

Teach Them Before They Need it: Instilling Research Skills in Pre-Professional Students

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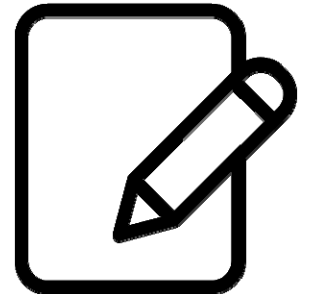
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Planning

- Background
 - Program purpose (not for credit), requires collaboration across the campus
- Chose content based on transferrable skills
 - Kept it flexible, began session with assessment that informed us before we taught them irrelevant content, included hands-on components that they could actually apply to their own work
- Pre-Assessment included:
 - Research experience so far?
 - What challenges have you faced when doing research?
 - How did you solve these challenges?



Outline

START: Questions for group

What is background research?

How do we do it? Why do it?

What is a literature review?

Setting up for success (staying organized, database accounts, etc.)

Doing a literature review

Steps involved

Creating a research question (Background/Foreground)

PICO and search terms

Choosing databases

Searching PubMed → **EXERCISE**

Evaluating articles

Reading a study (how to prioritize what to read first)

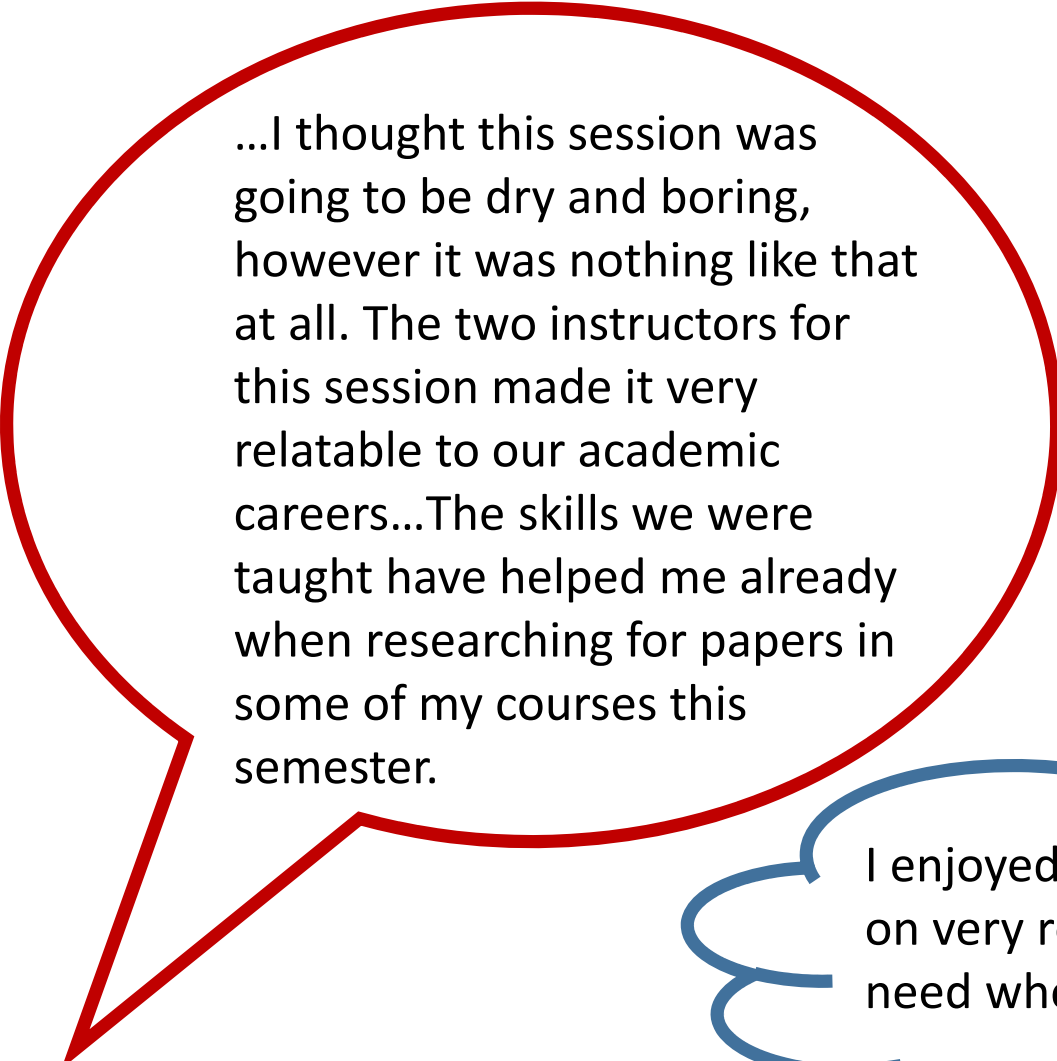
Critical appraisal

Communicating your research

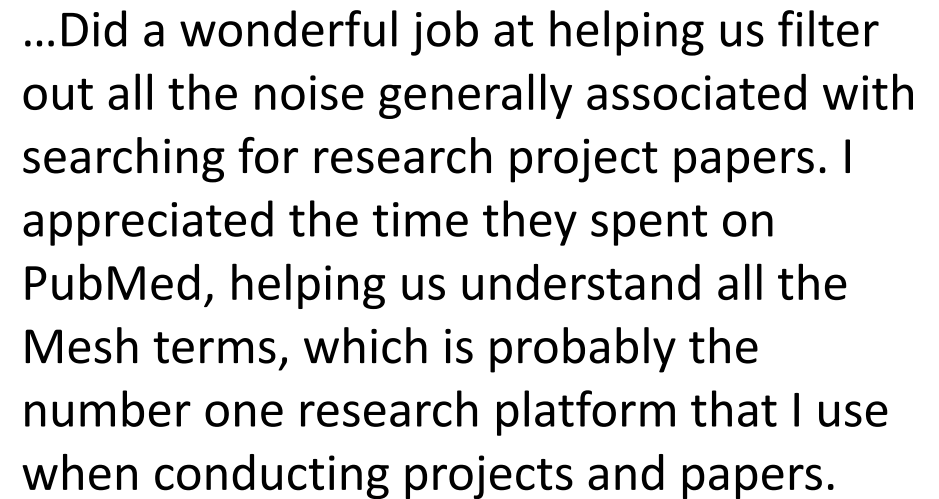
Tips for early career researchers (ORCID etc.)

