"Doing Research"

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What ChatGPT imagines doing a PhD is like

One of my favorite quotes

"E.L. Doctorow once said that 'Writing a novel is like driving a car at night. You can see only as far as your headlights, but you can make the whole trip that way.'

You don't have to see where you're going, you don't have to see your destination or everything you will pass along the way. You just have to see two or three feet ahead of you.

This is right up there with the best advice on writing, or life, I have ever heard."

– Anne Lamott

Transitioning from Structured Coursework to Independent Research

- **Develop Research Competencies:**

  - It is hard to do good research – for everyone.

  - A good approach = Learn-by-doing + work hard + be curious + be "sponge-like".

  - Working hard is not sufficient.

- **Establish Independence:** Start independent projects and refine research interests.
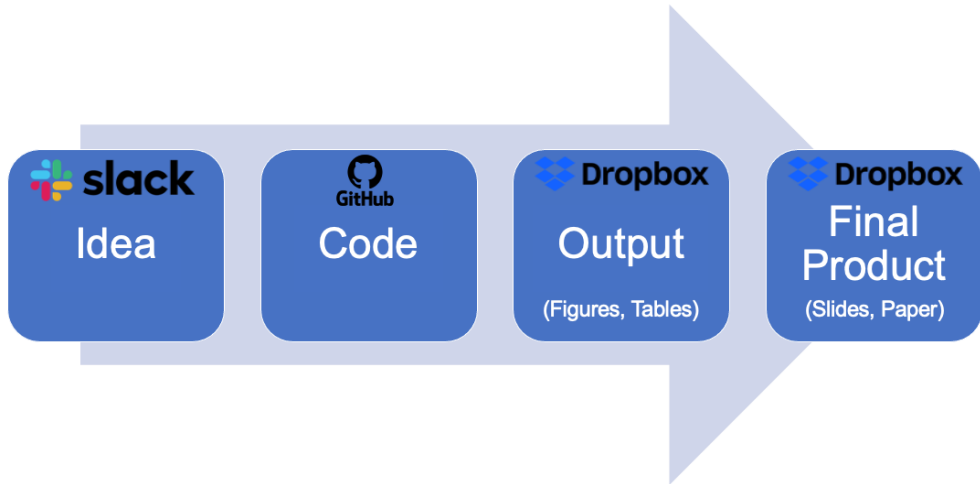
  - Independent research is not a solo process.

- **Learn Core Skills:** Develop both hard and soft skills to conduct research effectively.

Contents

Project Management

A Research Project Workflow

Version Control with GitHub

- **Git:** a version control system

- **Github:** an online hosting service for Git repositories (a GUI for git).

- Why use Github?

  - **Version control:** Track changes and revert to previous states.

  - **Collaboration:** Multiple contributors can work on the same project.

  - **Transparency:** Open-source projects and code sharing.

What are we trying to avoid?

Name	Date modified	Type	Size
archive	8/2/2022 10:23 AM	File folder	
causal_vs_permres_forecasts	8/2/2022 10:23 AM	DO File	4 KB
comparing_forecasts	8/2/2022 10:23 AM	DO File	4 KB
ftest_coefficients	8/2/2022 10:23 AM	DO File	2 KB
lead_figs	8/2/2022 10:23 AM	DO File	2 KB
make_forecast_vnf19_lt50	8/2/2022 10:23 AM	DO File	18 KB
make_forecast_vnf21	8/2/2022 10:23 AM	DO File	18 KB
make_forecasts_v1	8/2/2022 10:23 AM	DO File	5 KB
make_forecasts_v2	8/2/2022 10:23 AM	DO File	5 KB
make_forecasts_v3	8/2/2022 10:23 AM	DO File	6 KB
make_forecasts_v3_bmweights	8/2/2022 10:23 AM	DO File	6 KB
make_forecasts_vnhtemp	8/2/2022 10:23 AM	DO File	8 KB
make_gray_map	8/2/2022 10:23 AM	DO File	2 KB
make_mean_forecast	8/2/2022 10:23 AM	DO File	4 KB
maps_022717	8/2/2022 10:23 AM	DO File	4 KB
maps_022717_seattle	8/2/2022 10:23 AM	DO File	3 KB
maps_update	8/2/2022 10:23 AM	DO File	2 KB
maps_update_v2	8/2/2022 10:23 AM	DO File	3 KB
maptile2_test	8/2/2022 10:23 AM	DO File	1 KB

Basic terminology

- **Repository:** main code base for a project.

- **Branch:** An independent area of project development.

- **Origin:** the remote version of a branch of code (what you find online).

- **Local:** the version of a branch on your local machine.

Using GitHub

▶ **Step 1:** Create a repo.

▶ **Step 2:** Clone the repo to create a local copy.

  ▶ Create a folder in dropbox to store repos, e.g., /Users/jmc4qg/Dropbox/Github/

▶ **Step 3:** Fetch origin – updates the local branch with changs from the origin.

▶ **Step 4:** Make changes.

▶ **Step 5:** Commit – groups together code you've editied. Commit early, commit often!

