

Encouraging Students to Explore Interdisciplinarity During the Research Process

“To make excellence inclusive, LEAP [Liberal Education and America’s Promise] promotes...

- Students’ Signature Work—challenging higher education to prepare *all* students to complete a substantial cross-disciplinary project in a topic significant to the student and society, as part of the expected pathway to a degree. The signature project can take one of many forms (e.g., capstone, internship, field work, research, community-based research).”¹

Though we each work with our assigned divisions on upper-level capstone, Senior Inquiry, and other advanced research projects, each of the Research & Instruction Librarians at the Tredway Library is interdisciplinary and cross-disciplinary in her knowledge. Our work with the LSFY first-year sequence and at the library’s research help desk ensures that we consistently encounter questions and research challenges from across the academy, and we encourage students to explore resources beyond their major discipline(s) to add dimension to their work.

How might teaching faculty encourage students to explore resources in other disciplines in their Signature Work?

- Use the library homepage as a “road map” to other disciplines:
 - <http://www.augustana.edu/x23815.xml>
 - click on the yellow “Databases” tab, then open the drop-down menu
 - We organize library resources roughly by discipline; students can easily see which other disciplines/majors are closely aligned to their own, while also seeing others whose perspectives might enable them to view their Signature Work through a different lens.
 - Encourage students to consider which other discipline(s) might have a stake or an interest or an interest in the topic of their Signature Work, and ask that they explore the research of that discipline, both to add breadth to their explorations and to challenge their current understanding of their topic.
- Ask a librarian! We are happy to work with students on their Signature Work at all stages, from research topic development and source exploration until a project’s completion. We provide consultations to Senior Inquiry or other advanced seminar-type classes, and/or will meet with students individually. Encourage students to make an in-depth appointment with the librarian of their choosing via the form on this page: <http://www.augustana.edu/x39394.xml>

--Anne Earel

¹ “The LEAP Challenge: Education for a World of Unscripted Problems.” *Association of American Colleges & Universities*. AAC&U, n.d. Web. 22 September 2015.

Making the Senior Inquiry Project Truly a Culminating Experience

As the liaison librarian to the Natural Sciences division, it was necessary for me to develop a way to challenge the large number of majors, particularly in biology, to stretch their research skills but still make it scalable for one librarian partner. We have followed the model described below for four years and routinely hear from students they get a great deal out of the session. Even though this began with biology, I use this same model with SI classes in the other majors as well.

Rather than meeting with students at the beginning of the term when they are doing their SI, we schedule our session for mid-term, usually within weeks 5-7. We do this because in each of the majors, they've received discipline-specific instruction from me at least once and likely twice in other classes. Most students feel pretty confident in their researching abilities, so faculty members direct them to get started using the resources with which they are familiar.

Several days before our session, the faculty member asks students to answer the following questions. Their answers should only be a couple sentences each and be as specific as possible.

1. What is the topic or research question you are exploring?
2. What resources have you consulted as you are doing your literature research? Please list the names of databases, websites, organizations, or people you've consulted.
3. What is one problem you are having with your literature research you'd like to have addressed in the session with the librarian?

The faculty member sends me these responses a couple of days before our session. I usually spend several hours looking at what they have consulted and think about the gaps in what they are using and the problems they have expressed. Usually this requires that I develop some background knowledge in order to explore the topic in unique ways. This also helps me develop alternate terms that they may not have considered. I compile a list of the suggestions I want to share with the students, but often additional questions come up during the sessions.

Typical problems are:

- Not exploring the best databases for their topic
- Not identifying "who cares," which can move a topic into an interesting question
- Finding the full text of significant articles; requesting materials through I-Share and ILL
- Not knowing how to mine an important article with backward and forward searching techniques, or exploring a key author for his/her other work or work in their lab
- Not thinking about organizations or agencies as sources for the most up-to-date data
- Not knowing how to set up alerts to make them aware of new studies pertinent to their question

During the session, we sit in a half-circle with a wireless keyboard and mouse, which we pass around. The session is led by students, who share their research problems and then demonstrate the suggestions I've identified. Often other students and the instructor also will have comments. Most students take a lot of notes. At the end, I ask them to identify the next steps they will take and challenge them to make this the culminating work of their college career, ultimately publishable on Augustana Digital Commons.

--Connie Ghinazzi