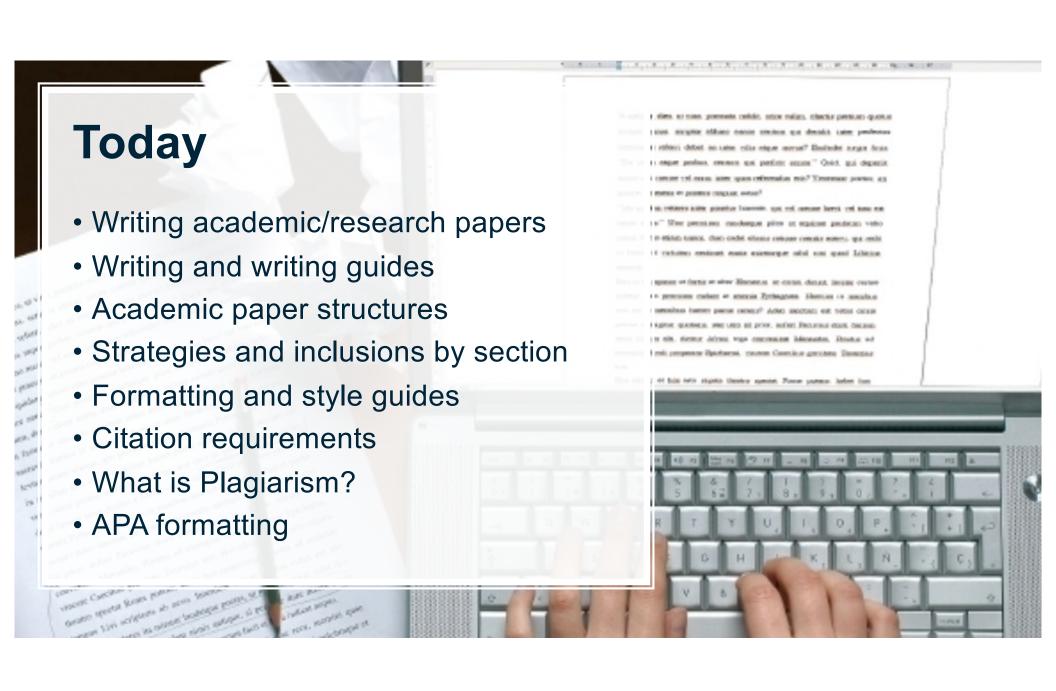
# Succeeding in Academia – Writing Successful Academic Papers

COLLEGE of
AGRICULTURE and
APPLIED SCIENCES

**UtahState**University



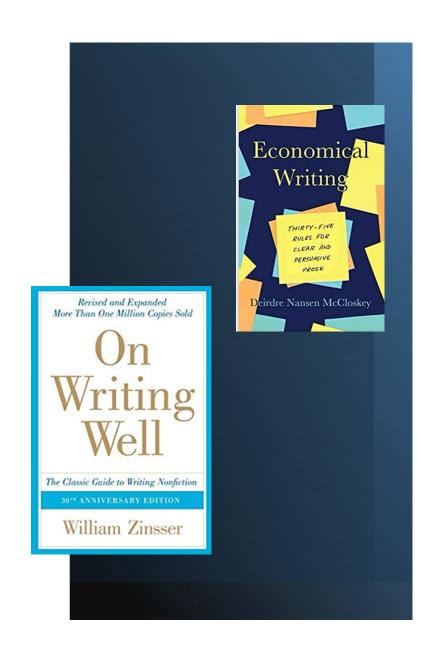
# **Writing Research Papers**

- A good research paper
  - Makes you forget you are reading a paper
  - Takes you on a tour of the questions asked and the answers found
  - Justifies why the answers are robust (apply to a broad range of data)
  - Discusses what can be learned from the results for policy, business, etc.
- Suggestions
  - Read lots of academic papers, both good and bad to recognize differences
  - Read things you enjoy reading, like novels
  - Read press such as the Economist, the New Yorker, or similar for well written examples



#### **Writing Guides**

- The Elements of Style
  - Strunk and White
- On Writing Well: The Classic Guide to Writing Nonfiction
  - William Zinsser
- On Writing: A Memoir of the Craft
  - Steven King
- Economical Writing: 35 Rules for Clear and Persuasive Prose
  - Deirdre McCloskey