▶ **Step 6:** Push – sends your comments to the "origin" so other people can see changes.

File Directories and Organization: Basic principles

▶ **Consistency:** Use a consistent naming and folder structure.

  ▶ Avoid spaces; use underscores or hyphens: `draft_v2.tex`

  ▶ Use lowercase letters.

  ▶ Avoid special characters like '*', '?', '&', etc.

▶ **Clarity:** Make sure file names and directory structures are clear and intuitive.

▶ **Versioning:** Track versions of important files using descriptive names or version control (Github for code).

▶ **Modularity:** Separate raw data, processed data, code (Github), and outputs.

File Directories and Organization: An Example

▶ Ensures efficiency in finding and using files.

▶ Facilitates collaboration with others.

▶ Supports reproducibility in research.

▶ Prevents data loss and confusion.

▶ Cloud storage is a must. Hard drives break.
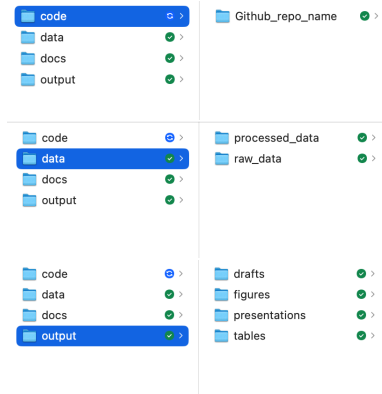
Good Coding Practices

- ▶ Writing clean, maintainable code is essential for successful research.

- ▶ Use version control to manage changes and collaborate effectively.

- ▶ Document your code to ensure it can be understood and reused by others and yourself!

- ▶ Test your code thoroughly to ensure reliability and robustness.

  - ▶ Create small-scale examples to be efficient.

- ▶ Continuously refine your coding practices as you gain experience.

- ▶ A helpful guide:
  https://web.stanford.edu/~gentzkow/research/CodeAndData.pdf
  https://github.com/gentzkow/lab-manual-archive

Managing your Time

- ▶ You are going to have to work hard.
- ▶ You need to figure out a way to create structure so that hard work = productive work.
- ▶ Your Time = Your Research + Teaching + Admin/Emails + RA Work + Personal Life.
  - ▶ These are separate bins. "Your research" is a full-time job.
  - ▶ Other bins should not crowd out your research time.
- ▶ Ways to create structure:
  - ▶ Time blocks: allocate specific blocks of time 2-3 hours for different tasks and activities.
  - ▶ Daily Scheduling: Create a daily schedule based on your time blocks. Stick to it but remain flexible.
  - ▶ Weekly review: review progress. Adjust as needed.
  - ▶ Pomodoro technique
- ▶ Creating structure is important so that you can be productive but also set boundaries between work and personal time.

Avoiding Procrastination . . . let me know if you figure this out.

- ▶ Break tasks into smaller steps

    - ▶ Large tasks can feel overwhelming; breaking them down makes them more manageable.

    - ▶ Example: Instead of 'Write paper', break it into 'Draft introduction', 'Review literature', etc.

- ▶ The Two-Minute Rule:

    - ▶ If a task will take less than two minutes, do it immediately.

- ▶ Set internal deadlines.

- ▶ Reduce distractions.

- ▶ Good luck. . .

To Do Lists

▶ I find it helpful to break things down into daily and weekly tasks.

    ▶ Set-up a google doc.

    ▶ Use the check box tool... gotta get that dopamine fix.

    ▶ Define specific, measurable, achievable, relevant, and time-bound goals (SMART), e.g. "Write the literature review by the end of the week."

    ▶ Prioritize: (urgent-important, not-urgent important, urgent-not important, not-urgent not-important)

Questions?

SurThriving the PhD

Aspire to do Great Work

- ▶ Your time is valuable.

- ▶ The PhD is amazing opportunity to work on whatever you're interested in with near complete freedom.

- ▶ Aim to do research that addresses significant challenges or advances understanding

- ▶ Develop a vision for your research that extends beyond the immediate outcomes, i.e., getting a PhD.

- ▶ Consider the broader impact of your work on the field and society.

- ▶ At the same time:

  - ▶ Balance ambition with feasibility – do what you can to ensure a clear path to a solution.

  - ▶ Focus on areas where you have or can develop a strategic advantage.

Prepare yourself for Opportunity

"Luck favors the prepared mind." – Louis Pasteur

▶ Luck is a factor, but it's not everything.

▶ Success often results from being prepared when luck strikes.

▶ Continuously work to improve your abilities, skills, efficiency – your potential is dynamic.

▶ Don't cap your potential by worrying about "looking smart" – "I don't know" is a wonderfully liberating answer that creates an opportunity to find out.

▶ There are diminishing returns to "smart". At this point curious » smart.

▶ Stay informed about developments in the field and emerging opportunities.

Be Courageous

▶ Don't be afraid to question established approaches.

▶ Bold ideas often lead to the most significant advances.

▶ Pursue original ideas – independent thinking is essential.

▶ Don't be afraid to fail. Learning from our failures and mistakes delivers tremendous growth potential.

