The University of Texas at Austin

Being an Effective UTCS Graduate Student

John Thywissen • 22 Aug 2016
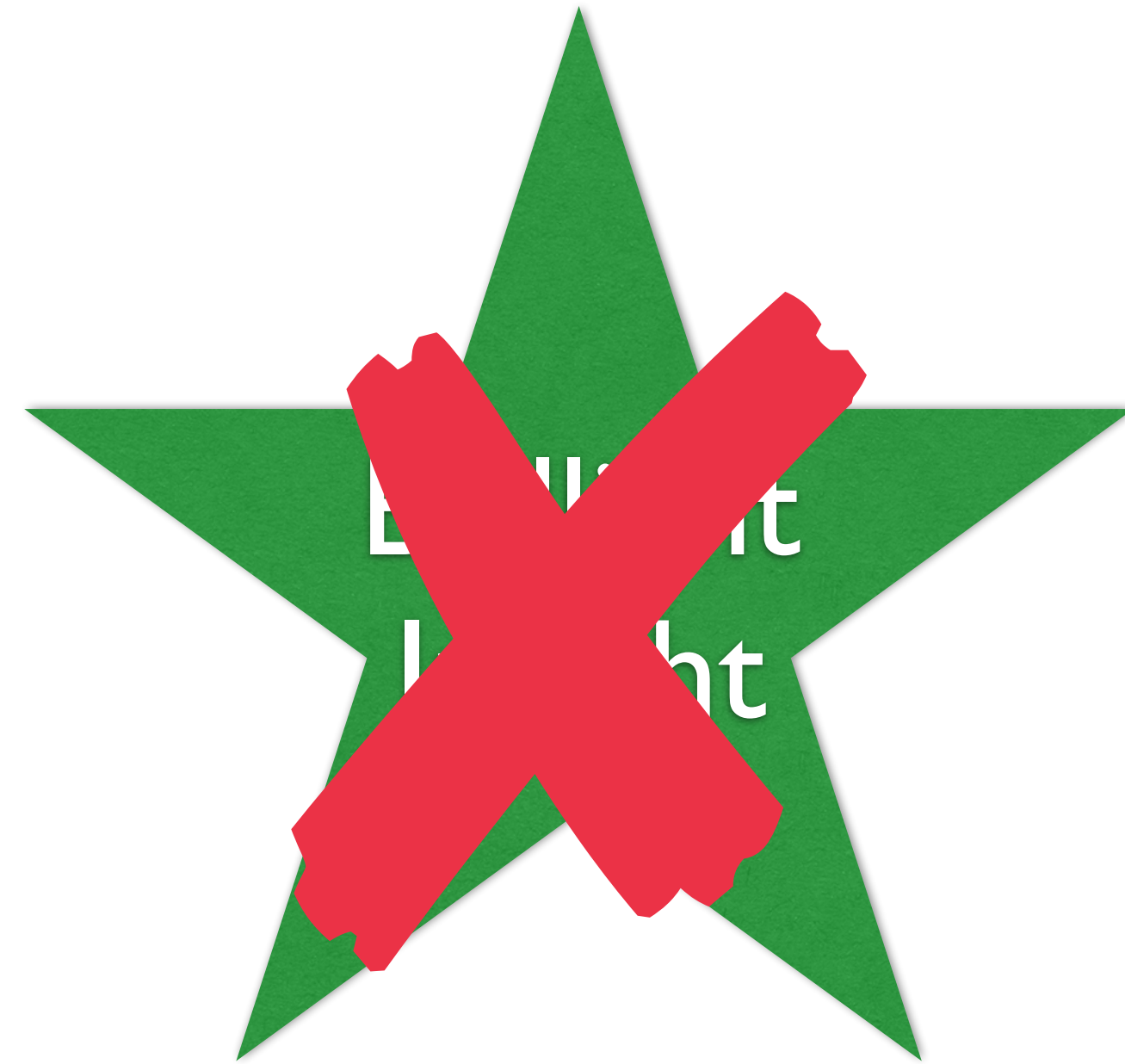
Begin at the End:

