Polkinghorne, S., & Wilton, S.

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

AUTHOR PRE PRINT VERSION

Polkinghorne, S., & Wilton, S. (2010). Research is a verb: Exploring a new information literacy-
embedded undergraduate research course. *Canadian Journal of Information and Library
Science*, *34*(4), 457-473. doi: 10.1353/ils.2010.0008

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

Short Abstract

This paper 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. This paper details the course's design and explores the course's effectiveness by examining a variety of data collected within an action research framework, including student skills résumés and semi-structured post-course interviews. This paper highlights findings of particular interest to the library and information science audience. These include those relating to the students' perception of information literacy, faculty-librarian collaboration, information skills résumés, the relationship between skills and confidence, and the students' normative understanding of a "typical" undergraduate learning experience.

Introduction

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 — including 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). Similarly, as Gross and Latham note, librarians lament that the very students who do not have well-developed information literacy skills are often those who possess considerable, and possibly unwarranted, confidence in what skills they have (2007). This paper introduces one potential solution to these concerns: a new activity-based, discipline-specific undergraduate research methods course, Political Studies 200 (POL 200), taught for the first time in 2009 at the Augustana Campus of the University of Alberta.

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., polling, interviewing). This paper details the course's design and explores its effectiveness by examining a variety of data collected within an action research framework, including student skills résumés and semi-structured post-course interviews. This paper highlights findings of particular interest to the library and information science audience. These include those relating to the students' perception of information literacy, faculty-librarian collaboration, information skills résumés, the relationship between skills and confidence, and the students' normative understanding of a "typical" undergraduate learning experience.

Context

Located in Camrose, Alberta, the Augustana Campus of the University of Alberta offers undergraduate degrees in the liberal arts and sciences to approximately one thousand students. Campus librarians are actively engaged in providing and promoting information literacy instruction; as its "Information Literacy Mission Statement" clarifies, Augustana's library "has made information literacy instruction its highest priority" (Augustana Campus Library 2010). Librarians provide conventional course-specific single-class visits, so-called "one-shots;" they also offer one-credit discipline-specific information literacy courses. Most recently, information literacy was incorporated into Augustana Campus's core curriculum as a required skill expected of all graduates. This change has inspired what is expected to be an extensive process in which librarians, teaching faculty, and other stakeholders will have opportunities to participate in the ongoing evolution and evaluation of campus information literacy offerings.

At Augustana, information literacy inspires an "enthusiastic response and ongoing support" from many members of the teaching faculty (Goebel, Neff, and Mandeville 2007, 167). The type of faculty-librarian collaboration driving POL 200, in which a librarian participates in course design and coordinates several class modules, cannot be described as commonplace, although it does exist, particularly at institutions with a programmatic approach to information literacy (Lampert 2005; Lindstrom and Shonrock 2006). However, at least as suggested by published literature, there are also many librarians who express feelings that they are misunderstood and underappreciated by faculty (Julien and Given 2003).

POL 200 was designed to address a widespread feeling, articulated well by Lewandowski and Strohmetz, that students were not adequately developing fundamental skills expected by faculty, particularly research skills, awareness of common disciplinary research methods, and critical thinking and information literacy skills. Within Political Studies 405, the campus's capstone Political Studies course, skills gaps were becoming increasingly apparent. As a result, before

students embarked on their senior research projects, much of the capstone course class time was being devoted to developing their skills in these three areas.

Capstone-style senior undergraduate research courses, in which students develop an original and independent research project, are becoming more common in Canadian and American universities. The success of these courses, however, relies upon students possessing the skills to carry out self-directed original research projects (Bos and Schneider 2009, 376). While there is consensus on the importance of instructing undergraduates in research methods (Brandon et al. 2006), undergraduate research training remains at the margins of most political science programs, with programs focusing more on teaching the theoretical profile of the discipline (Parker 2010, 122). In a cross-national comparison of undergraduate methods courses in political science programs, Jonathan Parker found that, of 34 Canadian universities, approximately 21% offered a required course in quantitative methods and/or research methods, although aspects of these topics may be embedded in other courses (Parker 2010, 124).