▶ Get good at failing. Become an expert at recovering from it.

▶ It's called "re-search" for a reason.

Embrace Uncertainty

▶ Become comfortable working with incomplete information.

▶ Bewilderment and perplexity are the modal state.

▶ We're always looking for resolution.

▶ If you already know the answer, you're doing it wrong.

▶ Embrace uncertainty as a tool for discovery – question assumptions and explore alternatives.

▶ Believe in your ideas enough to keep moving.

▶ Doubt them enough to refine and improve them.

Knowledge and Productivity are like Compound Interest

"I find that the harder I work, the more luck I seem to have" -

– Thomas Jefferson

"The more you know, the more you learn; the more you learn, the more you can do; the more you can do, the more the opportunity."

– Richard Hamming

▶ Consistency is key:
  ▶ Regular, focused effort compounds over time.
  ▶ Small, consistent gains lead to significant long-term results

▶ Work smart, not just hard
  ▶ Solid effort, intelligently applied, gets you surprisingly far.
  ▶ Drive, misapplied, doesn't get you anywhere.
  ▶ Manage yourself: Learn to avoid wasting time on activities that don't drive progress.

Questions?

Coming up with Ideas

"The best way to have a good idea is to have a lot of ideas." – Linus Pauling

What is your question?

- All good research starts with a *question* that is *interesting*.

- Are you interested in the question?

  - If not, how can you possibly expect anyone else to be?

  - You certainly won't enjoy working on it for the next 5-10 years.

- Can you explain to others why it's interesting and exciting?

  - to your peers and professors

  - non-economists

The 5 Whys

▶ A simple, iterative questioning technique used to think deeply about a problem and improve reasoning.

▶ **Example Research Idea:** How does remote work affect employee productivity?

   1. Why is this idea interesting? - Because remote work is becoming more common.

   2. Why is the rise of remote work important? – Because it changes how companies operate and manage employees.

   3. Why does this change in operations matter? – Because it can influence overall productivity and company success.

   4. Why is it important to understand productivity in remote work? - Because understanding it can help optimize work practices for better outcomes.

   5. Why is optimizing work practices valuable? - Because it directly affects employee well-being, job satisfaction, and company profitability.

Some ways to come up with ideas...

- ▶ Think about ideas early, often, and always.
- ▶ Good ideas are often preceded by not-so-good ideas.
- ▶ Write all your ideas down!
    - ▶ Especially *why you care!*
- ▶ Potential sources:
    - ▶ Your expertise/experiences/interests.
    - ▶ Classes – what are the important unanswered questions?
    - ▶ Seminars – what does the seminar make me think about?
    - ▶ Read newspaper articles/listen to podcasts
    - ▶ Read non-economics non-fiction
    - ▶ Talk to people (not just economists)
    - ▶ Think about economics "out in the real world".
- ▶ In general do not go to the literature for ideas
    - ▶ It's very hard to find a new question here.
    - ▶ Broad survey articles can stimulate ideas
- ▶ Keep at it... it's the only way.

Avoid corner solutions

- There is often a trade-off between how interesting and important a question is and how convicingly it can be answered.

- Being on the frontier is necessary.

  - The more interesting/novel the question, the less you have to nail it completely.

  - If you're the 10th paper on X, you'd better have the cleanest approach by a long shot.

  - Different fields/people have different tastes as to where on the frontier to be.

  - Everyone agrees that corner solutions are bad.

The Value of Reductionism

- ▶ The world is complex: interesting but not very understandable.

- ▶ We use reductionism to understand the world.

- ▶ Think about a system/topic that interests you.

    - ▶ Try and formulate a question.

    - ▶ Break the question down and consider its elements.

    - ▶ Think about conceivable answers to the question.

    - ▶ Can you distinguish between the set of possible answers?

    - ▶ If too many conceptual difficulties are encountered then try again.

- ▶ Keep detailed notes/a research diary of your efforts – you will forget.

Stay Open to New Ideas

- ▶ Engage with Diverse Content:
    - ▶ Read widely, including outside your immediate field.
    - ▶ Attend seminars, conferences, and workshops.

- ▶ Be Curious and Ask Questions:
    - ▶ Question assumptions and explore "what if" scenarios.
    - ▶ Curiosity can lead to unexpected and innovative ideas.

- ▶ Accept and Learn from Failure:
    - ▶ Not all ideas will work, and that's okay.
    - ▶ Learn from what doesn't work to refine your thinking and approach.

- ▶ Embrace Interdisciplinary Thinking:
    - ▶ Cross-disciplinary research can open up new avenues for exploration.
    - ▶ Consider how concepts from other fields might apply to your research.

Any Questions?

Research Production

"It takes just as long to bad papers as it does good papers, so you might as well write good papers." – anonymous

So you think you have an idea?

- ▶ "Fast forward" to the end – so what? Why is this interesting? Fine tune your question.

  - ▶ What would the ideal data and variation look like?

  - ▶ What is the essential data/variation you need?

  - ▶ Does this exist?

  - ▶ What's the underlying "model"/"data generating process"?

  - ▶ What issues/questions/concerns emerge? How will you deal with them?