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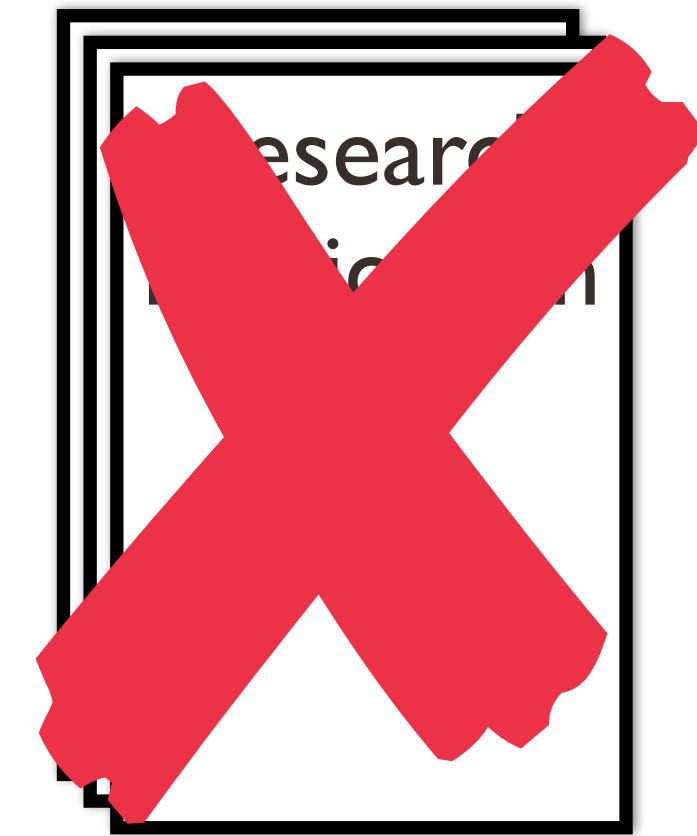# Goal: *Published Research*

Idealized research process

Brilliant Insight

Work to Prove it

Research Publication

Idealized picture is dangerously misleading
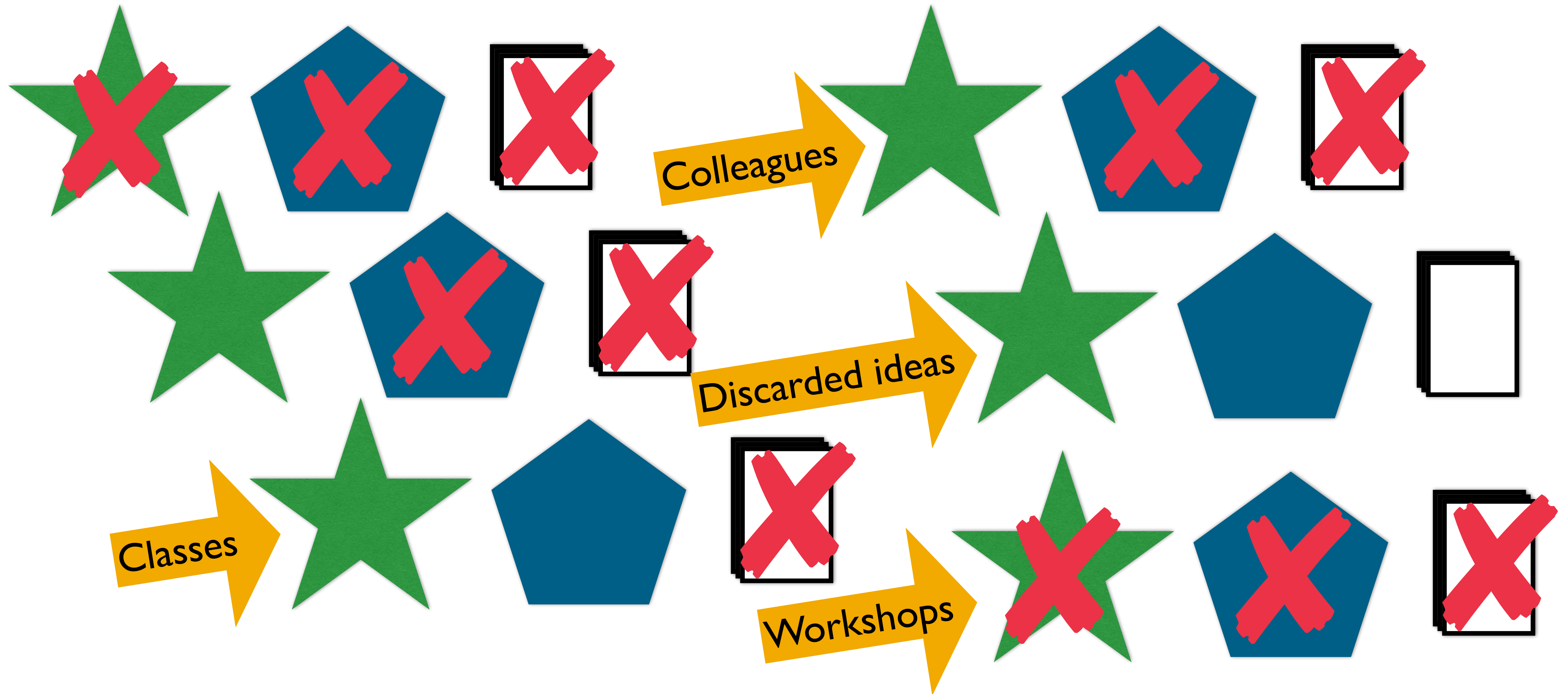
Not novel