In addition, there is a dearth of research on teaching research methods and information literacy to undergraduates within journals and resources for political scientists, despite the availability of this type of research within other disciplines and scholarly journals.[1] In general, there are few resources that focus on pedagogy and teaching strategies within political science programs and courses. The exceptions are the 'teaching' section of *PS: Political Science and Politics*, published by the American Political Science Association (APSA) and the *Journal of Political Science Education* (online). Within the library and information science literature, there is little discussion of information literacy and

---

[1] For example, an examination of the past five years of the 'teaching' section of the American Political Science Association journal, *PS: Political Science and Politics* (2006-2010), revealed only one article focused on information literacy within political science programs (Williams, Goodson and Howard 2006). By far, most of the articles focused on simulations, assignments and teaching strategies for use within specific courses. In addition, there were a few articles each on service learning, the use of new technologies within the classroom and student assessment.

research methods being taught side-by-side as a single discipline-oriented suite of skills and concepts.

Despite the limited availability of courses focused on teaching these skills, several of the students in POL 200 expressed confidence in their research and searching skills, particularly those relating to Internet searching. This confidence was also frequently paired with a lack of excitement at the prospect of learning 'how to do research,' despite in-course evidence of skill deficiencies in these areas, such as weak citation practices, sloppy search techniques, and problems constructing research questions and theses. In these ways, the students had much in common with those profiled in Gross and Latham's recent examination of the low skill/high confidence dichotomy, which is also widely acknowledged anecdotally among instruction librarians (2009).

The students reiterated their confidence within the interviews conducted after POL 200 had concluded. For example, one student described an expectation that POL 200 would be an easy course, "with a short paper sometime, people will talk about stuff, and I'll just roll my eyes and come twice" (Student 1[2]). This initial confidence has also been noted by other research on methods pedagogy for undergraduates. Brandon et al. note, "students lack basic knowledge of the research process and, more commonly, lack interest in research methods" (2006, 535). Bos and Schnieder suggest that students experience a high level of anxiety (especially math- and library-related anxiety) (2009, 375). The challenge, then, is not only for political science programs to integrate methods and information literacy training into their courses and program requirements, but also to make such courses engaging and relevant to students.

Bos and Schneider outline a variety of strategies for successfully teaching research methods, focusing in particular on quantitative research methods (2009, 382). In particular, they emphasize

---

[2] In accordance with research ethics requirements, the students have been anonymized and are referred to as "Student 1," "Student 2," etc., in this paper. Gendered pronouns have been applied randomly.

the importance of intentional reflection on the teaching and learning within methods courses in order to assess whether course goals are being met and whether student abilities are increasing, according both to instructor-led assessment and to students' self-assessment of their skill levels. This paper is the result of the implementation of such strategies in POL 200.

Course Design

From the inception of POL 200, Augustana librarians were invited to be involved in the course, including its development. The professor and librarian discussed potential objectives and activities for the course, and negotiated who would be primarily responsible for different topics and assignments. Several of the information literacy activities and assignments that were implemented in POL 200 were first tested in POL 405, the senior capstone course, during the 2008-2009 year. Ultimately, a POL 200 course outline was finalized in which the librarian would contribute to five of the course's twelve content modules, sometimes by leading the class and sometimes in a team-teaching arrangement with the professor.

Three central factors contributed to the high degree of librarian collaboration in the development of POL 200. First, the course was developed from scratch. Many instruction librarians perceive that a barrier to their instructional involvement is professors' seeming hesitations at being asked to supplant subject content for information literacy instruction (Julien and Given 2003, 77). POL 200's design involved librarians from the outset. Second, POL 200 was conceptualized to be at least as focused on information-related skills development as it was on discipline-specific learning. This created a natural opportunity for librarian involvement. Last, the professor developing POL 200 was familiar with Augustana librarians' information literacy instruction work and welcomes their classroom contributions.