  - ▶ Talk about your ideas with people early and often – research is not a solo process.

  - ▶ Your idea will develop as you learn more.

- ▶ Proceed systematically. If something is essential to a project's success do that now, not later!

Talk to People and Present your Work

- ▶ Most of my research ideas are bad.

- ▶ Don't be afraid to have bad ideas.

- ▶ Learning to tell the difference between good and bad research ideas is a critical skill to develop.

  - ▶ Sometimes an idea that you think is bad actually has an interesting angle that you missed

  - ▶ Othertimes something you think is good may be terrible.

- ▶ Write ideas down to organize your thoughts and then talk to people about them.

  - ▶ Many ideas will not survive the writing down process.

  - ▶ Many more still will not survive a conversation.

Discovering that someone has already answered your idea

- ▶ This is always disappointing.

- ▶ It will happen.

- ▶ At the same time:

  1. You just discovered the answer to the question you wanted to answer and it didn't cost you thousands of hours! Huzzah!

  2. An idea you had was deemed worthy of spending thousands of hours on was answered by someone else with more experience!

- ▶ Be encouraged! You're clearly moving in the right direction!

The Selection Problem

▶ Published academic papers are highly selected.

    1) They got written.

    2) They got published.

    3) They were sufficiently influential that they got onto the syllabus.

▶ This is not the norm.

▶ Most projects fail.

▶ Even those that succeed change a LOT from conception to conclusion.

Why Might Projects Fail?

- ▶ We find other papers that are too similar.
- ▶ The question was too hard/intractable/unintersting.
- ▶ Data doesn't really exist for what we want to do.
- ▶ The data does exist, but we couldn't get it.
- ▶ The data wasn't good enough to answer the question properly.
- ▶ Data/empirical problems were not surmountable.
- ▶ Couldn't find the right natural experiment.
- ▶ No first stage.
- ▶ Couldn't kill the pre-trends.
- ▶ Results were inconclusive.
- ▶ Project was completely misconceived.
- ▶ Standard errors are too big.

Managing Project Failure

- All these reasons start from a premise that you're doing something somewhat reasonable to start with.

- Sometimes you adapt. Often you learn something useful anyway.

- Can you find another research design?

- Figure out the critical steps and do them rapidly.

    - Don't waste time on steps that aren't critical.

    - Cut your losses if critical steps fail.

- Killing projects is probably the hardest decision.

    - Talk to people!

    - You haven't failed!

You're creating something ineffable

▶ Finished, polished, research papers are like skyscrapers.

▶ What you see stands as a testament to the work that's been done.

▶ The vast majority of the effort that goes into finishing an original research project – the scaffolding, foundation work, and interior structure – is hidden from view.

   ▶ This includes all the experimentation, data analysis, drafts, and revisions that don't make it into the final paper.

The Importance of Selling Your Work

- ▶ Presentation matters:
    - ▶ It's not enough to do great work – you must present it effectively.
    - ▶ Learn to write clearly and precisely.
    - ▶ Learn to give effective and engaging talks.
    - ▶ Learn to communicate and discuss research with others informally.
- ▶ Your work needs to stand out to get the recognition it deserves.
- ▶ Effective communication ensures your work reaches and influences others.
- ▶ **Homework:** Download 5-10 JMPs in a field that you're interested in, read all of them in under 2 hours, and rank them from best to worst. Now you know why recruiting committees value readability.

Any Questions?

Reading

The Four Levels of Reading (Adler & Van Doren, 1940)

▶ **Elementary Reading:** Understanding the basic meaning of words and sentences.

▶ **Inspectional Reading:** Skimming to get the gist of the book/paper.

▶ **Analytical Reading:** Engaging deeply with the content to understand and critique the book/paper.

▶ **Syntopical Reading:** Comparing and synthesizing multiple books/papers to develop a comprehensive understanding.

Active Reading Strategies

- **Prioritize:** Focus on papers that are most relevant to your most active research idea.

- **Annotate:** Take notes, underline key points, and write questions in the margins.

- **Summarize:** After reading, write a brief summary in your own words.

- **Engage:** Discuss the paper with others to gain different perspectives.

- **Revisit:** Re-read sections that were difficult or particularly important.

- **Apply:** Use insights gained from reading to inform your own research or work.

Critical Reading and Analysis

▶ **Question Assumptions:** What assumptions does the author make?

▶ **Evaluate Evidence:** Is the evidence presented convincing?

▶ **Consider Alternative Views:** How do the arguments compare to other perspectives on the topic?

▶ **Reflect on Implications:** What are the broader implications of the author's arguments?

Common Pitfalls to Avoid

- ▶ **Reading Without Purpose:** Always know why you are reading a particular paper.

- ▶ **Passive Reading:** Engage actively with the text; don't just absorb information.

- ▶ **Reading Everything in Detail:** Focus on what's relevant.

- ▶ **Uncritical Acceptance:** Always challenge the ideas presented; don't accept conclusions without scrutiny.

- ▶ **Neglecting Re-Reading:** Important papers often require multiple readings to fully understand.

