Helping Students Select a Research Topic

CITLS: Mentoring Research Students Mini-Series

Prof. Brett Hendrickson

Session Outline

- A Few Basics
- A Few Specifics
- The **BIG** Research Question

The Basics

Cycle of Inquiry

- Undergraduate research ideally contains the whole cycle of academic inquiry
  - Identifying the problem
  - Doing the literature review
  - Collecting the data
  - Analysis
  - Drawing conclusions
  - Disseminating the findings

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  - Disseminating the findings (1)

1. Maureen Vandermaas-Peeler, Paul C. Miller, and Jessie L. Moore, "Considering Excellence in Mentoring Undergraduate Research in Context," in *Excellence in Mentoring Undergraduate Research*, ed. Maureen Vandermaas-Peeler, Paul C. Miller, and Jessie L. Moore (Washington, DC: Council on Undergraduate Research, 2018), 2.

The Basics

Preliminaries

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  - Helping students learn how to ask questions rather than just answer them
    - Model this in our teaching
    - Provide discipline-specific taxonomies of questions to students (2)
  - Strategic Pre-planning
    - Have a plan in place for guiding research topic selection
    - Provide sample research topics
    - Do an early diagnostic of a student's research experience and skills (3)

2. John C. Bean, *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*, 2nd ed. (San Francisco: Jossey-Bass, 2011), 229, 236.
3. Helen Walkington et al., "Striving for Excellence in Mentoring Undergraduate Research: The Challenges and Approaches to 10 Salient Practices," in *Excellence in Mentoring Undergraduate Research*, ed. Maureen Vandermaas-Peeler, Paul C. Miller, and Jessie L. Moore (Washington, DC: Council on Undergraduate Research, 2018), 107, 118.

The Basics

Fancy Acronyms

- SMART
  - Specific, Measurable, Achievable, Realistic, Timely (4)
- Three Ms
  - Meaningful
  - Measurable
  - Manageable (5)
    - Can master the relevant literature
    - Collect and analyze the necessary data
    - Answer the key questions posed
    - In the time given for the project (6)

4. Walkington et al., 118.
5. Heather Lattimer, *Surviving and Thriving with Teacher Action Research: Reflections and Advice from the Field* (New York: Peter Lang, 2015), 2.
6. Charles Lipson, *How to Write a BA Thesis: A Practical Guide from Your First Ideas to Your Finished Paper* (Chicago: University of Chicago Press, 2005), 71.

The Specifics

What professors can do

- Regularly scaffold the research process in your classes
  - Exploratory essays, practice research prospectus, annotated bibliographies, concept mapping (7)
- Encourage students early in the major to keep a virtual or physical file where they collect research ideas. Earlier papers can be the seed for longer projects. (8)

7. Bean, *Engaging Ideas*, 246.
8. Lipson, *How to Write a BA Thesis*, 14–15.

The Specifics

Narrowing a topic

- When helping a student narrow a topic, the biggest question to keep in mind is:

Does my topic help address a problem that readers in my discipline care about?

- Or, to put it another way:

Is my topic significant to disciplinary conversations in a way that I can articulate?

The Specifics

Some nuts and bolts

- Skim OneSearch and research encyclopedias rather than Google for topic ideas
- Turn your topic into a sentence to see if it is narrow/interesting enough
- Ask journalistic questions of your potential topic (who, what, when, where, why, and how) **why** and **how** are the most productive
- Fill in the blanks: "I am trying to learn about/working on/studying _____ because I want to find out who/what/when/where/whether/why/how _____ in order to help my reader understand how/why/whether _____." (9)

9. Wayne C. Booth et al., *The Craft of Research* (Chicago: University of Chicago Press, 2016), 35–46.

The Big Research Question

- What are we teaching when we teach research?
- Heidi Jacobs: "What are the questions of research questions? What are the problems of research problems?"
- Gerald Graff: "Good education is about helping students enter the culture of ideas and arguments…teaching students to engage in intellectual debate at a high level is the most important thing we can do."
- Moving from problem-solvers to problem-posers (10)

10. Heidi L. M. Jacobs, "Research Questions and the Research Question: What Are We Teaching When Teach Research?" in *Successful Strategies for Teaching Undergraduate Research*, ed. Marta Mestrovic Deyrup and Beth Bloom (Lanham, MD: Scarecrow Press, 2013), 8.

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- Walkington, Helen, Eric E. Hall, Jenny Olin Shanahan, Elizabeth Ackley, and Kearsley Stewart. "Striving for Excellence in Mentoring Undergraduate Research: The Challenges and Approaches to 10 Salient Practices." In *Excellence in Mentoring Undergraduate Research*, edited by Maureen Vandermaas-Peeler, Paul C. Miller, and Jessie L. Moore, 105–30. Washington, DC: Council on Undergraduate Research, 2018.