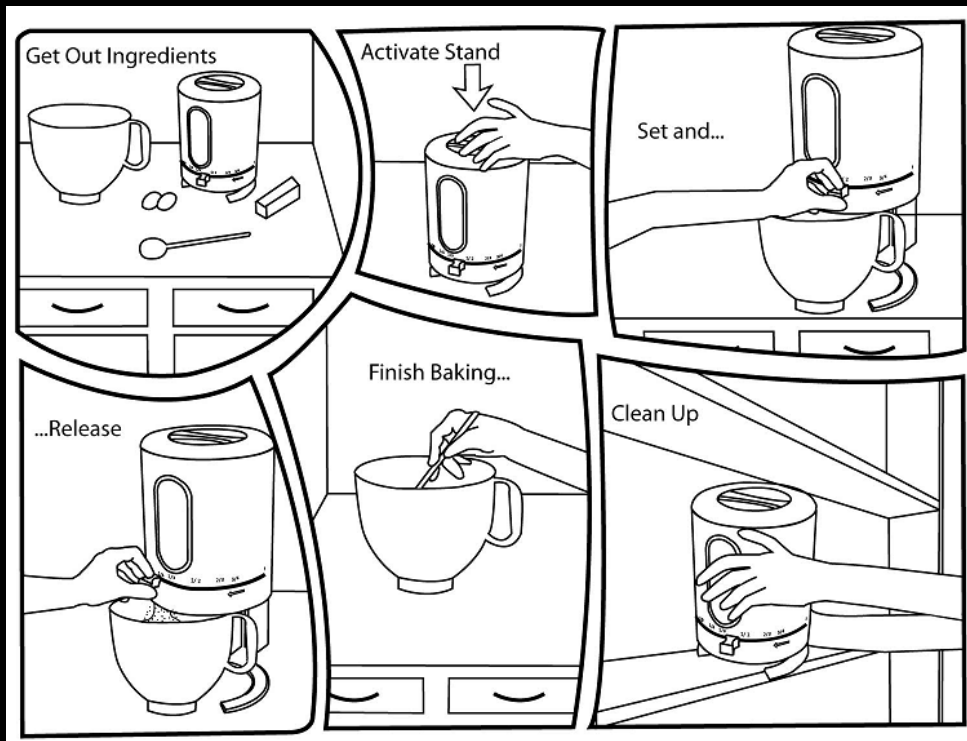
Have a detailed plan—
writing goals, resources,
flow, and organization.

Outlines and Flowcharts

- outlines (and similar techniques) plan the **order and content** of the paper
- **separates the mental demands** of “writing” from the mental demands of generating ideas, organizing, linking ideas, etc.
 - easier to **manipulate ideas** and see gaps
 - think **hierarchically** and logically

Storyboards

- outlines aren't the only method; can use **storyboards, graphical** representations



the **purpose** is to think about goals, ideas, sections, and resources **before you start trying to “make words”** or expressing your ideas in text

you can plan **verbally** or **visually**... but **have a plan**

“Tour Guide” Analogy

- **think ahead** for what tourists will need (and want) to best appreciate the “sights”
- **anticipate** what details they will need and when they will need them
- have a **clear and logical path from “point to point”**—never let them get lost

The **Confusing** Polytechnic Campus!



Intentional Writing

- carefully plan an **engaging journey** through your ideas, arguments, and evidence—no reader left behind!
- every component should **set up** and **prepare the reader** for the next piece
- readers should **never** wonder “why am I here? what’s the point?”
- have **a compelling reason for every decision** you make when planning (and later, when writing)

LESSON #4:

Revise your work multiple times and at multiple levels—mechanics, structure, and ideas.

Multiple Levels

- students often think of revising in terms of “**proofreading**” or “polishing”
 - spelling, grammar, punctuation
- but... they **neglect meaningful revisions**
- superficial > substantive

Fitzgerald, J. (1987). Research on revising in writing. *Review of Educational Research*, 57(4), 481-506.