Experience and Feedback

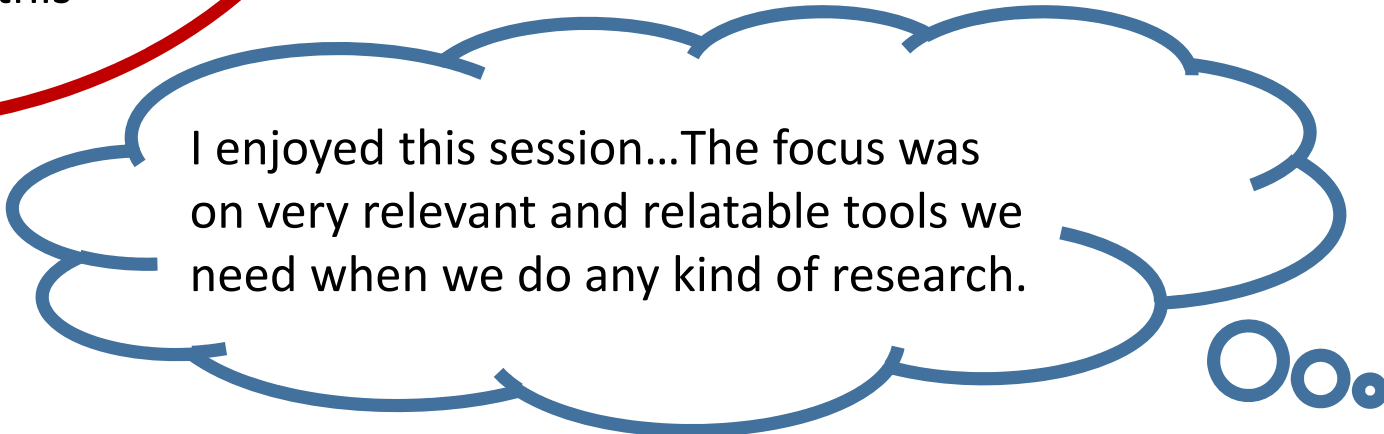
- Attendees' backgrounds
 - Degrees, research experience, upper level students
- Student engagement
 - Discussion was plentiful, interesting questions, stayed awake during late afternoon session
- Assumptions were challenged
 - Level of knowledge surprised us
 - Session became more advanced very quickly
 - Follow up was required on our part to answer more in-depth questions

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...I thought this session was going to be dry and boring, however it was nothing like that at all. The two instructors for this session made it very relatable to our academic careers...The skills we were taught have helped me already when researching for papers in some of my courses this semester.

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...Did a wonderful job at helping us filter out all the noise generally associated with searching for research project papers. I appreciated the time they spent on PubMed, helping us understand all the Mesh terms, which is probably the number one research platform that I use when conducting projects and papers.

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I enjoyed this session...The focus was on very relevant and relatable tools we need when we do any kind of research.