Infeasible

Unpublishable

Research is a stochastic process

Listen: The World is Streaming Research Ideas at You

- Go to department **talks.**

- Join a **reading group.** Can't find a good one? *Start one.*

    ▫ GRACS reading group list: http://wiki.cs.utexas.edu/gracs/ReadingGroups

- Participate in **workshops.**

- Skim though **proceedings** and **magazines** from ACM/IEEE/SIAM…

Foundations for Effectiveness: Six parts

1. Self-discipline
2. Skill and proficiency in processes and tools:
   - Task and time management
   - Academic writing and speaking
   - Development tools (for your area)
3. Self-awareness
4. Knowledge in area
5. Collaboration with fellow students and faculty
6. Effective use of group, UTCS and University resources

Time Management

Control your time

Eliminate distractions:

This requires both self-discipline and self-awareness: Decide: It's time to work, or it's time to play. Both are legitimate, but *decide consciously*.

Don't waste others' time

Be slightly early:

"If you're on time, you're late."

Track your time

	M	T	W	R	F	S	N
07:12 M10							
08:00 M11							
08:48 M12							
09:36 M13							
10:24 M14							
11:12 M15							
12:00 M16							
12:48 M17		PL Lunch					
13:36 M18	C S 105 Lecture & Office hours		C S 105 Lecture & Office Hours				
14:24 M19							
15:12 M20				Research Group Meeting			
16:00 M21							
16:48 M22			PHL 391				
17:36 M23							
18:24 M24							
19:12 M25							
20:00 M26							
20:48 M27							
21:36 M28							
22:24 M29							

Task Management

Get (or build) a process to track tasks.

Notes on scraps of paper will *not* work.

Leaving messages in your inbox will *not* work.

"Just remembering" will *not* work.

Your task management process:

–Must be **reliable** enough that you can **trust** it, and

–Must be **simple** enough that you use it **everyday**, and

–Must be **scalable** enough to handle **multiple** simultaneous **projects**.

Suggestion: the GTD system by David Allen:
   http://gettingthingsdone.com

Academic Writing and Speaking

- There are many books and talks on academic writing and speaking.

- Get a few, read them, and then **practice**. This is a skill, so you must **do it** in order to learn it.

- Take opportunities to write and speak. Ask for feedback from the readers/audience.

- *Tip:* Track everything you've read in a citation manager (examples: Zotero or BibDesk).