- ▶ **Overloading:** Avoid trying to read too much at once; focus on quality over quantity.

- ▶ **Ignoring Context:** Always consider the historical and cultural context in which the paper was written.

The Importance of Reading for Writing

"To write well, you must read well." – Joe Moran

▶ **Read to Write:** Reading widely improves your writing.

▶ **Learn from Others:** Study how great writers craft sentences.

▶ **Critical Reading:** Analyze the structure and style of sentences in the books you read.

Any Questions?

Writing

Academic Writing

- **Purpose:** Conveying complex ideas clearly and effectively.

- **Importance:** High-quality academic writing enhances credibility and advances knowledge.

- **Challenge:**

  - Academic writing is not just about what you say, but how you say it.

  - Crafting clear, persuasive, and engaging papers is essential.

  - Writing well takes time and effort – it is an active process.

Understanding Your Audience

"Write for the reader who knows less, not more." – Joe Moran

▶ Consider who will be reading your paper (peers, scholars, practitioners).

▶ Adjust the level of detail, language, and style based on your audience's familiarity with the subject.

▶ What do you want your audience to learn, feel, or do after reading your paper?

Writing with Rhythm

- ▶ Vary sentence lengths to create a pleasing rhythm.

- ▶ Use rhythm to guide and pace the reader through your text.

- ▶ Pay attention to the sound and flow of your sentences.

The Importance of Writing a Clear Research Question

▶ It's the foundation of your paper.

▶ Your research question guides your entire writing process.

▶ A well defined question keeps your writing focused.

▶ Ensure your question is clear, specific, and researchable.

Sentences

▶ Sentences are the smallest unit of thought.

▶ A well-crafted sentence is the building block of effective writing.

▶ Sentences should be clear, precise, and engaging.

▶ Good writing starts with the deliberate crafting of each sentence.

The Writing Process: From Draft to Final Manuscript

▶ **Drafting:** Start with a rough draft focusing on getting ideas down.

▶ **Revising:** Focus on content, structure, and flow; refine arguments and improve clarity.

▶ **Editing:** Focus on language, grammar, and style; ensure consistency and polish.

▶ **Proofreading:** Final check for typos, formatting, and minor errors.

"Shitty First Drafts" – Anne Lammott

- ▶ Core idea: every good piece of writing begins with a "shitty first draft".

- ▶ First drafts are meant to be imperfect.

- ▶ The goal should be to get ideas on paper.

- ▶ Trust the process.

- ▶ Embrace the messiness of the first draft as a necessary step toward a polished final product.

  - ▶ Writing a bad first draft allows for creativity without self-criticism.

  - ▶ Just focus on getting words down rather than crafting perfect sentences.

  - ▶ Good writing is re-writing... you have to have something to re-write.

Why First Drafts Matter

▶ First drafts help you discover what you want to say.

▶ They lay the groundwork for structure and coherence in subsequent drafts.

▶ Rough ideas and messy sentences are the seeds of strong, refined writing.

▶ Great writing emerges from the willingness to start with something imperfect.

Revising your drafts

- ▶ Ensure all arguments are fully developed and supported.

- ▶ Check that the paper flows logically from one point to the next.

- ▶ Simplify complex sentences and clarify ambiguous points.

- ▶ Maintain a consistent tone, style, and terminology throughout.

- ▶ **Tip:** Space away from your writing is incredibly helpful. You need to be able to see your work with fresh eyes.

The Importance of Clear and Concise Writing

▶ Develop a consistent style

▶ Avoid Jargon – Use technical terms sparingly and define them when necessary.

▶ Avoid using too many, unnecessary, superfluous words.

▶ Make sure your writing is easy to understand on the first read.

▶ Use the active voice to make your writing more engaging and dynamic.

"Writing Matters" (Feld et al., 2024, Journal of Economic Behavior & Organization

- ▶ Study investigates the impact of writing quality on economists' perceptions of academic papers.

- ▶ Design:

  - ▶ 30 economics papers, each with original and language-edited versions.

  - ▶ 18 writing experts judged writing quality; 30 economists judged academic quality.

  - ▶ Random assignment: Experts evaluated 5 papers in original and 5 in edited form.

  - ▶ No one saw both versions of the same paper.

  - ▶ No one knew that some of the papers were edited.

The Editing Process

- ► Editors:

  - ► improved the structure of the paper;

  - ► polished the writing at the sentence and word level;

  - ► sent the paper back to the writers, asking them to answer any questions and to check whether the edited version had retained the original meaning.

  - ► incorporated responses and changes.

  - ► Treatment: $\approx$12 hours per paper.

Effects on Writing Quality

Table 1
Effect of language editing on writing quality.

	(1) Std. Writing Quality	(2) Std. Key Message	(3) Std. No mistakes	(4) Std. Easy to read	(5) Std. Concise
Edited	0.603***	0.582***	0.666***	0.529***	0.496***
	(0.138)	(0.140)	(0.150)	(0.120)	(0.119)
Observations	179	180	180	180	180
R-squared	0.587	0.589	0.595	0.591	0.595
Mean outcome of original versions	−0.207	−0.291	−0.333	−0.264	−0.248

Note: This table reports results from OLS regressions of the dependent variables shown in the column headers on an edited dummy variable (indicating whether the paper was edited) as well as paper fixed effects and rater fixed effects. The first column only has 179 observations because one of the experts did not rate the writing quality for one of the papers. Standard errors clustered at the paper level in parenthesis.