POL 200's design is rooted in an active learning approach, grounded in the belief that the most

effective way to learn how to "do" research — including deciding what to research; how to research it; how to find, assess and integrate the supporting information you need; and how to communicate findings — is through practice. Generally, each week began with a new topic, often introduced by a guest expert. Students then worked with the subject matter to gain understanding and practical experience. Finally, students contributed to each other's learning by presenting their work in class. All course activities 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, informed by the course text, Colin Hay's *Why We Hate Politics* (2007). The general outline of the course in presented in table 1 (below).

Insert Table 1

Student learning was assessed primarily through six hands-on assignments (table 1). With each assignment, students submitted written reports. Each report included a reflective paragraph in which students described their experiences completing the assignment, commenting on what they learned, any challenges or surprises, and the assignment's strengths and weaknesses. The inclusion of a reflective component is an increasingly common classroom and professional development strategy chosen to encourage self-awareness as a platform for discovery (Lipp, 2007; Daudelin, 2000).

Among these six assignments, two were conceived of and described as information literacy assignments: one on finding research literature and one on evaluating Web-based information sources. Formative assessment of information literacy learning also took place regularly within the classroom, such as within a hands-on session about understanding and identifying scholarly and peer-reviewed sources. The course's other activities and assignments, while not explicitly labeled "information literacy," still pursued information literacy outcome as guided by the Association of College and Research Libraries (ACRL) standards (2000). For example, students conducted an

article analysis in which they read closely 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. Clear and consistent citation, outcome 3.a of the ACRL's Standard Five, was discussed in a class early in the term and expected from students with each assignment.

Course Evaluation Methods

The researchers adopted an action-research approach to capturing the course experience, enabling them to pursue three objectives: to measure the learning that occurred in the class (for instructors as well as students), to improve the course in future iterations, and to assess the success of specific innovations such as the integration of information literacy learning. Action research provides "a way of investigating professional experience which links practice and the analysis of practice into a single, continuously developing sequence" (Winter, 1996, 13). This approach often involves the collection of different data types, such as documents, interviews, and questionnaires relating to an event, practice, or circumstance. Next, these data are triangulated so that each method may "partly transcend its limitations" (Winter, 1996, 16), thus avoiding oversimplified conclusions. Evaluation and reflection leading to practical change are central tenets of action research, making it an appropriate framework for this attempt to examine a new course.

First, all student work from the term was compiled and anonymized. In addition to the small assignments already described, student work included "skills résumés," student self-assessments completed both at the beginning and at the end of the course (MacMillan 2009). These résumés asked students to articulate their own competencies and learning and enabled comparison with the skills demonstrated through other course work.

Post-course semi-structured interviews were also conducted with all six (6) students, in which they

spoke to their understandings of research, their discipline, and information literacy, as well as their

perceptions of their course experience (see table 2).[3] The anonymized interview transcripts were

analyzed thematically and compared with the researchers' assessments of the student course work.

Insert Table 2

This work piqued the researchers' interest in the interview data as social texts, or accounts

performing discursive functions (Mackenzie 20), with the potential to yield insights into the

undergraduate learning experience. As a result, the researchers also read the transcripts through a

discourse analysis lens, probing the presences, absences, inconsistencies, and accepted truths

contained within the transcripts. This approach enabled the researchers to begin to observe

students' "interpretive repertoires," alongside some of the knowledge formations "which organize

institutional practices and societal reality on a large scale" (Talja 460).

This paper highlights the findings of particular interest to the library and information science

audience. These include those relating to the students' perception of information literacy, faculty-

librarian collaboration, information skills résumés, the relationship between skills and confidence,

and the students' normative understanding of a "typical" undergraduate learning experience.

Findings

Student Perception of Information Literacy

One unexpected outcome of incorporating information literacy topics throughout the course rather

than as a single unit or module is that while students were able to identify many specific skills

gained within the class, they were unlikely to associate particular skills with information literacy

---

[3] All students were political studies majors; however, two of them (a fourth-year and a third-year student) had just
transferred to political studies. As well, because this was the first time the course was offered, most of the
students (4 of 6) were fourth-year students. There were also one second-year and one third-year student.

and more likely to describe all of these skills simply as "research skills." In the post-course interviews, when asked whether or how the course had improved students' understanding of "information literacy skills," four of six students expressed uncertainty about the meaning of the term. When asked whether or how the course had improved their "research skills," five of six students immediately mentioned those that had been labeled "information literacy" skills during the course. This occurred despite the fact that throughout POL 200, the term "information literacy" was used frequently in classes and assignments. Although this group of students was very small, this observation deserves further exploration. If the term "information literacy" is less meaningful, engaging, or approachable than other terms, such as "research skills," then this awareness could have an impact on how librarians approach, label, and conceptualize their instruction.