Suggestions for books on writing:

- *The Craft of Research*
  ISBN 0-226-06566-9 $9

- Turabian
  ISBN 0-226-81638-9 $13

- *Style: Lessons in Clarity and Grace*
  ISBN 0-321-89868-0 $16
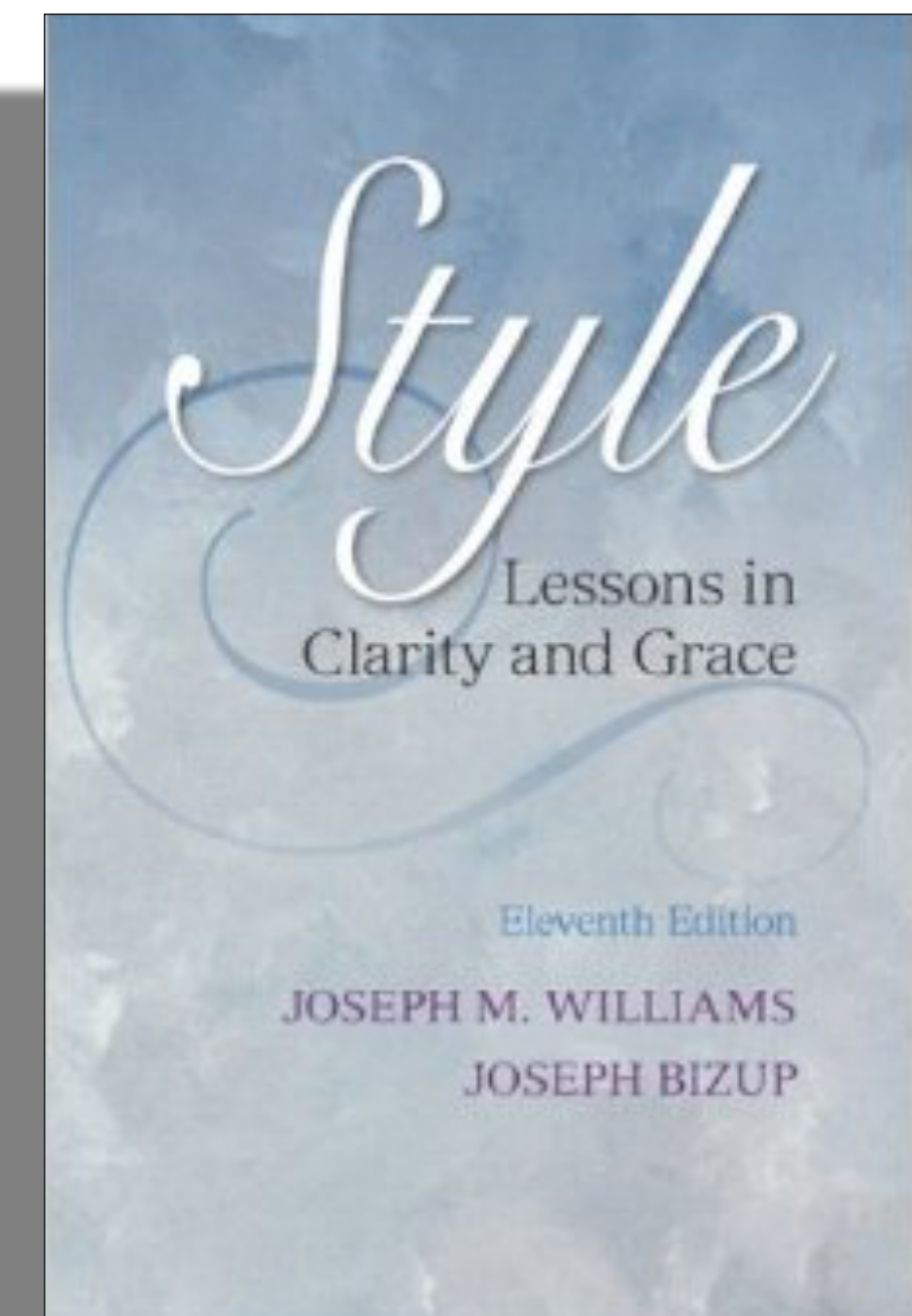