# **Actively Write**

- Write and embrace mediocre or bad writing
  - Just write, you can improve upon a first draft, you can't work on or improve something that doesn't exist
- Writing is rewriting
  - Rewrite often to improve a sentence or paragraph
    - Rewriting the paper abstract and introduction important
  - Consider strong grammar, using fewer words, and clarity
  - Short meaningful sentences are better than long drawn-out sentences
- Write every day
  - Use every opportunity to write to improve your writing, even emails
    - Write clearly and concisely
    - Writing in a daily journal may help



















# **Academic Paper Structure**

- Title
- Abstract
- Sections
  - Introduction
  - Literature review/background (often part of the introduction)
  - Data and descriptive stats (sometimes goes after empirical framework/modeling)
  - Theoretical framework (may not be needed if using common theory)
  - Empirical framework/modeling
  - Results and discussion
  - Summary and conclusions
- References
- Tables and figures (if any)
  - Often here at submission, then placed within text at publication
- Appendix (if any)



# Academic Paper Structure Cont.

- This structure is the most common but can be different per journal requirements
- When you chose an appropriate journal (we will discuss this later) check the submission requirements for instructions on section titles and order required
- Many journals do not require a specific format at the submission stage
- Some journals require all formatting guidelines (structure, references, equations, etc.) to be followed at submission



## Title, Abstract, & Introduction

- Most important marketing tools for a paper
  - Especially for empirical papers, which don't advance theory or methodology
- Title
  - Very important to catch the readers attention
  - What makes a good title is difficult to point out "I know it when I see it..."
  - Suggested do not's
    - Emphasize the technique used...semiparametric, non-parametric evidence, etc.
    - Long titles
      - Inverse relationship between paper title length and the number of times read
    - Don't try to be clever/cute
      - If you do make sure it makes sense, appeals to many people, uses common sayings or adages
      - Must perfectly fit your paper



#### Introduction Section

- After the title and the abstract, the introduction is where the reader will decide.....
  - If the paper is interesting enough to keep reading
  - Whether the paper is of good enough quality for them to believe your findings
  - Editor's decision to send the paper out for review or not, desk reject
  - Very important and should be rewritten/worked on often
  - Should clearly state what the paper does and how it does it
- Write the introduction before the abstract as its easier to write the abstract once you have the introduction written
- Start writing the introduction when there are empirical results available
- Follow Keith Head's introduction formula























#### Keith Head's Introduction Formula

- Hook (1-2 paragraphs)
  - Something that grabs the readers attention
    - A good hook relates to the real world
    - A bad hook appeals to the literature, long listing of studies and gaps
- Research question (1 paragraph)
  - States the research question as clearly as possible
  - Use the actual question and 1 or 2 other sentences
- Antecedents
  - Relate your work to the 5-10 closest studies (literature)
    - Might be recent work if lots of activity on the topic, or older if few studies on the topic
  - Tell the intellectual history of the topic in an interesting way
    - Not, so and so found this, so and so found that.... boring





















#### Head's Introduction Formula Cont.

- Value-added
  - This needs to shine
  - What is your contribution and how does it change the world?
    - Important contributions should have at least one
  - Examples
    - Improve internal validity through a better identification strategy
    - Improving external validity with data more applicable to real world scenarios
    - Small methodological improvement
- Roadmap
  - Road map to your paper...."The remainder of the article is organized as follows...."
  - Provide one for each paper, it can be removed later if desired by reviewers or editors

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#### Some Definitions

- Internal validity study structure
  - A measure of how well a study is conducted and how accurately its results reflect the studied group
  - Establishes a trustworthy cause and effect relationship
  - Methods to improve internal validity
    - Random selection, strict protocols, treatment and control groups, etc.
- External validity universality of results
  - The applicability of the study findings to the real world
  - How well the outcomes of a research study can be applied to other settings
  - Methods to improve external validity
    - Field experiments, specific inclusion criteria, replication, etc.

