Faculty-Librarian Collaboration

The faculty-librarian collaboration that took place in the course was perceived by students as unique, in the sense that they had not experienced it in a previous class, and beneficial, in the sense that they found it advantageous to their learning. More specifically, student feedback supports the conclusion that the success of this particular faculty-librarian collaboration hinged on each instructor's robust understanding of the other's capabilities and priorities. This understanding underpinned a successful negotiation of the sharing of course responsibilities. As one student said, "It was a very positive experience to have both [the librarian] and [the professor] to look at different ways to do our research... Having both of you there was very helpful" (Student 1). In the words of another student, "[POL 200] is sort of a course that I guess obviously couldn't be run by, you know, just [the professor] or just [the librarian]" (Student 3).

Skills Résumés

POL 200 students completed two skills résumés. These assignments aimed to assess student

understanding of what research skills are, and to provide a way to track their self-assessments of their skills development. By creating skills résumés, students also left POL 200 able to articulate their skills, which would be relevant to applying for jobs or graduate schools (MacMillan 2009). The first skills résumé was assigned at the beginning of the course. Students were asked to pretend that they were applying for a research position with the government, and to outline the skills they felt they had that would be appropriate for the job. These initial skills résumés were generally brief (likely partly due to the informality of the assignment and the fact that no marks were assigned to it). Students tended to focus on broad areas, mentioning computer skills, online research skills, and communication skills.

The second skills résumé was due at the end of the course. Again, students compiled a statement of their research skills at that point in time, as if they were applying for a research position. They were encouraged to outline their skills, training (including self-teaching), and experience, and to highlight any areas of special expertise: information, topics, or skills with which they felt there were especially adept. In addition, students were instructed to reflect on the process of thinking about and assessing their skill set, and how their skills had developed (or not) as a result of POL 200. These skills résumés were much richer, more thorough, and more precise than the initial résumés. This may reflect the assignment of a grade; however, the résumés themselves reflect the course structure and assignments and incorporate the course's language and terminology. The increased level of detail in the second résumé may also be a result of having had a term to think about and develop research skills.

Students' reflections on their skills résumés provide additional insight into the nuances of skill self-assessment. One student, for example, expressed a common sentiment by stating, "this course has helped me to think about and reflect on the experience I have and relate them to being viable research skills" (Student 2). Another student stated that she felt that all of her research skills had

improved, with the exception of computer skills. At the same time, she stated that she now felt less confident, because "this course did fill holes in my research abilities but it also made me aware of many more" (Student 1). A third student wrote, "I can't say I have accumulated any significant repertoire of skills from this course alone" (Student 3). This last quotation exemplifies a common theme found within the course reflections and the post-course student interviews: namely, students expressed confident estimations of their own skill sets. While this confidence was not necessarily unfounded, it does contradict research on student anxiety in methods courses (Bos and Schnieder 2009). This may be a result of the emphasis on qualitative rather than quantitative methods within POL 200. The relationship between confidence and competence has been more thoroughly studied within the library and information science field.

Skills and Confidence

The student reflections noted above evoke the work of Melissa Gross and Don Latham, who in applying competency theory to undergraduate information literacy skills development have articulated that it is often the least information literate students who have the most confidence in their skills, and that with greater competence comes greater "metacognitive skills" enabling students to "make better estimations of their own performance " (2009, 337). In POL 200, it was the more senior students who were more likely to express that they were already competent researchers. Yet, students repeatedly stated in the assignment reflections that the assignments were more difficult than they expected. This suggests that they approached the assignments feeling confident about their skills, and were surprised at the challenges they encountered.