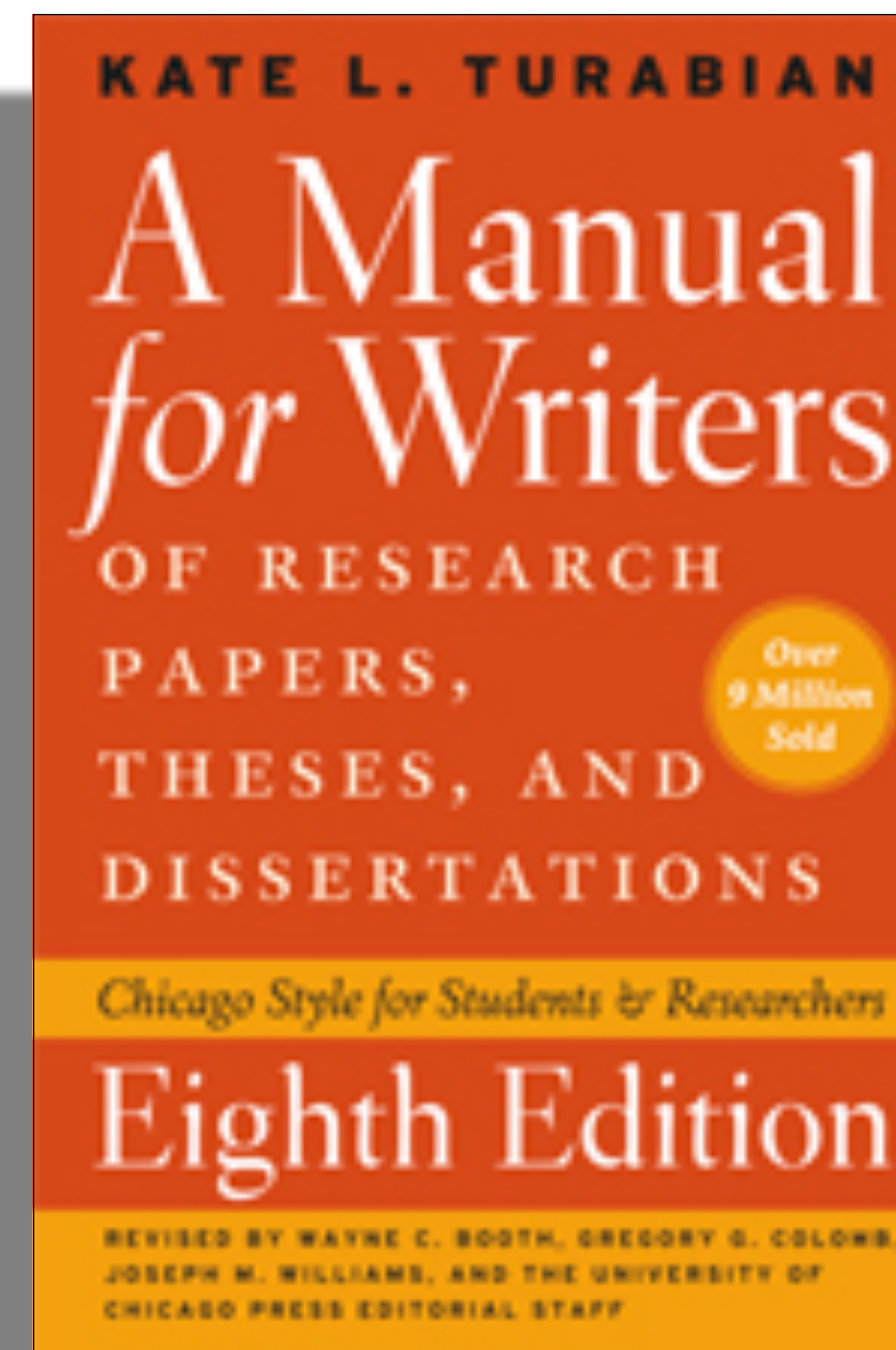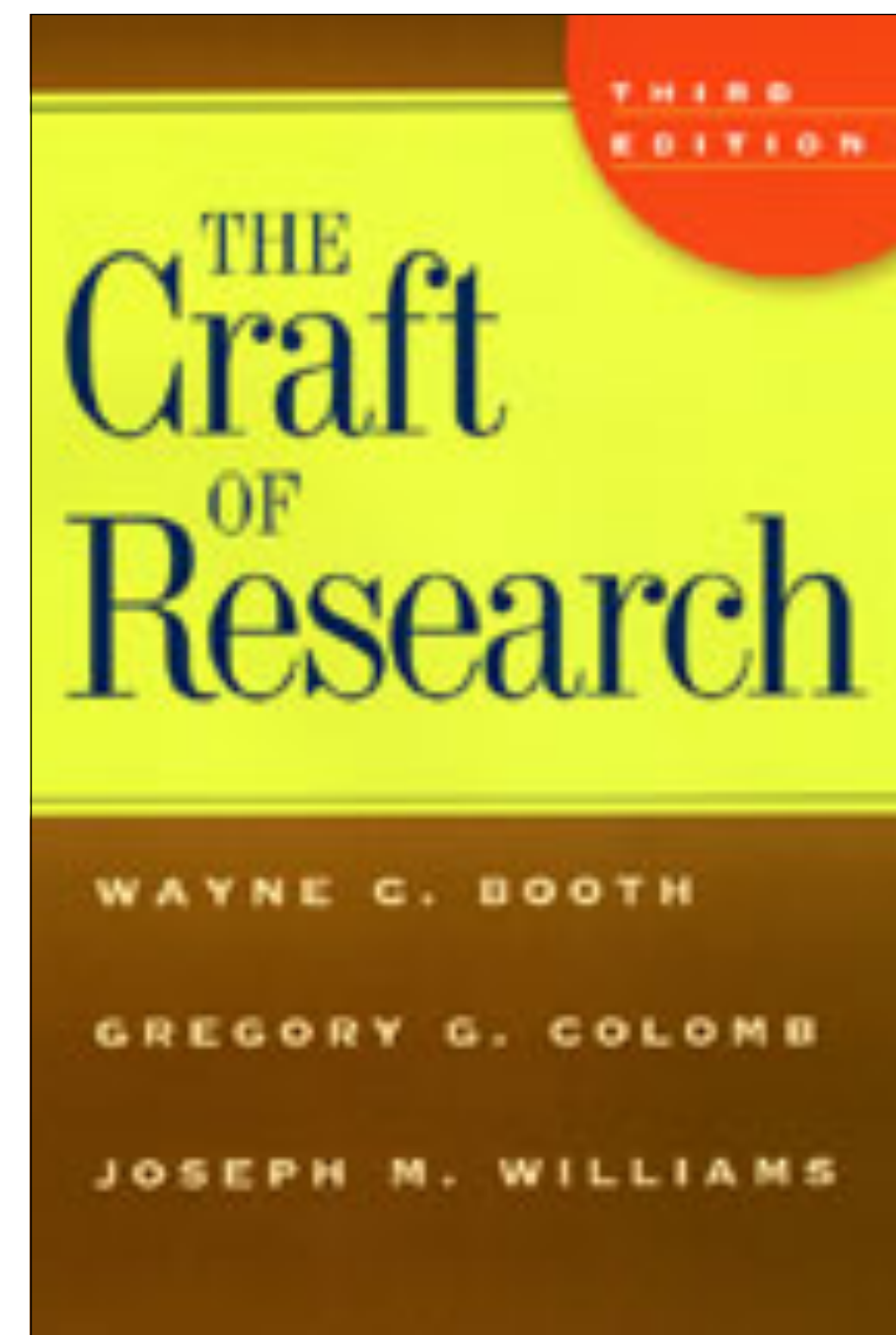
Collaboration with fellow students and faculty