### **Other Alternatives**

- Sahm's suggested Introduction formula
  - Motivation
  - Research question
  - Main contribution
  - Method
  - Findings
  - Robustness checks
  - Roadmap
- Provides more detail on the value-added section

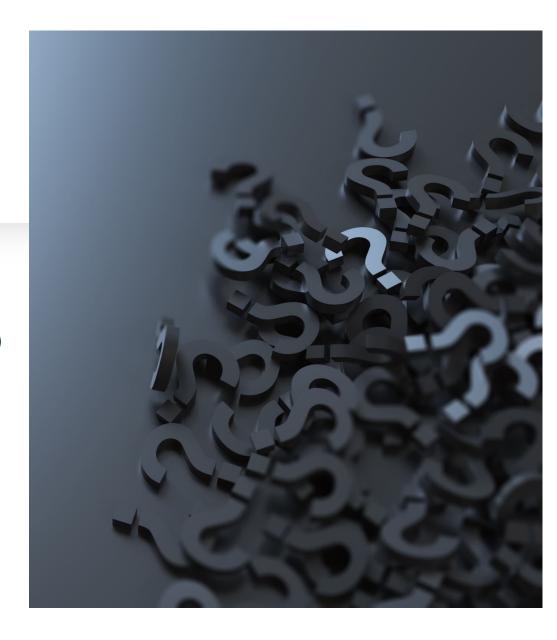
#### **Robustness Checks**

- Researcher examines how certain "core" regression coefficient estimates behave when the regression specification is modified by adding or removing regressors
- Regression example
  - Income = 3Xeducation + 1Xparentsincome + 2Xgender + error
  - The 3,1, and 2 are coefficient estimates
  - If we add in say *stateofresidence*, or take out *gender*, if we still get 3 for *education* and 1 or *parentsincome*, then the estimates are robust



# Other Alternatives Cont.

- Evan's suggested Introduction formula
  - Motivation (1-2 paragraphs)
  - Research question (1 paragraph)
  - Empirical approach (1 paragraph)
  - Results (3-4 paragraphs)
  - Value added (1-3 paragraphs)
  - Robustness checks, policy relevance, limitations (optional)
  - Roadmap (1 paragraph)



#### **Abstract**

- Very important in encouraging the reader to continue, i.e. read the introduction
- If the paper is read, it will be published and cited
  - Researchers often cite papers for which they have only read the abstract...ya crazy, but true!
- Use the first sentence of your hook, research question, and valueadded sections of your introduction
  - Should be readable/clear to any college educated person
    - Policy makers, business leaders/managers, college students and importantly...your peers
- Most journals have an abstract word count maximum



### Literature Review (or Background) Section

- Literature Review Section
  - Required as part of an M.S. thesis or Ph.D. dissertation
    - Demonstrate the student is familiar with the literature she/he is working with
  - Some journals require this section but not all
  - Bellemare ("Doing Economics") suggests incorporating this section into the introduction
    - Saves the reader time (5-10 most applicable articles already discussed in the intro)
    - Need to be a very good writer to pull off a compelling story in a literature review
    - Best written by senior scholars who have been thinking about the literature at length
- Background Section
  - Useful when a topic requires a significant amount of background knowledge
    - · Details of legislation the reader needs to keep in mind
    - Industry descriptions
  - Describe what the reader needs to know, no more



#### Data, Modeling, & Results Sections

- These are highly influenced by the type of research undertaken
- A theoretical modelling section may not be needed if doing applied work, if using a common model
- Often the empirical modelling section is presented before the data section
- Read pages 8-25 in "Doing Economics" for examples/details on these sections
  - Describing data
  - Formatting tables
  - Robustness checks



#### **Summary & Conclusions Section**

- Often called "concluding remarks" or simply "conclusions"
- Summary
  - Summarize the paper
    - Different version than in the abstract and introduction
    - What are the papers contributions or gaps it fills?
- Limitations
  - Detail the limitations of the paper
    - Geographic specific, data collection issues, etc.
- Real-world implications
  - · Detail implications for policy, business strategy, etc. if applicable
  - Point out potential costs and benefits
  - Identify clear winners and losers based upon the results
- Future research
  - What could be done differently? Extended?
  - If writing a follow up paper, set the stage here





















#### Formatting Papers – Style Guides

- Style guides
  - Used to make common elements consistent across documents written by multiple authors
- Typical rules/guidelines
  - Grammar and language
  - Headings
  - · Line spacing
  - Equation placement/formatting
  - Font type and size
  - Citation formatting
  - Reference formatting

Reference for the next six slides is the Purdue Owl at: <a href="https://owl.purdue.edu/index.html">https://owl.purdue.edu/index.html</a>