Effects on Economists' Evaluations

Table 2

Effect of language editing on economists' evaluations.

	(1) Std. Paper Quality	(2) Conference	(3) Desk Reject	(4) Publish	(5) Std. Writing Quality
Edited	0.203**	8.433***	−5.087	4.053**	0.197*
	(0.095)	(2.671)	(3.385)	(1.976)	(0.104)
Observations	300	300	300	300	300
R-squared	0.652	0.551	0.548	0.653	0.611
Mean outcome of original versions	−0.102	58.76	47.653	33.14	−0.156

Note: This table reports results from OLS regressions of the dependent variables shown in the column headers on an edited dummy variable (indicating whether the paper was edited) as well as paper fixed effects and rater fixed effects. Standard errors clustered at the paper level in parenthesis.

Conclusion

▶ Better writing leads to better academic reception.

▶ Writing quality is an important factor in academic success.

▶ Consider investing in language editing to enhance paper impact.

▶ **Homework:** Download 10 JMPs in a field that you're interested in, read all of them in under 3 hours, and rank them from best to worst. Now you know why recruiting committees value readability.

Any Questions?

Managing Up

Introduction

- ▶ Your advisor is your primary mentor, guiding your research and academic progress.

- ▶ A strong relationship can lead to better support, more opportunities, and greater success.

- ▶ Effective advisor relationships are built on communication, trust, and mutual respect.

- ▶ Managing expectations and proactively addressing challenges are essential.

Understanding Your Advisor's Role

- **Advisor Responsibilities**

  - Provide guidance on research practice.

  - Support your professional development and academic growth.

  - Help navigate administrative and academic hurdles.

- **Understanding Expectations**

  - Clarify what your advisor expects in terms of progress, communication, and output.

  - Align your research interests with your advisor's expertise.

Understanding Your Advisor

- **Know Their Priorities**
  - Research focus and long-term goals.
  - Key projects and deadlines.

- **Understand Their Working Style**
  - Preferred communication methods (email, meetings, informal check-ins).
  - Decision-making style (collaborative vs. directive).

- **Recognize Their Expectations**
  - Clarity on deliverables and timelines.
  - Standards for quality and thoroughness.
  - Independence and initiative.

Managing Up

- **What is Managing Up?**

    - Proactively building a positive relationship with your advisor.

    - Ensuring alignment between your work and your advisors expectations.

- **Why It's Important**

    - Improves communication skills.

    - Enhances productivity and job satisfaction.

    - Leads to better research outcomes.

Effective Communication

- **Regular Updates**
  - Schedule consistent check-ins to discuss progress and challenges.
  - Provide a written agenda/key points in advance of each meeting.

- **Clear and Concise Updates**
  - Keep your advisor informed with succinct updates.
  - Address any delays or issues promptly.

- **Listening and Feedback**
  - Actively listen to your advisor's feedback.
  - Your role is to think deeply about feedback.
  - If you don't pursue something, explain why.

- **Ask for Clarification**
  - Don't hesitate to ask questions if something is unclear.
  - Ensure you understand the "why" behind suggestions/tasks.

- **Be Proactive**
  - Anticipate needs and challenges.
  - Suggest solutions, not just problems.

Managing Deadlines and Deliverables

- **Set Clear Deadlines**

  - Agree on realistic timelines for tasks.

  - Communicate early if delays are expected.

- **Prioritize Tasks**

  - Understand what's urgent and what can wait.

- **Deliver High-Quality Work**

  - Review your work before submission.

  - Strive for accuracy and thoroughness.

Building Trust and Reliability

- **Be Consistent**
  - Deliver on your commitments consistently to build trust.
  - Build a reputation for reliability.

- **Own Your Mistakes**
  - Admit errors and propose corrective actions.
  - Show a willingness to learn from mistakes and are committed to improving.

- **Be Transparent**
  - Keep your PI informed of your progress, both positive and negative.
  - Don't hide problems; address them directly.
  - Avoid negative surprises by communicating issues early.

Navigating Conflict and Disagreements

- **Address Issues Early**
  - Don't let small issues fester into bigger problems.

- **Focus on Solutions**
  - Frame feedback in terms of potential solutions.
  - Use 'I' statements to express how you feel without blaming.

- **Stay Professional**
  - Keep discussions respectful and focused on the work.

- **Seeking Mediation if Necessary**
  - If conflicts persist, seek advice from the DGS or department chair.
  - Utilize university resources.

Seeking Feedback and Growth

- **Request Feedback Regularly**
  - Actively seek feedback on your performance.

- **Show Willingness to Learn**
  - Be open to constructive criticism.
  - Use feedback to improve and grow.

- **Set Personal Development Goals**
  - Align your growth with the needs of the research project.

