

The Term Paper

Yes, there is a term paper

- ▶ For most of you, this is a literature review.
- ▶ You may, work in a team of three if you are doing an empirical paper.
 - ▶ This means data handling and regressions.
 - ▶ I don't recommend this unless you have taken econometrics.

What is a Literature Review

- ▶ Part of every research paper
 - ▶ Provides the setting
 - ▶ Shows how the paper fits in with existing literature
- ▶ Can also be a stand alone paper
 - ▶ Never a paper by paper recitation
 - ▶ Make the papers talk to each other.

Main purpose is to draw connections between publications that may not be obvious from reading them individually.

These are Suggestions

- ▶ There are many approaches to writing your literature review term paper.
- ▶ This is *a* recommendation.

Start with a seed paper

- ▶ Start with a paper you like.
- ▶ The paper should come from one of the Energy Economics oriented journals listed on the syllabus or one of the general interest economics journals.
- ▶ If your paper is not from one of those journals
 - ▶ Your paper may be engineering or business but not economics.
 - ▶ Your paper may not be energy

Think of the paper as a seed. You are going to grow a literature review from that paper.

Glance Through a Few Journals

- ▶ Energy Economics
<http://www.journals.elsevier.com/energy-economics/>
- ▶ The Energy Journal <https://www.jstor.org/journal/energyj>
- ▶ Resource and Energy Economics <http://www.journals.elsevier.com/resource-and-energy-economics/>
- ▶ Energy: The International Journal
<http://www.journals.elsevier.com/energy/> This has economics and engineering
- ▶ Energy Policy <http://www.journals.elsevier.com/energy-policy/>
- ▶ Utilities Policy (for more electricity focused reading)
<http://www.journals.elsevier.com/utilities-policy/>

Spend a Few Minutes

- ▶ Glance through a few editions.
- ▶ Look for any special issues or collections.
- ▶ See something that interests you? Grab it. Open it.

Alter URLs with this head to go through PSU library

`https://stats.lib.pdx.edu/proxy.php?url=https:
//www.sciencedirect.com/science/article/pii/S0140988317304413`
or add `.proxy.lib.pdx.edu` after `.com`

Mine the bibliography

- ▶ Every paper comes with a literature review and bibliography
- ▶ Look at the literature review
 - ▶ They cited similar papers to establish how the paper fits in the literature.
 - ▶ Grab what you need.
 - ▶ Ignore the general references, e.g., this is how you add two numbers together.

You now have a few more papers to read on the same topic.

Find out What People Thought of the Paper After

- ▶ People will read your seed paper and write new ones.
- ▶ They will then include it in a literature review
- ▶ Look the paper up on Google scholar (<https://scholar.google.com>) and find out who cited your seed paper.
- ▶ Choose some of those papers to read.

You now have even more papers to read.

Read and Make Notes

These are not all the papers you will read, but it will get you started.

Use the multi-step process:

- ▶ Read the title and abstract
- ▶ Read the section headings
- ▶ Read the introduction
- ▶ Read the conclusion
- ▶ Look at the figures
- ▶ Look at the equations
- ▶ Skim the whole thing
- ▶ Read it but don't freak out if you don't get everything.
 - ▶ Keep notes on your reactions, how the topic connects back and questions (My personal notes on papers are filled with profanity)
 - ▶ Repeat as time allows.

While Reading Take Notes

- ▶ How are key terms are defined?
- ▶ What are some key statistics?
- ▶ Keep an eye out for good quotes.
- ▶ Analyze the papers a bit. Some are better than others and make notes on why the good ones are good and the bad ones are bad.
- ▶ Look for trends over time on how a topic is treated.
- ▶ Look for a hole in the literature. Is there a topic that has been missed? That would be a great motivation for a later original contribution to the literature.