#### Common Style Guides

Style	Usage
Associated Press Style (AP)	used by journalists and other news & media writers
Chicago (sometimes written Chicago/Turabian, or <u>CMoS</u> )	used in the humanities
Institute of Electrical & Electronics Engineers Style (IEEE)	used in engineering & computer science
American Medical Association (AMA)	used in nursing & other medical fields
Association for Computing Machinery ( <u>ACM</u> )	used in computing and information technology fields
The American Society of Mechanical Engineers (ASME)	used in mechanical engineering



# Citations (Properly Citing Sources)

- An attribution of someone else's writing, work, ideas, videos, etc.
- In text citations
  - According to Curtis et al. (2020), Utah consumers don't like organic foods.
  - Previous studies show that organic foods are preferred by consumers with strong health concerns (Curtis et al., 2020).
- · Refence list
  - Curtis, K., Drugova, T., and Reeve, J. (2020). Consumer Preferences for Labeled Fruit Products in Utah." Journal of All Things Organic, 28(6): 25-28.

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#### **Citation Requirements**

- The following must be cited/credited:
  - Words or ideas presented in a magazine, book, newspaper, song, TV program, movie, website, computer program, letter, advertisement, or any other medium
  - Information you gain through interviewing or conversing with another person (face-to-face, over the phone, in writing, etc.)
  - When you copy the exact words or a unique phrase
  - When you reprint any diagrams, illustrations, charts, pictures, or other visual materials
  - When you reuse or repost any digital media, including images, audio, video, or other media



#### Citation Requirements

- The following do not need to be cited/credited:
  - Writing your own lived experiences
    - Observations, insights, thoughts, or conclusions about a subject
  - When writing up your own results obtained through research
  - When using your own artwork, digital photographs, video, audio, etc.
  - When using "common knowledge"
    - Such as folklore, common sense observations, myths, urban legends, and historical events
    - Generally, common knowledge is information that someone finds undocumented in at least five credible sources
  - When using generally accepted facts (including facts that are accepted within certain communities)
    - Pollution is bad for the environment
    - In the field of composition studies, "writing is a process" is a generally ac



























#### What is Plagiarism?

- Intentional plagiarism
  - Copying a blog post or stealing an article from the internet
  - · Hiring someone to write your paper for you
  - Copying a large section of text from a source without making it clear it isn't yours through quotation marks or proper citation
  - Intentionally failing to cite someone else's work
    - Claim that the ideas and words belong to you
  - It is possible to plagiarize from yourself
    - Yes, using the same materials in multiple papers
- Unintentional plagiarism
  - Not fully understanding the citation system and thus missing key elements of the source attribution
  - Paraphrasing (restating in own words) but accidentally directly quoting words or phrases without realizing
    - In this case there is usually some attribution to the source, but not the right kind (paraphrasing vs.) quoting)
  - Misattributing a quote or idea to the wrong source
    - Common in larger research projects when dealing with a lot of source material























#### **APA – Style Guide**

- APA Publication Manual of the American Psychological Association
  - Commonly used citation formatting requirement among academic journals
- Required for USU Extension publications
  - References and in text citations
  - See Purdue Owl for full description at https://owl.purdue.edu/index.html

Format	Citation examples
Websites	Last name, F. M. (year, Month, Date). Title of page. Site name. URL
	Price, D. (2018, March 23). Laziness does not exist. Medium.
	https://humanparts.medium.com/laziness-does-not-exist
Journals and	Author, A. A., Author, B. B., & Author, C. C. (Year). Title of article. Title of
Periodicals	Periodical, volume number(issue number), pages. https://doi.org/xx.xxx/yyyy
	Scruton, R. (1996). The eclipse of listening. The New Criterion, 15(3), 5–13.
Books	Author, A. A. (Year of publication). <i>Title of work: Capital letter also for subtitle</i> . Publisher Name.
	Stoneman, R. (2008). Alexander the Great: A life in legend. Yale University Press.























#### **USU Extension Publications**

- USU Extension Writer's Resource
  - Style guide
  - Citations
  - Formatting
  - Punctuation and grammar
  - Tips for success
  - <a href="https://extension.usu.edu/employee/files/writer-resource-revised-2023.pdf">https://extension.usu.edu/employee/files/writer-resource-revised-2023.pdf</a>



### **Next**

- March 13: Submitting academic papers and responding to editorial decisions
- March 27: Reviewing manuscripts for journals



# Questions?

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