- **Know When to Seek Help**
  - Reach out when you need direction or support.
  - Avoid unnecessary dependence; try to solve problems independently first.

Navigating Career Conversations

- **Be Open About Your Goals**

  - Discuss your career aspirations with your advisor.

  - Seek advice on how to achieve these within your projects/program.

- **Align Research Tasks with Career Development**

  - Look for opportunities to develop skills that are relevant to your future career.

  - Ask your advisor to introduce you to key people in your field.

- **Plan for the Next Steps**

  - Work with your advisor to identify opportunities for growth beyond the current role.

  - Attend conferences and seminars with your advisor.

Working with Multiple Advisors

- **Clarify Roles and Expectations**

  - Discuss with both advisors their expectations for your work and how they envision their roles.

  - Understand any differences in their priorities.

- **Coordinate Communication**

  - Establish a consistent meeting schedule with both advisors – together and separately as needed.

  - Ensure consistent communication to avoid conflicting guidance.

  - Act as a bridge between your advisors, keeping each informed about your progress with the other.

  - Prioritize transparency and open dialogue to maintain trust with both advisors.

Any Questions?

Presenting your Work

Most presentations fall short of their goals

- Most presenters

  - Rush to get through all their slides

  - Avoid questions

  - Try to make their research seem hard

  - Have conversations with the screen

  - Attempt to tell their audience everything

By delivering a good presentation, you maximize your chances for impact

- ▶ There is no substitute for good, well executed ideas

- ▶ However, even the best research suffers when poorly presented

- ▶ You job is to tell a story that engages and persuades

Public speaking is a core skill for an academic

- ▶ Good ideas do not sell themselves

- ▶ No matter how good your idea is, no one will automatically be on board

- ▶ As soon as you are standing in front of a room full of people who do not know what you know, or believe what you believe, you are in sales/marketing.

- ▶ It is your job to sell your idea

- ▶ You might have selected into academia because you hate selling things. Too bad

Know what your audience cares about

- ▶ You can sell ideas without being dishonest

- ▶ You are selling your research, which you (presumably) believe in. It is not dishonest to try to explain to others why you believe in it.

- ▶ At the end of the day, you want to convince your audience to believe in it too

- ▶ You can't sell ideas without understanding what your audience cares about and how they think

- ▶ What is convincing to you may not convince others. That's what makes this hard.

Your audience cares about themselves

▶ Convince them that what you're saying is relevant to them

▶ Your presentation is not about you: what you wanted, what you thought, what you did.

▶ Your presentation is about them: what they want, what they did or might do.

"People like to feel needed, like they are part of a conversation, and they hate having their time wasted."

-Mike Monteiro

Advance effort spent structuring your presentation reaps substantial rewards

- ▶ Think backwards: what do you want people to remember?

- ▶ Do not try to say everything, you cannot and should not do this

  - ▶ Most people will remember one-two things from your presentation

- ▶ Create islands of sanity/room to breathe

- ▶ Empathize with your audience

- ▶ Note: If your slides don't flow, your paper probably doesn't either

Preparing your slides

- ▶ Your paper and presentation are two chances to tell a story

- ▶ Structuring your slides helps you figure out that story

- ▶ Slides are not there to remind you what to say

- ▶ Slides help your audience to follow your story

- ▶ The earlier you start thinking about and writing your slides, the better you will tell that story

- ▶ Preparation allows you to focus on delivery, interaction, and having fun

Some General Rules – The Introduction

- ► Make the most of your first 5 minutes

- ► The audience should know

  - ► Your question

  - ► Your motivation

  - ► Your approach

  - ► The main takeaway(s)

  - ► The greatest threats to validity, and how you overcame them

Some General Rules – The Literature

- Use the related literature to create context.

- You must know the literature.

- Your audience should know

    - What's immediately relevant

    - What you contribute

- Use your time to talk about what you do

Some General Rules – Content

▶ Don't overcrowd your slides – a slide should contain as little information as possible, conditional on it conveying your point at a glance.

▶ Never write anything on a slide that the audience can't read

▶ Figures and tables are effective tools **IF THEY ARE CLEAR**

▶ Where possible, graphs $>$ tables

▶ Slides tables will look different to paper tables.

▶ For tables: never display irrelevant numbers. Not all numbers will be equally important, but there should be nothing extraneous.

▶ Both 0.00000000001 and 2.9495657 are unhelpful.

Some General Rules – Transparency

- Every paper has weaknesses

    - Know yours

    - Address yours (where possible)

    - Do not try to hide anything

- People respect being told what they can't learn from your work maybe more than what they can learn.

    - It's easy to be imprecise or oversell what you find, it's hard to work out the limit of what we can learn.