Roscoe, R. D., Snow, E. L., Allen, L. K., McNamara, D.S. (2015). Automated detection of essay revising patterns: Applications for intelligent feedback in a writing tutor. *Technology, Instruction, Cognition, and Learning*, 10(1), 59-79.

Roscoe, R. D., Wilson, J., Johnson, A. C., & Mayra, C. R. (2017). Presentation, expectations, and experience: Sources of student perceptions of automated writing evaluation. *Computers in Human Behavior*, 70, 207-221.

Reorganizing

- In addition to improving spelling, sentence structure, and word choice...
 - **move things around**
 - consider “flow”
 - what do readers need and when?
- e.g., **instead of slowly building up** to your conclusions, try **stating main ideas up front** and then supporting them

Revising for Meaning

- are technical ideas **defined clearly** using accessible language? are there **examples**?
- are any **ideas unnecessary** or redundant?
- **have you left out information** that readers need to understand your ideas?
- is there a **more compelling example** or explanation you could give instead?

Multiple Revisions

- plan on multiple **revisions** and **drafts**



The Right/Write Mindset

- writing is an **audience-aware, iterative process** of planning, drafting, and revising to clearly **communicate** ideas via text
 - good process → good product
- so... **how do you develop these skills?**

Practicing Writing

LESSON #5:

Make the commitment to improve your writing— every assignment, every paper, every email.

Deliberate Practice

- repeated **practice**, over periods of **time**, with the **intent to improve** and persevere
- try to **build on and challenge existing skills**, knowledge, and potential
- very important for **skill acquisition**

Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, *100*(3), 363-406.

Kellogg, R. T., & Whiteford, A. P. (2009). Training advanced writing skills: The case for deliberate practice. *Educational Psychologist*, *44*(4), 250-266.

Repeated Practice

- writing is a **skill**, therefore you need to **write more** in order to get better at it

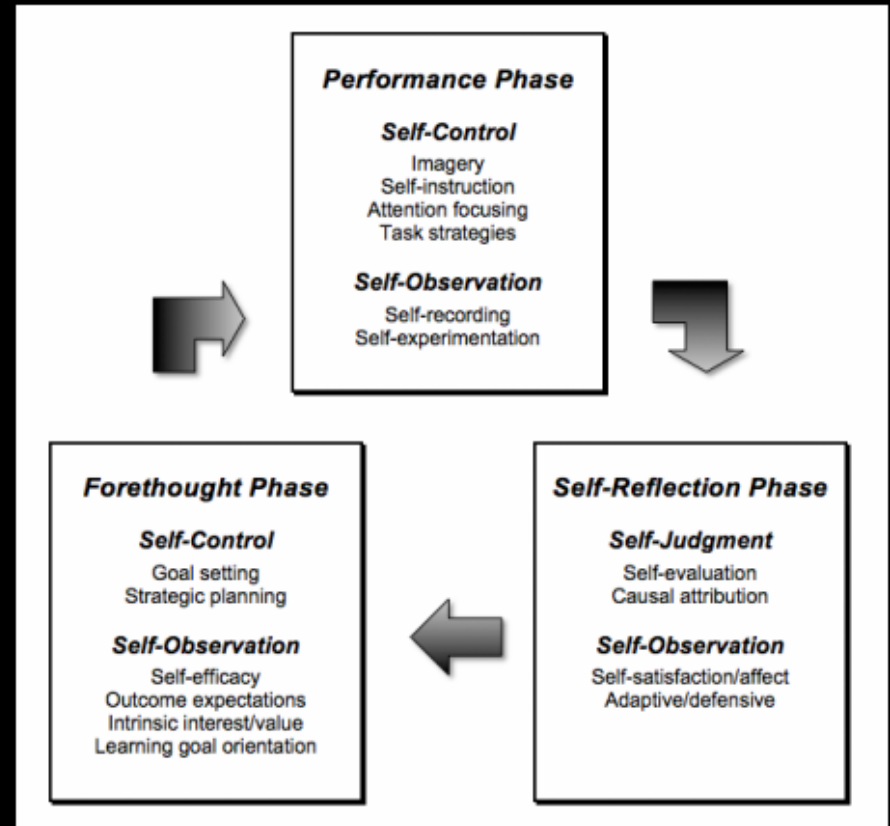
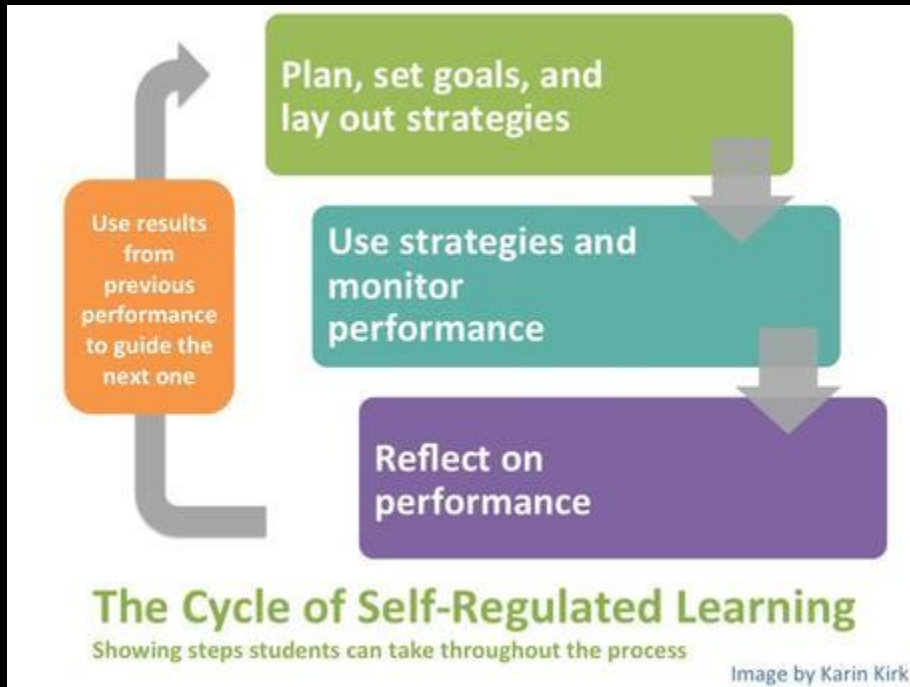