You will Notice Patterns

- ▶ Could be a chronological pattern, how people think of a topic changes over time.
- ▶ Could break into schools of thought, fresh water vs salt water.
- ▶ Technique, regression or simulation, etc.
- ▶ Pro vs con

Writing a Paper is a Process

After high school, you don't just write a paper in one night, in one draft. That said, we see a lot of those.

- ▶ Break the habit.
- ▶ It will work for a while, but the inability to manage a project that take more than a few days will limit you in life.

McCloskey, D. (2000). Economical writing (Second ed.). Prospect Heights, Illinois: Waveland Press. Great book on how to write.

The Process

- ▶ Abstract
- ▶ Bibliography
- ▶ Annotated Bibliography
- ▶ First Draft
- ▶ ...
- ▶ Final Draft.

The Abstract

Revised many times before the final draft

- ▶ Start with one
- ▶ Make sure your topic is not too big for a paper.
- ▶ Get Narrow

Undergraduates try to write very short papers about very broad topics and end up with a very poor product.

Bibliography

Out of the papers you have read, pick the ones you want to use.

- ▶ If your answer is “all them”, you have not read enough. Go back and read some more.
- ▶ The sole exception to this rule is if you doing a meta-analysis, which treats a literature statistically.

Annotated Bibliography

A brief descriptive and evaluative statement about each article and indication of how you will use it.

- ▶ Typically not in citation order
- ▶ Organized according to how you will use them in an argument.
For example,
 - ▶ Statistics
 - ▶ European vs American vs Latin American perspectives
- ▶ Categorize by your argument.

The annotated bibliography is basically your first outline of the paper.

Write

- ▶ If you have a system that works use it.
- ▶ If you think your system works, question it.
 - ▶ Some of your system are very high school.
 - ▶ They kinda work
 - ▶ Microwaving a burrito will get you dinner, but hardly constitutes cooking or an effective lifestyle.

A suggestion

I start with a rough outline and then:

- ▶ Add graphics, tables and data analysis
- ▶ Add a bunch of details to the outline
- ▶ Start adding paragraphs

Just write:

- ▶ Don't have to write in order.
- ▶ Do not make it perfect
- ▶ Write
- ▶ If every other sentence is readable – great.
- ▶ Write every day.

Editing

- ▶ Don't edit till you are done writing for the day.
- ▶ Edit what you wrote the day before.
 - ▶ Helps make it more readable.
 - ▶ Puts you in the readers' shoes.

Faculty Perspectives

- ▶ We don't hate term papers because we are lazy.
- ▶ We hate them because we get high school quality and high school effort work.
- ▶ Faculty comments are
 - ▶ More useful the more effort you put in.
 - ▶ I'll spend a few hours on a good paper, making comments, finding new references that fit the topic.
 - ▶ Poor papers will only get general, basically copy and paste, comments.

A hurried, night before, draft paper will set you behind since you will get less help from me.

Translating Faculty Comments

- ▶ “Clearly Early Work” = Bet you started this last night.
- ▶ “Watch your citations” = Not sure if you were never taught how to cite or were attempting to plagiarize.
- ▶ “Nice!” = Seriously, I didn’t think of that and am impressed.
- ▶ “Tell me more” = “Expand” = I have no idea what you are saying because you were so brief.

Many of us have gotten so cynical, we assume the worst but we try not to let on.

A literature Review Chosen at Random

Greening, Lorna A., David L. Greene, and Carmen Difiglio. "Energy efficiency and consumption—the rebound effect—a survey." *Energy policy* 28.6 (2000): 389-401 (<http://www.sciencedirect.com.proxy.lib.pdx.edu/science/article/pii/S0301421500000215>)

Comments

Solid outline

- ▶ Typology of rebounds
- ▶ “Rebound effect” used differently across papers
- ▶ Discussed how definitions and scope are different across papers
 - made them talk to each other.
- ▶ Organized literature review by end-use.
- ▶ Nice use of tables to summarize differences.

In the end

Teach me something I would not have noticed by reading the individual papers.