- Write down questions and comments, and incorporate them before the next talk

Empirical Researchers: You are an Economist not a Statistician

▶ You are not always required to have a model

▶ You are always required to have given thought to a basic theoretical framework, the economic reasoning, or the data generating process

▶ If you do have a model, write it down and be prepared to justify it

  ▶ Be clear about how the model maps into the empirical analysis

▶ Describe the data and sources of variation clearly

▶ Present your identification strategy

  ▶ But not before you tell us why you are bothering

▶ Discuss the key identification issues you face and how you address them

Theoretical researchers: You are an Economist not a Mathematician

- ▶ Describe the environment clearly

- ▶ Introduce notation and state assumptions early

  - ▶ Know why your assumptions matter

- ▶ State main results

  - ▶ Unless a proof is insightful or very innovative, skip the details

- ▶ Discuss the intuition

  - ▶ Convince the audience that the results are useful and not obvious

- ▶ Simple examples and graphs can be very helpful

A few simple things can make you a better public speaker

- Relax

- Smile

- Breathe ... frequently

Basics of Public Speaking

- ▶ Look at and talk to your audience

- ▶ Be loud enough that they can hear you

- ▶ Be slow enough that they can process what you say

- ▶ If you can't say everything you need to when you're talking slowly, you are trying to say too much

- ▶ Use language that **everyone** understands

    - ▶ If you must use jargon, explain it

Technical Tips - Before the Talk

- ▶ Practice out loud

- ▶ Experiment with what helps you relax

- ▶ Consider getting targeted instruction

- ▶ If you are uncomfortable with public speaking, consider joining a group that will make you give speeches

    - ▶ A Toastmasters or debate club are good examples

Technical Tips - During the Talk

"Your first job is to inspire confidence." – Mike Monteiro

▶ Do not pace around the room. It makes you look nervous and cuts you off from your audience.

▶ Stand to the left of your slides if possible.

    ▶ Ignore this rule if the room layout would make it awkward

▶ Never stand in front of your slides.

▶ Move your body naturally, especially your hands – the way you would in a conversation with someone you care about, on a topic you care about.

▶ Use a clicker

Technical Tips - During the Talk

- ▶ Take command of the room. You are responsible for what happens during your talk. This is your time.

- ▶ It does not matter that the audience is more accomplished than you. You have something to tell them

- ▶ It doesn't matter if you make a fool of yourself. Commit.

- ▶ People will forgive committed foolishness. They will not forgive you if you do not take the seminar – or their time – seriously

How to Take a Question

- ▶ Being able to handle questions well is just as important as being able to present well

- ▶ Questions are not a nuisance, they are why you are there.

- ▶ Questions tell you what the audience cares about

- ▶ Never interrupt someone or assume you know what they will ask

- ▶ If you think you have misunderstood the question, ask the speaker to clarify

Handling Questions

- ▶ Demonstrate "active listening".

- ▶ Avoid being dismissive: figure out what is underneath the questions and speak to that.

- ▶ Be respectful and friendly

- ▶ If you cannot answer, acknowledge the point and say you will think about it

    - ▶ Actually think about it

- ▶ Do not try to guess or deceive the audience

- ▶ If you cannot resolve a debate, or if something is not directly relevant, politely move on and suggest a further conversation offline.

Handling Questions

▶ Questions are not requests for change. They are for clarification.

  Audience Member: "Why did you cluster at the state level."
  Speaker: "I can change it!"

▶ The person who asks this wants you to explain your reasoning.

▶ If you immediately capitulate then it suggest you haven't thought about what you are doing.

▶ They do not want your life story, they want a one sentence explanation of why you did something.

Don't get defensive

▶ Remember, you are selling yourself

▶ Reacting defensively suggests that you think the work is about you. The audience absolutely does not agree with this

▶ There is nothing the audience hates more than when you make things about you

▶ It is better to concede a point than get defensive

▶ It is fine to say, "I need to think about that."

Don't get defensive

▶ Your attitude is crucial. It does not matter how smart you are or how good your paper is if people think you are an ass

▶ Remember:

  ▶ the world of economics is small word travels fast.

  ▶ you will have some choice as to who your colleagues will be as well

Don't assume people know what you know...

▶ You are likely to vastly overestimate what the audience knows and how much they can absorb

▶ Most of what now seems obvious to you is not obvious to them. Spell it out

▶ Give your audience the information they need to understand your results and why they matter

▶ People must be able to understand your work well enough to evaluate it and, more importantly, to buy it

▶ If they do not buy your work, you are sunk

... but don't try to show how hard you worked

▶ Really good ideas in economics require hard work, but are often obvious ex-post

▶ Do not try to show how hard you worked. This is boring for the audience which makes them think you don't respect their time

▶ The only way to manage/balance this is to frame the talk correctly.

▶ Make the idea feel obvious now, while reminding your audience why it wasn't obvious before

    ▶ They will buy the idea, and they will buy it from you

Live in Reality

- ▶ Present the work you have, not the work you wish you had

- ▶ By the time you are standing in front of a room, the amount of work you have done is the exact right amount of work

- ▶ Nobody else knows what you wanted to get done but couldn't: that information is not in their minds. Do not put it there.

- ▶ Confidence $\neq$ perfection, omnipotence, etc.

- ▶ Expect to make mistakes so they don't blindside you

- ▶ All ideas and people are flawed. Admit your flaws. Sell on your strengths

- ▶ You cannot control your audience nor the outcome of the talk. You can control what you do

Any Questions?