the **only** way to acquire a **complex cognitive skill** is through **mindful practice**

Intent to Improve

- **rote, mindless practice is minimally effective**—cannot just “go through the motions” and expect to get better
- must be **intentional** and **self-regulated**
 - set challenging but realistic **goals**
 - put forth **strategic effort**
 - **analyze** your mistakes... and **adapt**

self-regulated learning



self-regulated learning is like **applying user-centered design cycles... to yourself**. Identify your own needs and resources, try out solutions, and iterate.

Formative Feedback

- **you can't "go it alone"**—writing is usually a **taught skill** (not self-discovered)
- good feedback **helps you self-regulate:**
 - reveals **how well you did** (monitor)
 - suggests concrete **ways to improve** (adapt)

Nicol, D J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback. *Studies in Higher Education*, 31(2), 199-218.

Shute, V. (2008). Focus on formative feedback. *Review of Educational Research*, 78(1), 153-189.

What is Good Feedback?

- **timely**: is received when there is time to think about and act on it
- **formative**: information and suggestions that can be acted upon to improve
- **specific**: directly indicates strengths, weaknesses, and opportunities
- **elaborated**: explains the reasoning, rationale, “how,” and “why” underlying the feedback

LESSON #6:

Seek out opportunities to co-author with experienced writers (who are willing to talk about it).



writing mentors

“**pull back the curtain**” to reveal and explain writing processes and expectations

provide a “**safety net**” for exploration and failure

offer **feedback** for solving writing problems



Write with Faculty

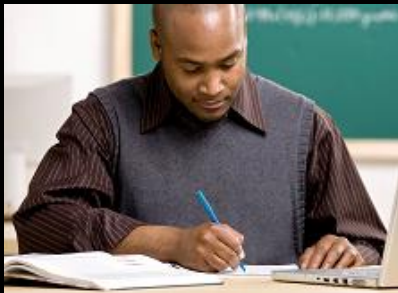
- your **advisor** is (or should be) a crucial **writing mentor/resource**
 - both of you want to publish
 - **32% boost** in career productivity
- **broaden your network** to include other faculty in your program or elsewhere
 - collaboration → expanded portfolio

LESSON #7:

Form a peer writing group.