Students often assessed their work as more successful than did the instructors. This confidence appears to be underpinned by the product-oriented mindset explored by Gross and Latham (2009, 345). For example, for some students, if they found what sources they needed, then they had

succeeded, regardless of their information-seeking process. In the class sessions supporting assignments that incorporated searching, students were given detailed instruction on searching practice, including truncation, Boolean logic, keyword generation, and utilizing the deep Web. Students named these skills repeatedly in their post-course interviews. However, when the students performed their searches, they often chose to wade through masses of information rather than apply these skills to develop the more focused, sophisticated searches of which they were capable. The students were comparatively much less confident in relation to learning about statistics, for example, which suggests that the information-seeking process, since it often involves the Web and other tools with which students feel very familiar, seems less challenging.

In an interview, one student reported, "I did have a hard time understanding that I was learning about the Internet from someone older than me" (Student 1). Another student commented that while "searching for websites related to my topic I found myself reverting to my old web searching habits pretty quickly" and, reflecting the documented practices of several students, "I ended up going back to Google, because I was more comfortable with how it works as I am very familiar with this particular search engine" (Student 2). At the same time, a third student reflected, "I found that the searching experience [on the Internet] was relatively easy in comparison with using databases. […] Nevertheless, quickly finding quality sources remains my goal, and while the internet may contain much to offer it hides it much too well" (Student 4); this suggests that while the student felt more confident searching the internet, she was also aware of the limitations of Web searching for scholarly research. Others commented on comparative strengths and weaknesses of different search engines, although they often preferred the comfort of Google. In other assignments, students often described a "wading" process such as this: "I knew there would be countless search results, but I browsed them nonetheless" (Student 6).

In POL 200, assignment design likely illuminated the gap between the skill level and confidence level of some students. While POL 200's assignments were detailed, they did not contain the degree of prescription often contained within information literacy assignments. For example, for Assignment 1 (Searching), the instructors recommended, rather than required, that students perform searches adhering to a set degree of complexity. This made it possible for students to complete this assignment without necessarily modifying their existing searching practices. Students did not necessarily revolutionize their searching practices based on instruction alone, even if the new techniques introduced in class were sufficiently memorable so as to be mentioned in post-course interviews. In the next iteration of POL 200, this aspect of assignment design will be revisited; while more prescriptive assignments are not unproblematic, they may be a necessary tool in the pursuit of student skill development, including students' abilities to "better assess their own skill level" (Gross and Latham 2009, 337).

Normative Understanding of University Courses

Exhibited within students' experiences and descriptions of this new class was a significant normative conception of the university learning experience. With only one exception, a student new to the program, students proactively framed their reflections on POL 200 in relation to this conception. The rest of the students used similar language to describe this construction of a "typical" course in political studies. In the post-course interviews, their first comments tended to reflect on POL 200's exceptional nature — not in the sense that the course was perceived as exceptionally fun or wonderful, but in the sense that POL 200 was different from other courses.

For example, Student 1 reflected, "I've never encountered a course like it." Student 2 commented, "I was just expecting [POL 200] to be like another politics course, read a book, do a paper on it." Student 3 remarked that POL 200 "was giving you tools for research rather than just doing a paper."

Student 5 said, "I thought we would have to write two or three papers," and observed that POL 200 "was just very informative while we didn't have to sit in a stuffy classroom and just listen to someone talk the whole time." Student 6 articulated that, "I think that maybe even just the breakdown of the class and the fact that we could do smaller assignments surprised me because I'm not used to that at all. I don't think that I've ever had a class like that...this year has been basically reading reading reading and then a huge paper at the end."

While further examination is needed, improved understanding of the discourses underpinning the "typical" undergraduate learning experience could help to equip instructors, including both librarians and professors, to help students meet the challenges of reading, writing, and thinking critically, including the skills frequently conceptualized within library circles as "information literacy." In practical terms, a more nuanced awareness of these discourses would better position instructors to create challenging, engaging, atypical learning opportunities for students.

