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Research is a verb: Exploring a new information literacy-embedded undergraduate research methods course

Abstract: This presentation introduces a potential solution to widespread and longstanding concerns about undergraduates' research, writing, and critical thinking skills: a new activity-based, discipline-specific research methods course. The presenters explore course design, course-embedded information literacy learning, course effectiveness evaluation, faculty-librarian collaboration, and the role of reflection in teaching and learning.

Résumé : Cette communication présente une solution potentielle aux préoccupations répandues et de longue date concernant les habiletés de recherche, de rédaction et d'analyse critique des étudiants universitaire de premier cycle : un nouveau cours de méthodologie de recherche basé sur des activités et adaptée à la discipline. La présentation portera sur la conception de cours, des activités pédagogiques favorisant la maîtrise de l'information, l'évaluation de l'efficacité du cours, la collaboration entre professeurs et bibliothécaires et le rôle de la réflexion dans l'enseignement et l'apprentissage.

In a recent *Inside Higher Ed* article*,* Lewandowski and Strohmetz argue that while many professors complain about students, and particularly their research, writing, and critical thinking skills — the skills frequently conceptualized as information literacy — these complaints are nothing new. Further, they argue, the responsibility to address them lies with instructors as much as with students (2009). This presentation introduces one potential solution to these complaints: a new activity-based, discipline-specific undergraduate research methods course, Political Studies 200, taught for the first time in 2009.

The course used a three-pronged approach to introduce research in the discipline, focusing substantially on information literacy (e.g., understanding where information comes from, searching for various types of information, evaluating Web-based information), as well as research skills (e.g., developing a thesis, understanding research ethics) and predominant political science research methods (e.g., designing surveys, conducting interviews). The presenters focus on two main areas of innovation: course design, particularly details and results of information literacy integration; and the multi-faceted method employed to evaluate course effectiveness for both students and instructors. Within these areas, the presenters also explore themes that are of increasing concern to researchers, including: faculty-librarian collaboration, discipline-oriented course-embedded information literacy learning, and the role of reflection in teaching and learning.

Political Studies 200 was originally designed to address a widespread feeling, articulated well by Lewandowski and Strohmetz, that students were not displaying the skills expected of them during their degrees, including research design skills, awareness of common disciplinary methods, and critical thinking and information literacy skills.

Within the course, student learning was assessed primarily through six hands-on assignments covering various topics such as qualitative interviews and Web-based surveys. Among these small assignments, two were conceived of as information literacy assignments: one on finding research literature and one on evaluating Web-based information sources. Formative assessment also took place regularly within the classroom, such as within a session on understanding and identifying scholarly and peer-reviewed sources.

Additionally, several other activities and assignments, while not labeled "information literacy" as such, still served information literacy outcomes such as those contained in the oft-cited Association of College and Research Libraries standards (2000). For example, students conducted an analysis in which they read and evaluated a research article they had located through a prior searching assignment. This analysis aligns with the ACRL's Standard Three, which emphasizes information evaluation and knowledge construction. All assignments were linked to the discipline, and to each other, by the overarching topic of political representation and engagement, within which each student found her or his particular interest. Additionally, each assignment incorporated a reflective component, an increasingly common classroom and professional development strategy chosen to encourage self-awareness as a platform for discovery (Lipp, 2007; Daudelin, 2000). Several aspects of this course are relatively new and rare, including the fact that it exists at all: a research methods course for Canadian undergraduates cannot be described as a status quo offering (Parker 2008), particularly at the junior level. Given this, the presenters adopted a particularly holistic approach to capturing the course experience. A variety of data types were collected in an attempt to pursue three research objectives: to measure the learning that occurred in the class, to improve the course in future iterations, and to assess the success of specific innovations.

To these ends, the presenters collected several types of data, including post-course semi-structured interviews with all students, in which they spoke to their understandings of research, their discipline, and information literacy, as well as their perceptions of their course experience. The student work from the term was compiled and anonymized. In addition to the small assignments already described, student work included "skills resumes," complex student self-assessments typically completed both at the beginning and at the end of the course (MacMillan 2009). These resumes enabled students to articulate their own competencies and learning, while enabling the presenters to compare students' self-assessments to the skills demonstrated through other course work. Altogether, these data are rich sources of insight into both learning experience and teaching effectiveness.

The findings yielded by this research are as diverse as the data collected. Many of them relate specifically to pedagogy in political science, but the presenters will highlight those of particular interest to the library and information science audience. One unexpected outcome of incorporating information literacy throughout the course, rather than as a discrete unit or session, is that while students were able to identify specific skills gained within the class, they were unlikely to associate particular skills with information literacy, and more likely to think of all of these skills simply as "research skills." This finding may have implications for the way we understand the role of information literacy in undergraduate skill development. Through their assorted reflections and skills resumes, students demonstrated growing awareness and understanding of various research and information skills and their relationship to the production and analysis of scholarly work.

As well, the faculty-librarian collaboration that took place in the course was noted by students as unique and beneficial. More specifically, student feedback supports the conclusion that the success of this particular collaboration hinged on each instructor's understanding of the other's capabilities and priorities. This understanding underpinned a successful negotiation of the sharing of course responsibilities.

By gathering and analyzing a variety of data types, the researchers explored the course as a complex event that can and should be evaluated on numerous bases. This presentation displays the results of an action-research approach to undergraduate instruction, a method providing "a way of investigating professional experience which links practice and the analysis of practice into a single, continuously developing sequence" (Winter, 1996, 13). This report on innovative course design and information literacy practice is relevant to participants at the CAIS 2010 conference because of its potential to inform understandings of possible pedagogical approaches to skill development among undergraduate students.

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