Write with Peers

- expert and experienced writers are **not the only source** of feedback and mentoring
- your **peers can also provide feedback**



Patchan, M. M., Schunn, C. D., & Correnti, R. J. (2016). The nature of feedback: How peer feedback features affect students' implementation rate and quality of revisions. *Journal of Educational Psychology*, 108(8), 1098-1120.

Receiving Feedback

- receiving feedback from **multiple peers can be as good or better** than feedback from a single expert or instructor
 - more **comprehensive**, several perspectives
 - **triangulates** critical problems
 - peers give **feedback “in your language”**

Giving Feedback

- similar to “learning by teaching,” **giving feedback benefits** writing development
 - practice with **evaluating text**
 - practice **recognizing problems** and **solutions**
 - gain perspective as a **reader** or **audience**

Lundstrom, K., & Baker, W. (2009). To give is better than to receive: The benefits of peer review to the reviewer's own writing. *Journal of Second Language Writing, 18*, 30-43.

Patchan, M. M., & Schunn, C. D. (2015). Understanding the benefits of providing peer feedback: How students respond to peers' text of varying quality. *Instructional Science, 43*(5), 591-614.

Practice Makes Better

- no one is ever “finished” learning how to write and improve their writing
- improving your writing is an **ongoing, intentional process** of writing **more**, seeking out **mentors** and **feedback**, and **using that guidance** to get better
- how can we **speed up** this growth?

Cultivating Resources

Key Resources

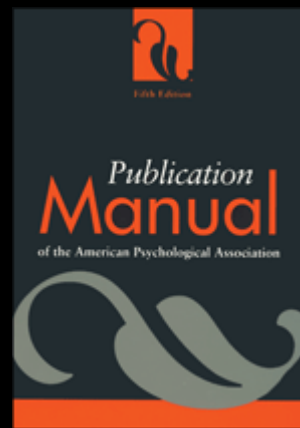
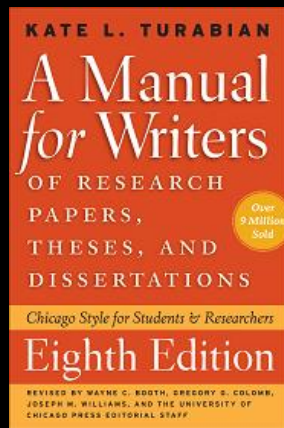
- what do you **need** to be a good writer?
 - knowledge of the “**rules of writing**”
 - understanding of key **genre expectations**
 - a toolbox of writing **strategies**
 - both **general** and **disciplinary knowledge**

LESSON #8:

Build a library of writing style guides, links, and "role model" texts.

Style Guides

- countless **guides for writing** have been published, in print and online



- **buy, download, or bookmark** several resources and **consult them often**

“Rules are Made to Be...”

- “rules of writing” help you **understand the expectations** of the task, genre, or field
 - through practice, the rules become **automatic**
- but, rules **can be broken on purpose**
 - e.g., emphasis, sarcasm, dialect, creativity
 - you cannot **break rules strategically** if you **do not know** or understand them

Role Models

- find papers, authors, and examples of writing that you like—**emulate** them!
- learn by **studying examples** of success
 - pay attention to what works
 - reflect on how and why
 - reverse engineer it

- every **genre** has **expectations**
 - expository vs. narrative vs. argument
 - term paper vs. lit review vs. thesis
 - read examples of work in key genres to **learn about the expected structure**
- pay attention in **Dr. Craig's methods class!**