Conclusion

By gathering and analyzing a variety of data types, the researchers explored Political Studies 200 as a complex event that can and should be evaluated on numerous bases. The researchers found that POL 200 was successful in shaping students' understandings of research process within the discipline. As demonstrated by their course work, skills résumés, and interviews, the course enabled students to develop and demonstrate their research, methodological, and information literacy skills, even if the students generally viewed these skills as a single set, and expressed confidence that frequently outmatched their demonstrated skills. Further, the researchers discovered that their students have a predominant normative understanding of the university course, which significantly affected their responses to the structure and content of POL 200.

While data analysis continues, and the researchers' findings are naturally "tentatively applied and context-bound" (Lincoln and Guba qtd. in McKenzie 37), they do have the potential to advance

pedagogical approaches to skill development among undergraduate students. Directing blame at students is an easy and inadequate response to their research and information literacy skills gaps. It is necessary to address these deficiencies programmatically — with reflective, hands-on courses such as POL 200 representing a promising possibility — in order to facilitate greater student research success.

Acknowledgements

Works Cited

Association of College and Research Libraries. 2000. Information literacy competency standards for

higher education. *Association of College and Research Libraries.*

http://www.ala.org/ala/mgrps/divs/acrl/standards/informationliteracycompetency.cfm

(accessed May 17, 2010).

Augustana Campus Library. 2010. Augustana Library information literacy mission statement.

University of Alberta Libraries. http://www.library.ualberta.ca/augustana/infolit/ (accessed

May 17, 2010).

Bos, Angela. L. and Monica C. Schneider. 2009. Stepping around the Brick Wall: Overcoming student

obstacles in methods courses. *PS: Political Science & Politics.* 42 (2): 375-383.

Brandon, Amy, Mitchell Brown, Chistopher Lawrence and Jennifer Van Heerde. 2006. Teaching

research methods track summary. *PS: Political Science & Politics.* 39 (3): 535-535

Daudelin, M.W. 2000. Learning from experience through reflection. In *Strategic learning in a*

knowledge economy: individual, collective, and organizational learning process, eds. R. Cross

& S.B. Israelit, 297-311. Woburn, MA: Butterworth Heinemann.

Goebel, Nancy, Paul Neff, and Angie Mandeville. 2007. Assessment within the Augustana model of

undergraduate discipline-specific information literacy credit courses. *Public Services Quarterly* 3

(2007): 165-189.

Gross, Melissa, and Don Latham. 2009. Undergraduate perceptions of information literacy: Defining,

attaining, and self-assessing skills. *College & Research Libraries* 70 (4): 336-50.

Gross, Melissa, and Don Latham. 2007. Attaining information literacy: An investigation of the

estimates of skill, and library anxiety. *Library & Information Science Research* 29: 332-53.

Hay, Colin. 2007. *Why we hate politics.* Cambridge, UK: Polity.

Julien, Heidi, and Lisa M. Given. 2003. Faculty-librarian relationships in the information literacy

    context: A content analysis of librarians' expressed attitudes and experiences. *Canadian Journal*

    of Information and Library Science 27 (3): 65-87.

Lampert, Lynn. 2005. "Getting psyched" about information literacy: A successful faculty-librarian

    collaboration for educational psychology and counseling. *Reference Librarian* (89/90): 5-23.

Lewandowski Jr., G.W. and D.B. Strohmetz. 2009. The kids are alright. *Inside Higher Ed,* October 28.

    Retrieved from http://www.insidehighered.com/views/2009/10/28/lewandowski

    (accessed May 25, 2010).

Lindstrom, Joyce, and Diana D. Shonrock. 2006. Faculty-librarian collaboration to achieve

    integration of information literacy. *Reference & User Services Quarterly* 46 (1): 18-23.

Lipp, A. 2007. Developing the reflexive dimension of reflection: A framework for debate.

    International Journal of Multiple Research Approaches 1 (1), 18-26.

MacMillan, M. 2009, May. Many paths, one journey: Mapping the routes to information literacy.

    Paper presented at the LOEX 2009 Conference, Albuquerque, NM.