–Again, join (or start) a reading group in your interest area.

–Go to research group meetings.
  □ Use as speaking practice venue.

–Faculty meetings: conference course/advisor meeting: Roughly 1 hour/week.
  □ Agree on goals for the semester.
  □ Use as a writing practice venue.

More advice

Peters, Robert L. *Getting What You Came For: The smart student's guide to earning a master's or Ph.D*. Revised ed. New York: Farrar, Straus and Giroux; 1997. 413 p. [Amazon $12.] ISBN 0-374-52477-7
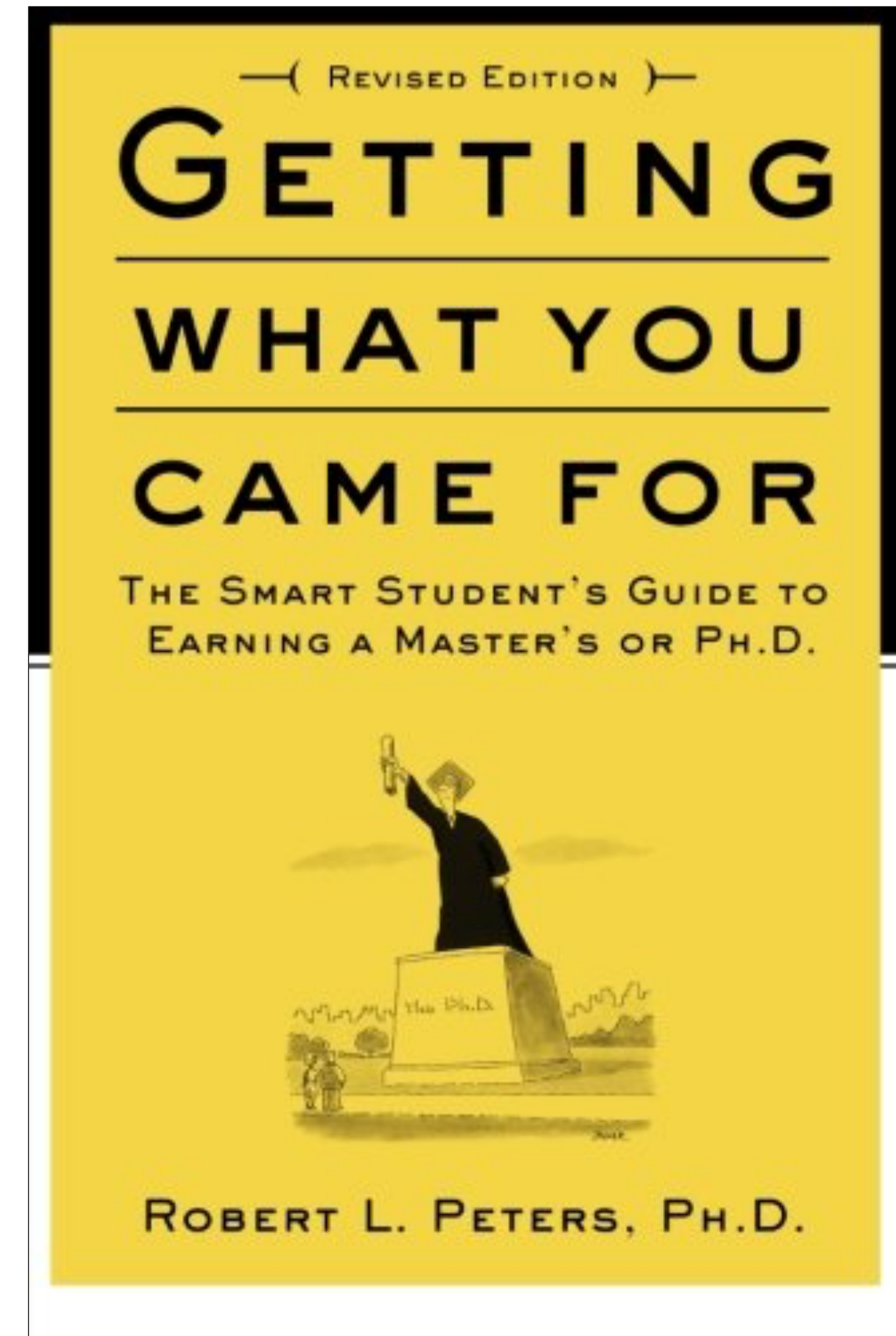
Being an Effective UTCS Graduate Student

Begin at the End

- Goal: *Research publications*

- Participate in research projects.

- Now. Not "real soon".

- Do not wait for the perfect research topic.

- Research is a stochastic process, so multiple "trials" of potential projects are essential.

- View classes as input for your research projects.

- Talk and listen: advisor, fellow students, workshops, other researchers, etc.

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