Journal Example 1 (2013) 1

Contents lists available at ScienceDirect

Journal Example

journal homepage: www.elsevier.com/locate/jexamp

Journal Example

Example Author Manuscript Title

Example Author One^{a,*}, Example Author Two^b, Example Author Three^{c,3,4,5}

^aY. Z. Institute of Example, Example, Example, Example, 660036 City, Country
^bA.B. University of Example, LEA, B-12345 City, Country
^cABC DEF Ltd, c/o Institute Sample, 1 Sample street, City, Country E.G. 12, 1234

ABSTRACT

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Introduction

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<http://dx.doi.org/10.23456/j.example.2013.11.014>

Experiment

- style guides and role models are a starting place for **finding your own voice**
- as part of deliberate practice, **experiment with different ways** of expressing ideas
- carefully **heed the feedback** you receive

Lesson #9:

Read more, broadly,
and mindfully.

Reading-Writing Connection

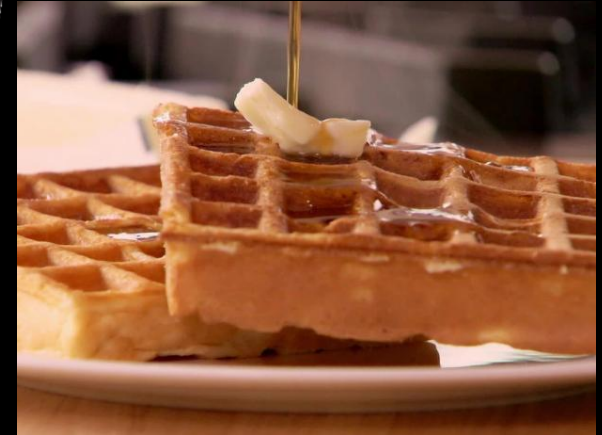
- one of the most critical aspects of improving as a writer is to **read more**
- wait... what?
- reading and writing are **reciprocally connected**



Fitzgerald, J., & Shanahan, T. (2000). Reading and writing relations and their development. *Educational Psychologist*, 35(1), 39-50.

Allen, L. K., Snow, E. L., Crossley, S. A., Jackson, G. T., & McNamara, D. S. (2014). Reading comprehension components and their relation to writing. *L'annee Psychologique/Topics in Cognitive Psychology*, 114, 663-691.

being a **writer who doesn't read...**



... is like being a **chef who doesn't eat**

Mindful Reading

- use the text as a **resource** and inspiration
- **question the author**—be skeptical and critical of claims, evidence, methods
- **connect new and prior knowledge**; actively work to **resolve confusion** or knowledge gaps

Read “Selfishly”

- be a **participant**, not a **recipient**
- how do the ideas, arguments, and findings **relate to your own hypotheses** and work?
 - **support** your ideas? **expand** them?
 - **challenge** your ideas?
- how can these ideas advance **your own** expertise or agenda?

Build your Knowledge Base

- reading increases your **knowledge**, which gives you **more to write about**
 - academic articles expand your knowledge of relevant **disciplines and methods**
 - news articles and books expand your knowledge of the **world and events**
 - recreational reading can **inspire new ideas** or challenge how you think and feel

Critical Thinking

- reading and writing **share underlying reasoning processes**
 - practice **critically evaluating** how good (and poor) texts construct meaning and ideas
 - practice drawing upon and **integrating knowledge** from variety of sources

Perspective Taking

- “**readers**” and “**audience**” are the same
- as a **mindful reader**, you can consider what it’s like to be “**on the other side**”
 - what **annoys** you? what **inspires** you?
 - what **confuses** you? what **informs** you?
- apply “lessons learned” to your writing

Resources for Writing

- as you develop your skills as a writer, simultaneously **develop knowledge, strategies, and perspectives** that effective writers draw upon
- these resources **facilitate** writing and deliberate practice for improvement

Conclusion

9 Research-based Lessons for Writing

1. be user-centered
2. be process-focused
3. have a plan
4. revise and refine
5. commit to improve
6. seek co-authors
7. write with peers
8. build a library of resources
9. read mindfully

A photograph of a wooden desk with a white cup of coffee, a red pen, and a branch of holly with red berries. A white card with handwritten text is in the foreground.

The end!

Thank you!

Questions?