McKenzie, Pamela J. 2003. A model of information practices in accounts everyday-life information

    seeking. *Journal of Documentation* 59 (1): 19-40.

Morrison, H. 1997. Information literacy skills: An exploratory focus group study of student

    perceptions. *Research Strategies* 15 (1): 4-17.

Parker, Jonathan. 2008, February. Undergraduate research-methods training in Political Science: A

    comparative perspective. *PS: Political Science and Politics* 43 (1): 121-125.

Talja, Sanna. 1999. Analyzing qualitative interview data: The discourse analytic method. *Library & Information Science Research* 21 (4): 459-477.

Winter, R. 1996. Some principles and procedures for the conduct of action research. In *New directions in action research,* ed. O. Zuber-Skerritt, 13-27. London: Falmer Press.

Table 1 General Course Outline, Political Studies 200

Topic / Skill Focus	Knowledge of the discipline	Research methods	Research skills	Critical reading and thinking	Information literacy	Writing	Presenting	Reflection and self-assessment
Course introduction *Skills Résumé 1*								✔
Orientation to the discipline and its research	✔	✔						
The research process	✔	✔						
Using primary and secondary sources *Assignment 1, Searching:* Locate and select specific sources					✔	✔	✔	✔
How to write an essay *Assignment 2, Dissecting an*			✔	✔	✔	✔	✔	✔

Article: Find, print, and analyze a relevant peer-reviewed article								
Identifying scholarly sources			✔	✔	✔			
Research ethics			✔					
Statistics and opinion polls *Assignment 3, Surveys:* Create and implement Web-based survey	✔	✔		✔		✔	✔	✔
Research and the Web *Assignment 4, Website Evaluation:* Select and assess three relevant Web sites			✔	✔	✔	✔	✔	✔
Interviews and focus groups *Assignment 5, Interviewing:* Develop a set of interview questions and carry out an interview	✔	✔	✔	✔		✔	✔	✔
Content analysis	✔	✔	✔	✔		✔	✔	✔

and critical discourse analysis *Assignment 6, CDA:* In groups, analyze a selection of news articles								
New directions in Political Science *Final Assignment, Skills Résumé 2 and Book Review* of Why We Hate Politics	✔			✔	✔	✔		✔

Table 2 Post-Course Student Interview Guide

1. To you, what was the course about? How would you describe the course?

2. Before it started, what did you expect POL 200 would be like?

3. In what ways did POL 200 match your expectations? In what ways did it differ from your expectations?

4. Did the class contain any surprises?

5. What was a high point of POL 200 for you? Which class or classes were most memorable or engaging to you?

   o Why?

6. What was a low point of POL 200 for you? Were there any classes that were frustrating, or that seemed pointless?

   o Why?

   o Do you think this could've been done differently? If so, how?

7. If you were describing the course to someone who was considering taking it, what would you say?

8. What's the most important thing you learned in POL 200?

   o Why?

9. What's the least important thing you learned in POL 200?

   o Why?

10. One of the goals of this course was to give you research skills: how well would you say this happened?

    o What sorts of skills did you leave with?

11. Has your understanding of research methods changed as a result of this course?

    o If so, how?

12. One of the goals of this course was to give you information literacy skills: how well would you say this happened?

    o What sorts of information literacy skills did you leave with?

13. Has your understanding of information literacy changed as a result of this course?

    o If so, how?

14. We covered a variety of research methods in this course. Did this change your perception or understanding of research?

    o If so, how?

15. Which method(s) changed your perception of research?

o   Which method(s) did you find most useful? Least useful?

16. Please describe what impact, if any, you believe this course has made / will make on your work for other Political Studies classes.

      o   How come?

17. Please describe what impact, if any, you believe this course has made / will make on your work for other classes outside Political Studies.

      o   How come?

18. Please describe what impact, if any, you believe this course has made / will make on your daily (non-school) life.

      o   How come?

19. We covered a variety of research skills and methods used in Political Studies in this course. Did this change your perception or understanding of the discipline of Political Studies?

      o   If so, how?

20. Is there anything else you'd like us to know that we haven't thought to ask you?